

**STATE OF HAWAII
DEPARTMENT OF HEALTH**

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**Testimony COMMENTING on HB1519
RELATING TO SUNSCREEN**

REPRESENTATIVE AARON LING JOHANSON, CHAIR
HOUSE COMMITTEE ON CONSUMER PROTECTION & COMMERCE
Hearing Date: 2/15/2022 Room Number: 329/videoconference

1 **Fiscal Implications:** This measure may impact the priorities identified in the Governor's
2 Executive Budget Request for the Department of Health's (Department) appropriations and
3 personnel priorities.

4
5 **Department Testimony:** HB1519-HD1 seeks to amend HRS 342D to require that sunscreens
6 sold or distributed in Hawaii only contain active ingredients classified by the United States Food
7 and Drug Administration (FDA) as Category 1: *Generally Recognized as Safe and Effective*. The
8 Department has the following comments.

9 The Department recognizes the benefits of the 2018 legislation prohibiting the sale of
10 oxybenzone and octinoxate containing sunscreen products and shares the concerns about the
11 potential impacts of some sunscreen chemicals on coral reefs and human health. It is heartening
12 to see the dramatic increase in availability, variety and consumer acceptance of local and
13 national brand oxybenzone and octinoxate-free options and mineral sunscreen products that have
14 entered the marketplace in the past two years. Use of these products meets standards for public
15 health protection and offers the public a concrete choice to help protect Hawaii's coral reefs and
16 marine environment when enjoying our beaches.

17 However, the risk of skin cancer from sun exposure remains a hazard for the people of
18 Hawaii and visitors and it is imperative that the public health consequences of additional
19 prohibition on sunscreen ingredients are considered.

1 Under the FDA’s proposed update, the only FDA Category 1 active ingredients in
2 sunscreens would be zinc oxide and titanium dioxide, both of which are mineral sunscreens. Of
3 the remaining fourteen approved ingredients, twelve would be classified as Category 3 –
4 *insufficient evidence to determine if they are safe and effective* and two as Category 2 – *Not safe*
5 *or effective*. This change by FDA that would update the GRASE list is still in the proposal stage
6 and cannot become effective for at least 1 year after finalizing. The current GRASE list in effect
7 until FDA’s update is finalized lists all 16 sunscreen ingredients.

8 The Department is concerned that restricting the sale and distribution of sunscreens to
9 only two approved active ingredients has the potential to increase the risk of skin cancer to
10 Hawaii residents and visitors. This is particularly pertinent to certain individuals who have skin
11 sensitivity or allergy to mineral sunscreens.

12 The Department is not aware of any states or jurisdictions that have passed legislation
13 using FDA Category 3 status as justification for banning or restricting medications or personal
14 care products.

15 The Department supports FDA efforts to evaluate the safety and effectiveness of over-
16 the-counter medications including sunscreens and encourages further study of these chemicals.
17 The Department also supports public outreach and education aimed at encouraging the use of
18 sunscreens that have less impact on coral reefs and the environment as well as alternative sun
19 protection options such as clothing.

20

21 **Offered Amendments:** None

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

DAVID Y. IGE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

**Testimony of
SUZANNE D. CASE
Chairperson**

**Before the House Committee on
CONSUMER PROTECTION & COMMERCE**

**Tuesday, February 15, 2022
2:00 PM**

State Capitol, Conference Room 329, Via Videoconference

**In consideration of
HOUSE BILL 1519, HOUSE DRAFT 1
RELATING TO SUNSCREEN**

House Bill 1519, House Draft 1 proposes, beginning January 1, 2023, to prohibit the sale, offer for sale, or distribution in the State of any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the Food and Drug Administration (FDA), without a prescription issued by a licensed health care provider. **The Department of Land and Natural Resources (Department) appreciates the intent of this measure and offers the following comments.**

Currently, the FDA has listed 16 active ingredients as “generally recognized as safe and effective” (GRASE) for use in sunscreen products, including the two that are currently banned in Hawai‘i (oxybenzone and octinoxate) as well as several for which bans have been proposed previously (octocrylene, avobenzone, homosalate, and octisalate).

A proposed rule currently being reviewed by the FDA would change the status of 14 of these ingredients to “not GRASE”. The status changes for two of these, aminobenzoic acid and trolamine salicylate, are due to data showing concerns regarding human health and safety. The status changes for the remaining 12 are due to inadequate data to support a complete safety finding. Further, in the FDA’s outreach on this subject, they suggest that a ruling on the safety of a subset of these ingredients could be deferred to allow time for additional safety information to be gathered.

As these changes have not yet been finalized, this bill would not have a meaningful effect until such time that the FDA creates a definitive ruling per their proposed rule. Until then, it is not clear which particular ingredients would end up being prohibited in Hawai‘i as a result of this bill.

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

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Beyond this, the FDA bases their rules and status determinations on the effects of these ingredients on humans with no consideration regarding potential environmental effects. The original purpose of the Act that banned the sale of sunscreen with oxybenzone or octinoxate¹ was to preserve marine ecosystems. If the intent of this measure is to limit the usage of chemicals that may have deleterious effects on coral reef ecosystems and other natural resources, the Department would recommend that the bill name specific ingredients which have documented negative environmental effects.

The following ingredients found in sunscreens would fit this criterion: octocrylene, avobenzene, homosalate, and octisalate.

The Department recognizes the concerns about the presence of avobenzene and octocrylene in the nearshore marine environment. There is growing body of science that suggests these chemicals may have negative effects on corals and other marine life. Octocrylene is now the dominant UV-sunscreen contaminant in coastal waters.² Recent scientific studies suggest that octocrylene may have negative impacts in aquatic environments equivalent to oxybenzone (already banned from sunscreens in Hawai‘i). Octocrylene functions as an endocrine disruptor, a metabolism disruptor, and a reproductive disruptor. It has also been shown to reduce the ability of coral symbionts to photosynthesize, and evidence suggests that it can have toxic impacts to a variety of aquatic organisms including corals, fish, mammals, and plants.³

Avobenzene has been shown to cause toxicity to the light-reactions of photosynthesis which can cause corals to bleach. Avobenzene is also an endocrine disruptor, and can disrupt fat metabolism.³ This could reduce coral resilience during warming events as bleached corals depend extensively on fat metabolism in order to survive.⁴

Octisalate has displayed multiple hormonal disrupting activities with in vitro lab studies. In addition, disruption of mitochondrial membrane function, and possible apoptosis (programed cell death) was found. No coral toxicity studies were found for homosalate, but this chemical has been readily found in reef waters. Lab based studies have shown hormone-receptor disrupting activities in in-vitro assays. Lethal and sublethal effects were found when the marine algae (*Tetraselmis* sp.) was exposed to homosalate, indicating potential impacts to phytoplankton communities⁵. This highlights concerns that it could affect corals and suggests the need for testing for these potential the effects. Both homosalate and octisalate are teratogens, which are known to cause embryonic development defects in mammals, fish, and larvae.

As a result of these recent scientific findings, we feel that prohibiting the sale of products containing octocrylene, avobenzene, homosalate, or octisalate would likely benefit the health and resiliency of Hawai‘i’s coral reef ecosystems. At the very least, the Department would recommend support for increased monitoring of various sunscreen chemicals at high-use

¹ Act 104 (SLH 2018) established section 342D-21, which prohibits the sale or distribution of sunscreen that contains oxybenzone or octinoxate.

² Downs, Craig A., personal communication (2021)

³ Fel et al. (2019), Lozano et al. (2020), Giraldo et al. (2017), Boyd et al. (2021), Yan et al. (2020), Zhang et al (2016), Campos et al. (2017), Gago-Ferrero et al. (2013), Cocci et al. (2020), Bluthgen et al. (2014)

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⁵ Thorel et al. (2020)

swimming areas and further research examining the effects of these chemicals on the nearshore marine environment in Hawai‘i.

The Department supports the use of sunscreens that do not contain chemicals that are harmful to marine life, particularly non-nano particle, mineral-based sunscreens, as well as sun-protective clothing, as alternatives to organic chemical sunscreens. The Department continues to conduct outreach efforts to help the public understand the issues regarding use of chemical sunscreens in the ocean so they can be better informed and make better choices regarding sun protection. These efforts include information on the Department’s Division of Aquatic Resources website, focused one-on-one outreach, news releases, videos, interaction with partner organizations, and meetings with boat tour operators and vendors who sell sunscreen. The Department continues to explore other ways to inform the public on this issue.

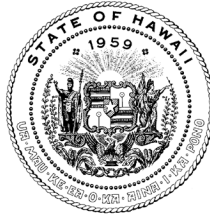
It should be noted that, although it is important to address all potential coral reef ecosystem stressors, the primary concerns with Hawaii’s coral reefs continue to be related to land-based sources of pollution, unsustainable fishing practices, invasive species, and climate change. Continued legislative support to reduce these main stressors will have the largest impact on coral reef resilience and recovery.

Thank you for the opportunity to comment on this measure.

Citations

- Ahn, Sungjin, et al (2019), A long-wave UVA filter avobenzone induces obesogenic phenotypes in normal human epidermal keratinocytes and mesenchymal stem cells, *Archives of Toxicology* <https://doi.org/10.1007/s00204-019-02462-1>
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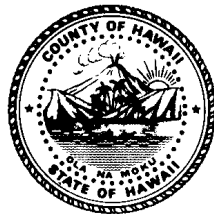
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HAWAI'I COUNTY COUNCIL

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February 14, 2022

TESTIMONY OF REBECCA VILLEGAS
COUNCIL MEMBER, HAWAI'I COUNTY COUNCIL
ON HB1519 HD1, RELATING TO SUNSCREEN
Committee on Consumer Protection and Commerce
Tuesday, February 15, 2022 at 2:00pm

Aloha Chair Ling Johanson and Members of the Committee:

My testimony is submitted in my individual capacity as a member of the Hawai'i County Council and Chair of the Hawai'i County Council Climate Resilience and Natural Resource Management Committee.

We strongly support HB1519 HD1 which requires that beginning January 1, 2023, it shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the United States Food and Drug Administration, without a prescription issued by a licensed health care provider.

A number of sunscreens have recently demonstrated to pose intolerable toxicologic threats such as; environmental contamination in coastal waters, harmful impacts on Hawai'i's marine environment, coral reefs, and other residing ecosystems, increases the risk of breast cancer, birth defects, developmental disorders in children, and other issues. The State in the interest to preserve our marine ecosystem has banned sunscreen that contain oxybenzone or octinoxate through the enactment of Act 105, session laws of Hawai'i 2018. Additional action must be taken to prevent any potential harmful impacts of sunscreens containing ingredients other than what is listed as category I. The ocean is our #1 tourist destination, our playground, our icebox, and our solace. We must find solutions to protect the State's economy, health, environment, and our way of life for our residents.

For the reasons stated above I urge the Committee on Consumer Protection and Commerce to support this measure as well. Should you have any questions, please feel free to contact me at (808) 323-4267.

Mahalo for your consideration.

A handwritten signature in black ink, appearing to read "Rebecca Villegas".

Rebecca Villegas
Council Member, Hawai'i County Council



I'm testifying on behalf of the nonprofit Maui Nui Marine Resource Council to reiterate our support of [HB1519 HD1](#) relating to sunscreen. We strongly support passage of this law which as of 1/1/23 would prohibit the sale, offer for sale, or distribution for sale in the State of any sunscreen that contains active ingredients that not generally recognized as safe and effective by the US FDA (GRASE), without a prescription. At this time, only zinc oxide or titanium oxide are listed as GRASE sunscreen ingredients.

Maui Nui Marine Resource Council applauded the passage and signing of Hawaii's historic bill banning sunscreens containing oxybenzone and octinoxate, two chemicals that are proven to harm corals and fish, and its implementation in January 1, 2021.

Our organization has been working for the past three years to educate Maui visitors and residents about avoiding sunscreen products with reef-harming ingredients, using airport displays, beach signage, targeted social media, ads and other outreach.

Our staff has reported significant confusion among visitors, residents, store owners and concierge about which sunscreens are truly reef safe.

We believe this confusion was created by sunscreen manufacturers who took advantage of the lack of a legal definition of the label "reef safe."

Manufacturers use "reef safe" as a marketing tool to describe any product that does not contain oxybenzone and octinoxate

However, science has shown that oxybenzone and octinoxate are not the only chemicals that are harmful to coral reefs. Other chemicals found in sunscreen products labeled as "reef safe" are not safe for reefs – and not safe for human health.

The common sunscreen chemical avobenzone, which is often used in place of oxybenzone, works in a similar manner to oxybenzone and is believed to pose similar risks to coral DNA and aquatic life.

Homosalate impacts the human body's hormone systems, particularly the estrogen system. Hormone disruption also threatens reefs and aquatic organisms.

Octocrylene has been linked to aquatic toxicity, with the potential to harm coral health, and is often contaminated with the known carcinogen benzophenone.

If we try to ban specific chemicals, the industry will only create new compounds. We will be in a perpetual state of trying to catch up, to identify and ban chemicals that are harming reefs.

For these reasons, Maui Nui Marine Resource Council strongly believes it is best to allow **ONLY** the sale of sunscreen products containing ingredients that scientists consider to be safe for our reefs.

Out of the 16 "approved" active ingredients used in sunscreen right now, the FDA has stated only two are generally recognized as safe and effective—the mineral based products of titanium dioxide and zinc oxide. By requiring that all sunscreens sold in Hawaii contain only ingredients that are GRASE, Hawaii will only allow sunscreens that use minerals (zinc oxide and titanium dioxide) as the active ingredients.

Why should Hawaii's communities take the risk of allowing thousands of gallons of sunscreens containing potentially harmful non-mineral sunscreen chemicals to be washed into our nearshore ocean waters each year?

Hawaii lawmakers showed great leadership in its historic bill that prohibits the sale of sunscreens containing oxybenzone and octinoxate. This new proposed law will be easier for the public to choose only mineral-based sunscreens – the sunscreens that are safest for our coral reefs and marine wildlife.

Our coral reefs, fish and other aquatic life are under great stress due to climate change and warming ocean temperatures. Human-created impairments to ocean water quality – including sunscreen chemicals – add to that stress and can cause corals that are barely hanging on to weaken and possibly perish. We can't continue to wait to take action on sunscreen chemicals.

Let's give our reefs the best possible chances at survival. Please keep [HB1519 HD1](#) on track to go into effect on January 1, 2023. Thank you.

Anne Rillero
Communications, Community Outreach and Development Manager
Maui Nui Marine Resource Council

HB-1519-HD-1

Submitted on: 2/12/2022 8:39:33 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Robert Culbertson	Big Island 'Reef Keepers' Hui	Support	No

Comments:

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee

Our Position: Strongly Support HB1519 HD 1

Although we are making progress on our collective goals to keep harmful chemicals off our reefs, this legislation is needed to further refine our understanding, expectations and communicate our need to the public.

Mahalo for your time!

R A Culbertson

Honokaa

HB-1519-HD-1

Submitted on: 2/13/2022 5:59:21 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Brianne Wold	Rugged Research	Support	No

Comments:

Written testimony for HB1519

On behalf of Rugged Research’s support for prohibiting the sale, offer for sale, or distribution in the State of any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the Food and Drug Administration, without a prescription issued by a licensed health care provider.

Corals among the Hawaii islands have a multitude of stressors including, but not limited to point source pollution, increasing water temperatures, overfishing, and irresponsible recreation. This bill would attempt to reduce one of the many stressors by removing sunscreens that affect the life and growth cycles of young coral polyps, therefore giving corals a better fighting chance to become more resilient to climate change.

In a peer reviewed study from 2015, published in the journal Archives of Environmental Contamination and Toxicology, it was found that the chemicals have a range of effects on coral, including mortality in developing coral, bleaching of coral and genetic damage to coral and other organisms. It also found that oxybenzone and octinoxate can induce feminisation in adult male fish and increase reproductive diseases in creatures from sea urchins to parrotfish and mammal species similar to the endangered Hawaiian monk seal. The chemicals can also induce neurological behavioural changes in fish and have possible impact on the many endangered species found in Hawaii’s waters, including sea turtles.

We understand that many visitors to the islands often bring their own sunscreen, which this bill has no effect on, but many still buy on island. By only selling reef safe sunscreen in local stores, it will promote awareness and inspire action to know more, and encourage change for future purchases by visitors and locals.

Rugged Research understands that while there unfortunately is an economic role when deciding on regulations for the protection of native flora and fauna, we think this bill successfully attempts to allow vendors to still earn profits by selling reefsafe sunscreen as alternatives.

Rugged Research supports the use of sunscreens that do not contain oxybenzone or octinoxate when in or on the water, as well as sun protective clothing, as alternatives.

Continued legislative support of efforts to reduce the stressors on corals will have the largest impact on coral reef resilience and recovery.

Thank you for the opportunity to comment on this measure.

Bri Wold

Co-Founder of Rugged Research



TO: House Committee on Consumer Protection & Commerce
Rep. Aaron Johanson, Chair
Rep. Lisa Kitagawa, Vice Chair

FROM: Lynn Miyahira representing Public Access to SunScreens (PASS) Coalition

DATE: Tuesday, February 15, 2022

TIME: 2:00 PM

PLACE: Via Videoconference

Re: HB 1519, HD 1 - Relating to Sunscreen

Position: Opposed

The [Public Access to SunScreens](#) (PASS) Coalition is a multi-stakeholder coalition composed of public health groups, dermatologists, sunscreen manufacturers, and leading advocates for skin cancer patients. The PASS Coalition opposes this measure as it will create additional barriers for consumers to access their choice of safe, effective and FDA-approved sunscreens as a skin cancer prevention tool.

We ask that the legislature hold off on passing HB 1519 or any other legislation on sunscreen ingredients, until more data on environmental and public health impacts are available.

The use of sunscreen is an important evidence-based sun-safe practice. It is well known that utilizing comprehensive sun-safe practices is one of the most effective ways to reduce the risk of skin cancer, including the regular use of sunscreen, wearing sun protective clothing, hats and sunglasses, and seeking shade. Skin cancer prevention tools, such as broad-spectrum sunscreens that protect against both UVA and UVB rays, must be combined with comprehensive educational tools to ensure consumer awareness of the risks of skin cancer due to excessive sun exposure.

Hawaii Residents Are at Higher Risk for Skin Cancer

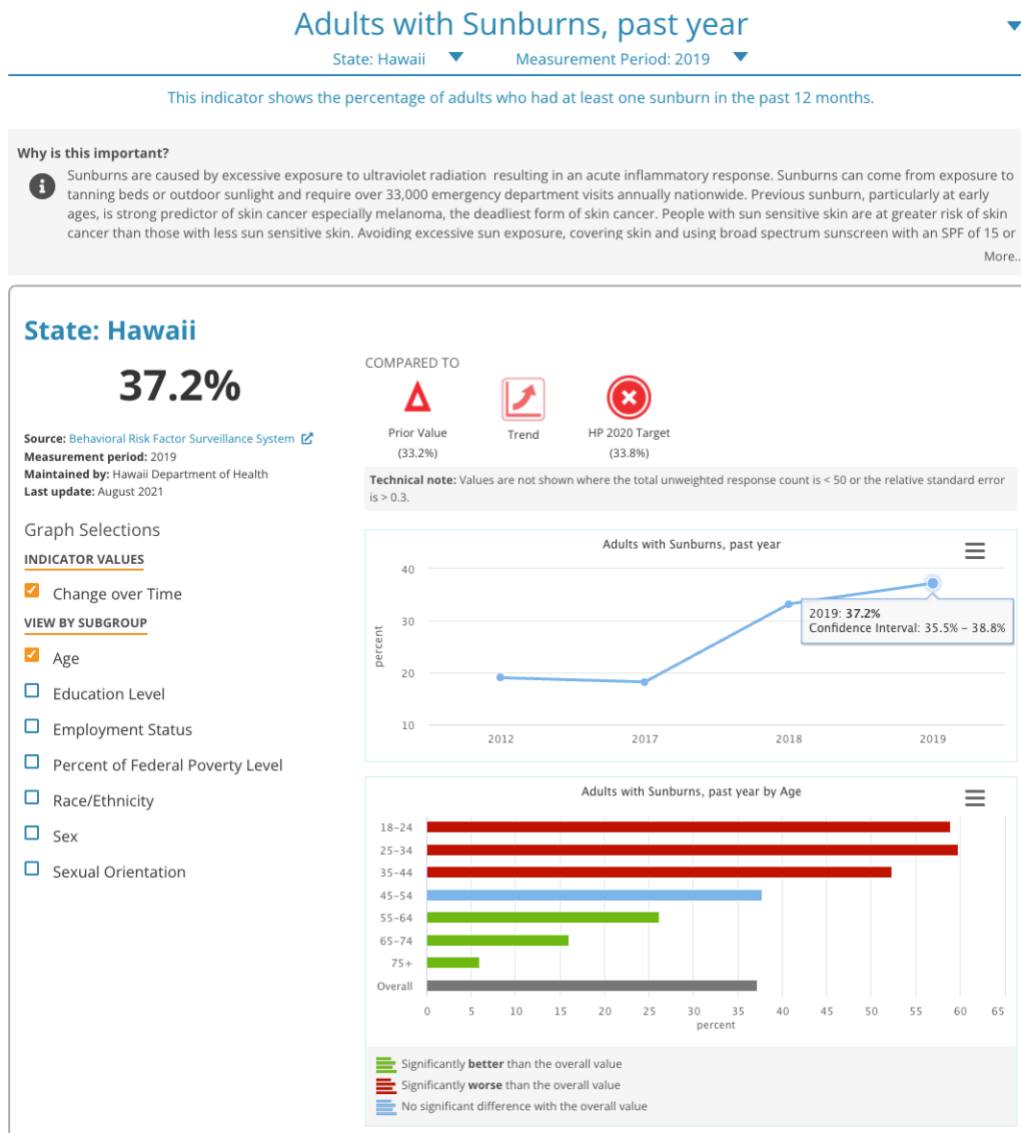
Some notable skin cancer and sun safety behavioral statistics include:

- Native Hawaiians and other Pacific Islanders suffer from double the melanoma mortality rate than the State averageⁱ
- Researchers have found that just *one* blistering sunburn in childhood or adolescence more than doubles a person's chance of developing melanoma later in lifeⁱⁱ

- Hawaii has one of the highest daily UV index averages in the nation.ⁱⁱⁱ On a scale of 0 – 12, Hawaii has over nine months of the year in very-high (8) to extremely high (11) UV indexes, making it crucial public health issue for residents to have access multiple tools to protect them from sun exposure
- In 2019, more than one in three Hawaii residents surveyed reported having a sunburn in the last 12 months, nearly double from the previous year
- **According to the DOH’s Hawaii Health Matters dashboard, the number of adults in Hawaii reporting having at least one sunburn in the past 12 months has almost doubled since 2017.**^{iv} This data shows how stigmatizing the use of sunscreens has caused a decline in sun-safe behaviors – and having just five or more sunburns in your lifetime is known to double your risk for melanoma.^v

Table 1: Adults with at least one sunburn in the last 12 months

Source: [Hawaii Health Matters, Department of Health](#)



The Science Touted by Sunscreen Ban Advocates Is Flawed

Despite the known risk of skin cancer, Hawaii and a handful of other jurisdictions have placed restrictions on the sale of sunscreens based on limited laboratory testing that led policymakers to believe banning sunscreen would improve coral reef health. The early studies, however, did not fully consider the complexity of a coral reef system and had scientific limitations. Importantly, findings from a 2019 study by Dr. Carys Mitchelmore of the University of Maryland contradicts an earlier study by Dr. Craig Downs that has been widely promoted by advocates of the sunscreen ban. Dr. Mitchelmore's study uses rigorous methodology and shows actual levels of oxybenzone sampled from sea water in Hawaii to be 141 times lower than previously stated by Dr. Downs, and 1,020 times below levels considered toxic to coral.^{vi}

The limited studies that purported to show a link between sunscreen exposure and coral toxicity are methodologically flawed and should not be used for evidence-based policy making based on EPA data reliability standards. Subsequent follow-up studies with more rigorous analyses have not replicated the work by Dr. Downs, and do not support the conclusions.

Additionally, Dr. Ku'uilei Rodgers, principal investigator at the UH Coral Reef Ecology Lab, was asked by the Star-Advertiser about sunscreen threats at Hanauma Bay. [In an article on Nov 20, 2021](#), she was quoted saying that "There is no strong evidence to state sunscreens threaten coral reefs." She goes on to say, "Our coral reef ecology lab has not seen the effects of sunscreen use on bleaching in our monitoring efforts. If there were effects from sunscreen it would be evident."^{vii} Dr. Rodgers and her team have been studying Hanauma Bay for over 20 years and we can be sure that if sunscreen was a major threat to corals, they would see it in their research. Please see the attached article.

Congress Has Directed the National Academy of Sciences to Conduct a Comprehensive Study

For that reason, banning sunscreen will have little impact on protecting coral reef. The overwhelming consensus amongst the scientific community is that coral decline is primarily caused by rising ocean temperature and ocean acidification.^{viii} Other causes include land-based source pollution, water quality issues due to poor wastewater management, sedimentation and excess nitrification.^{ix} As a result, the United States Congress directed the National Academy of Sciences (NAS) to evaluate the latest science available on the correlation between coral reefs and sunscreens and the potential public health impact of limiting access to sunscreen.

This NAS study, titled "[Environmental Impact of Currently Marketed Sunscreens and Potential Human Impact of Changes in Sunscreen Usage](#)," is being conducted right now as an objective review of these issues by leading scientific experts. The project description is as follows:

"Concerns have been raised about the potential toxicity of sunscreens to a variety of marine and freshwater aquatic organisms, particularly corals. At the same time, there are concerns that people will use less sunscreen rather than substituting sunscreens with UV filters that are considered environmentally safe. This study will review the

state of science on use of currently marketed sunscreen ingredients, their fate and effects in aquatic environments, and the potential public health implications associated with changes in sunscreen usage.”^x

This study, sponsored by the U.S. Environmental Protection Agency, is currently examining research concerning both the environmental and human health impacts of access to sunscreen. This independent study is evaluating the scientific merit of current science and identify gaps in our current understanding of coral reef environmental health and human health risks of skin cancer. All NAS studies involve multiple strategies to reduce bias and to synthesize the best available science.

NAS Study Should be Completed Before Legislators Make Further Decisions on Consumer Sunscreen Choice

The conclusion of this NAS study – expected soon in spring 2022 – will inform future decisions of policymakers to ensure access to sunscreens while also protecting the coral reefs. Until this study is completed, legislation like HB 1519 should be suspended as there are currently insufficient data to inform a risk/benefit analysis between protecting the marine environment and protecting the public’s health. It is important that the legislature wait for unbiased scientific analysis and consensus.

FDA Advises Continued Use of Sunscreens

In addition to the lack of peer-reviewed evidence on the environmental impact of sunscreens, the impact on human health is also still being researched. On September 24, 2021, the Food and Drug Administration (FDA), which regulates sunscreens as over-the-counter (OTC) drugs for the prevention of sunburn and skin cancer, issued a [final order](#)^{xi} that concluded that, “In the short term, these new authorities essentially preserve status quo marketing conditions for these sunscreens” and that “most sunscreens on the market are in compliance with the deemed final order.” **To be clear, the FDA’s final order issued on September 24, 2021 did NOT recommend any changes to currently marketed sunscreens.**

Earlier this year, the FDA also posted an article titled, “[Shedding More Light on Sunscreen Absorption](#)”^{xii} that explained that while the FDA was seeking more information on the absorption levels of sunscreen ingredients, including avobenzone, oxybenzone, octocrylene, homosalate, octisalate, and octinoxate, it still advises their continued use. The FDA clearly stated, “Absorption does NOT equal risk – the FDA advises continued use of sunscreens” and noted that:

“The findings in these studies do not mean that the FDA has concluded that any of the ingredients tested are unsafe for use in sunscreens, nor does the FDA seeking further information indicate such. The agency’s proposed rule requested additional safety studies to fill in the current data gaps for these ingredients. The rule also proposed that two active ingredients (zinc oxide and titanium dioxide) are generally recognized as

safe and effective for use in sunscreens, and additional data was not requested for them.

Given the recognized public health benefits of sunscreen use, the FDA strongly advises all Americans to continue to use sunscreens in conjunction with other sun protective measures (such as protective clothing) as this important rulemaking effort moves forward.”^{xiii}

The Hawaii state law signed in July 2018 already eliminated the OTC sale of the ingredients oxybenzone and octinoxate. **HB 1519 would expand this ban to include the most utilized alternative sunscreen ingredients and could potentially remove approximately 64% of the sunscreens currently available in the United States from being sold in Hawaii.**

The proposed legislation could **significantly reduce consumer choice** of and access to sunscreen in Hawaii, where sunscreen is often used not only in the ocean, but whenever people are outdoors doing activities such as hiking, golfing, walking, running, cycling or working outside. This puts Hawaii residents at greater risk for skin cancer with only limited peer-reviewed scientific evidence on sunscreen ingredients and its impact on environmental and human health.

Again, we ask that the legislature hold off on passing HB 1519, or any other legislation on sunscreen ingredients, until more data on environmental and public health impacts are available.

If you have any questions about the PASS Coalition or the content of this testimony, please feel free to contact me at lmiyahira@iq360inc.com.

Mahalo you for the opportunity to testify.

Sincerely,

Lynn Miyahira
Public Access to SunScreens (PASS) Coalition

ⁱ <http://www.hawaiihealthmatters.org/indicators/index/view?indicatorId=2389&localeId=14&localeChartIdxs=1%7C2%7C4>

ⁱⁱ <https://www.skincancer.org/skin-cancer-information/skin-cancer-facts/>

ⁱⁱⁱ <https://www.epa.gov/sunsafety/sun-safety-monthly-average-uv-index>

^{iv} <http://www.hawaiihealthmatters.org/indicators/index/view?indicatorId=3029&localeId=14>

^v <https://www.skincancer.org/skin-cancer-information/skin-cancer-facts/>

^{vi} <https://www.sciencedirect.com/science/article/pii/S0048969719310125?via%3Dihub>

^{vii} <https://www.staradvertiser.com/2021/11/20/hawaii-news/sunscreen-chemicals-still-found-at-hanauma-study-says/>

^{viii} <https://www.nature.com/articles/nature21707>

^{ix} <https://www.epa.gov/coral-reefs/threats-coral-reefs>

^x <https://www.nationalacademies.org/our-work/environmental-impact-of-currently-marketed-sunscreens-and-potential-human-impacts-of-changes-in-sunscreen-usage>

^{xi} <https://www.accessdata.fda.gov/scripts/cder/omuf/index.cfm?event=NewMonograph&ID=D1D673977F06B1486C355A8162942E5B9CC2734AE65E4585CB6C013EDD5B03F3&OMUFID=OTC000006>

^{xii} <https://www.fda.gov/news-events/fda-voices/shedding-more-light-sunscreen-absorption>

^{xiii} <https://www.fda.gov/news-events/fda-voices/shedding-more-light-sunscreen-absorption>



Kenneth J. Tomecki, MD, FAAD President
Mark D. Kaufmann, MD, FAAD President-elect
Neal Bhatia, MD, FAAD Vice President
Linda F. Stein Gold, MD, FAAD Vice President-elect
Marta J. Van Beek, MD, MPH, FAAD Secretary-Treasurer
Daniel D. Bennett, MD, FAAD Assistant Secretary-Treasurer
Elizabeth K. Usher, MBA Executive Director & CEO



February 14, 2022

The Honorable Aaron Johanson, Chair
House Committee on Consumer Protection and Commerce
Hawaii State Capitol, Room 436
Honolulu, HI 96813

Dear Chairperson Johanson:

On behalf of the Hawaii Dermatological Society and the nearly 16,500 U.S. members of the American Academy of Dermatology Association (AADA), we write to urge you to oppose HB 1519, legislation that would prohibit the sale, offer for sale, or distribution in the state of any sunscreen that contains active ingredients that are not generally recognized as safe and effective (GRASE) by the Food and Drug Administration (FDA) without a prescription issued by a licensed health care provider. As dermatologists we dedicate ourselves to promoting habits in our patients that ensure healthy skin. UV radiation damages the skin's DNA, which is the first stage of skin cancer. We oppose this legislation and urge you to strongly consider the broad implications of banning the use of sunscreens containing certain ingredients, bearing in mind the grave dangers of sun exposure without adequate protection that the residents and visitors of Hawaii face.

Recently, the FDA proposed a rule categorizing two ingredients, zinc oxide and titanium dioxide, as GRASE. The proposed rule also asks manufacturers to provide more data about the safety of chemical sunscreens containing avobenzone, ensulizole, homosalate,

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meradimate, octinoxate, octisalate, octocrylene and oxybenzone. Industry is currently working with the FDA on testing requirements for these ingredients.

The request for more data does not mean that the ingredients are unsafe. The FDA has not asked the public to refrain from using sunscreens that contain any of these ingredients.

Chemical (organic) sunscreen filters are an important component of many sunscreen products. They provide ample broad-spectrum protection against UV radiation. This legislation would remove access to chemical filters, leaving only mineral filters, which are less effective. Mineral sunscreen products often leave a whitish residue on the skin. Many, especially individuals with darker skin tones, find these to be unacceptable for use.

UV light exposure is a risk factor for all types of skin cancer and sunscreen use is a major photo-protective method. UVA radiation damages deeper layers of the skin and contributes to the development of melanoma, the deadliest form of skin cancer. UVB radiation is the primary cause of sunburn and plays a key role in the development of skin cancer in the skin's superficial layers. Both types of rays suppress the immune system.¹ Unprotected sun exposure is the most preventable risk factor for skin cancer. At least one in five Americans will develop skin cancer.^{2,3} Melanoma, the deadliest form of skin cancer, is the second most common form of cancer in women, aged 15-29 years old. Caucasian men, age 50+ are at a high risk of developing melanoma.^{4,5,6} In 2021, 460 new cases of melanoma are expected in Hawaii.⁷ The annual cost of treating nonmelanoma skin cancer in the U.S. is estimated at \$4.8 billion, and the average annual cost of treating melanoma is approximately \$3.3 billion.⁸

¹ Lim HW, James WD, Rigel DS, Maloney ME, Spencer JM, Bhushan R. Adverse effects of ultraviolet radiation from the use of indoor tanning equipment: time to ban the tan. *Journal of the American Academy of Dermatology*. 2011 Apr 30;64(4):e51-60.

² Stern RS. Prevalence of a history of skin cancer in 2007: results of an incidence-based model. *Arch Dermatol*. 2010 Mar;146(3):279-82.

³ Robinson JK. Sun Exposure, Sun Protection, and Vitamin D. *JAMA* 2005; 294: 1541-43.

⁴ Siegel RL, Miller KD, Jemal A. Cancer statistics, 2017. *CA Cancer J Clin*. 2017; 67:7-30.

⁵ Little EG, Eide MJ. Update on the current state of melanoma incidence. *Dermatol Clin*. 2012;30(3):355-61.

⁶ NAACCR Fast Stats: An interactive quick tool for quick access to key NAACCR cancer statistics. North American Association of Central Cancer Registries. <http://www.naacccr.org/>. (Accessed on 3-10-2016).

⁷ American Cancer Society. Cancer Facts and Figures 2021. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2021/cancer-facts-and-figures-2021.pdf>

⁸ Guy GP, Machlin S, Ekwueme DU, Yabroff KR. Prevalence and costs of skin cancer treatment in the US, 2002–2006 and 2007–2011. *Am J Prev Med*. 2015;48:183–7

To prevent skin cancer, the AADA recommends comprehensive sun protection that includes seeking shade; wearing protective clothing, including hats and sunglasses; and applying a broad-spectrum, water-resistant sunscreen with an SPF of 30 or higher to exposed skin.

Dermatologists have an interest in patient and public access to safe and effective sunscreen ingredients. The FDA is currently working with industry on safety testing for currently marketed sunscreen ingredients. The FDA is also considering several time-and-extent applications (TEAs) for new sunscreen ingredients to be added to the FDA over-the-counter (OTC) sunscreen monograph. The FDA's conclusion from recent studies on sunscreen ingredient absorption "supports the need for further studies to determine the clinical significance of these findings." FDA further stated that "these findings do not indicate that individuals should refrain from the use of sunscreen."⁹ Sunscreen ingredients have been in use for almost 50 years without any reported systemic adverse side effects. This issue highlights the urgent need for new safe and effective sunscreen ingredients in the United States. With the approval of ingredients that utilize alternative UV filters, the public's health will be better. The AADA continues to participate in the discussion with the FDA and manufacturers regarding availability of current and new ingredients.

We are concerned about the potential environmental impact of UV-filters. The potential adverse effects related to the levels of UV-filters in the water supply and marine life (as well as humans) are an emerging science. A review of 12 studies evaluating 14 different organic UV filters in seawater near coral reefs determined that the majority of concentrations found in seawater were in the nanograms per liter range. Nine papers reported toxicological findings from no response to a variety of biological effects; these effects were detected in the micrograms per liter to milligrams per liter range, namely, at least 1000-fold higher than those reported in seawater in real life.¹⁰ The review concludes "there is currently limited evidence to suggest that corals are adversely impacted by environmental exposure to UV filters."

⁹ Matta, MK, Florian, J, Zusterzeel, R, Nageswara RP, Patel, V, Volpe, DAPhD, et al. Effect of Sunscreen Application on Plasma Concentration of Sunscreen Active Ingredients: A Randomized Clinical Trial. *Journal of the American Medical Association* 323, No. 3 (2020). 267.

¹⁰ Mitchelmore CS, Burns, EE, Conway A, Heyes A, Davies IA. A critical review of organic ultraviolet filter exposure, hazard, and risk to corals. *Environ Toxicol Chem.* 2020 (00);00:1-21. Online 2 February 2021 in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/etc.4948

Our organizations advocated for the enactment of the Further Consolidated Appropriations Act, 2020, by which the U.S. Congress directed the Environmental Protection Agency (EPA) to contract with the National Academy of Sciences (NAS) to conduct a scientific literature review of current sunscreens' potential risk to the marine environment. The study will consider scientific literature on the potential public health implications as a result of reduced use of sunscreens. This type of research is necessary to understand how UV filters may affect the environment. We encourage you to consider these ongoing efforts before taking any action to remove a product that has been proven to be effective against skin cancer. Based on current data, removing specific sunscreen ingredients and products from the market would be premature. Doing so would deprive the public of an integral component of photoprotection to decrease the risk of skin cancer.

Please consider the public health consequences of removing access or attaching stigma to sunscreens containing certain ingredients. We urge you to oppose HB 1519 for the reasons above, and we request that Hawaii give the FDA more time to evaluate new sunscreens for public use and for the NAS to conduct its review and report its findings. We appreciate the opportunity to provide written comments on this important public health issue. For more information, please contact Lisa Albany, director of state policy for the AADA, at LAlbany@aad.org or (202) 712-2615.

Sincerely,



Kenneth J. Tomecki, MD, FAAD
President
American Academy of Dermatology Association

Patrick M. Ellison, MD, FAAD
President
Hawaii Dermatological Society

February 14, 2022

Representative Aaron Ling Johanson, Chair
Representative Lisa Kitagawa, Vice Chair
Committee on Consumer Protection & Commerce
Hawaii State Legislature
415 South Beretania Street
Honolulu, HI 96813

RE: Opposition to HB 1519

Dear Chair Johanson and Vice Chair Kitagawa:

On behalf of the members of the Personal Care Products Council (PCPC),¹ I am writing to express our opposition to HB 1519, legislation to prohibit the sale, use or distribution of sunscreen ingredients. **This bill will lead to a serious public health issue by banning essential, safe and effective sunscreen products.**

The U.S. has Limited Number of Sunscreen Ingredients to Fight Skin Cancer

Sunscreens are a key factor in preventing and reducing the risk of skin cancer and damage from the sun's ultraviolet (UV) rays. Public health organizations, including the American Cancer Society (ACS), American Academy of Dermatology, the Mayo Clinic and the Skin Cancer Foundation, recommend using sunscreen as part of a safe-sun regimen. The Centers for Disease Control and Prevention's Sun Safety recommendations note the importance of daily sunscreen use, including on cloudy and overcast days, to help prevent most skin cancers. And, according to the World Health Organization (WHO), four out of five skin cancer cases can be prevented by following safe-sun practices, including using sunscreen regularly.

Sunscreen ingredients must be approved for use by the U.S. Food and Drug Administration (FDA) and are a crucial and well-recognized tool in the fight against skin cancer and premature skin aging. The U.S. has a limited number of approved sunscreen ingredients to develop products that protect consumers from the harmful effects of solar radiation.

Hawai'i Residents at High Risk for Skin Cancer

Hawai'i residents are at high risk for developing skin cancer. ACS estimates that melanoma, the most serious form of skin cancer, will be one of the leading causes of new cancer cases in Hawai'i in 2022, with an increase in melanoma rates over the past year. Hawai'i has one of the highest daily UV index averages in the nation, making protecting residents from sun exposure a public health priority.

¹ Founded in 1894, the Personal Care Products Council (PCPC) is the voice and advocate for 600 member companies representing the \$499.6 billion global cosmetics and personal care products industry. PCPC's members represent approximately 90% of the U.S. beauty industry and are some of the most beloved and trusted brands in beauty and personal care today. As the manufacturers, distributors and suppliers of a diverse range of products millions of consumers rely on every day – from sunscreens, toothpaste and shampoo to moisturizer, makeup and fragrance – PCPC's member companies are global leaders committed to product safety, quality and innovation.

Environmental Impact of Sunscreens is being Evaluated by the National Academies of Science, Engineering, and Medicine (NASEM)

This legislation does not consider the full body of scientific evidence to establish whether UV filters pose an ecological threat to Hawaiian reef systems. This includes considerations such as the suitability and reliability of existing data to assess environmental risks in addition to the well-recognized causes of coral reef decline in Hawai'i and the rest of the world, including climate change, land-based pollution, and other human activities, such as physical damage to corals from recreational activities.²

Policy decisions that will adversely impact public health should not be made ahead of a scientific consensus on this issue. To reduce bias and to synthesize the best available science, the United States Congress directed the NASEM to evaluate the presence and potential impacts of organic and inorganic UV filters in freshwater and marine environments, as well as the potential public health impact of limiting access to sunscreens. The findings of the review, which is sponsored by the U.S. Environmental Protection Agency (EPA), are expected in early 2022. Making environmental management decisions on sunscreens based on current insufficient and, in some cases, unreliable scientific data may lead to unintended negative health consequences, such as fewer available sunscreens and an increase in the prevalence of skin cancer while providing limited, if any, environmental improvement. PCPC encourages industry, academia, NGOs, federal agencies and the state of Hawai'i to work together to ensure that both the reef ecosystems and the health of Hawai'i's residents are protected.

By passing this bill, the Legislature could significantly reduce consumer options when making important health decisions. Ensuring consumers have access to products containing a wide variety of sunscreen active ingredients is critical and an important contribution to FDA's public health mission.

We respectfully ask that you oppose this bill. Thank you for your consideration and the opportunity to comment.

Sincerely,



Karin Ross
Executive Vice President, Government Affairs

² Mitchelmore, C. L., Burns, E. E., Conway, A., Heyes, A., & Davies, I. A. (2021). A critical review organic ultraviolet filter exposure, hazard, and risk to corals. *Environmental Toxicology and Chemistry*, 40(4), 967–988. <https://doi.org/10.1002/etc.4948>. See also Burns, E.E. & Davies, I.A. (2021). Coral Ecotoxicological Data Evaluation for the Environmental Safety Assessment of Ultraviolet Filters. *Environmental Toxicology and Chemistry*. DOI: 10.1002/etc.5229. See also Dyer, S.D. & Green, N.S. (2021). Use of Eco-epidemiology to Assess the Potential Risks of UV Filters to Corals. Presentation to National Academies of Science, Engineering and Medicine, 16 September 2021. <https://www.nationalacademies.org/event/09-16-2021/docs/D885731178D23BF914365FE2D192B964EC6504FE7A7B>.



AMERICANS FOR DEMOCRATIC ACTION

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Doug Pyle, Secretary	Stephanie Fitzpatrick	Stephen O'Harrow		

February 14, 2022

TO: Chair Johanson and Members of the CPC Committee

RE: HB 1519 HD 1 Relating to Sunscreen

Support for a Hearing on February 15

Americans for Democratic Action is an organization founded in the 1950s by leading supporters of the New Deal and led by Patsy Mink in the 1970s. We are devoted to the promotion of progressive public policies.

Americans for Democratic Action Hawaii supports this bill as it would prohibit the sale and distribution of sunscreen products containing ingredients not generally recognized as safe and effective as defined by the Food and Drug Administration. We would like the HD 1 assurance that this bill would not repeal the existing law that prevents use of oxybenzone and octinoxate. We want to require that BEFORE a chemical goes on the market. It must meet FDA standards of GRASE = generally recognized as safe. We also hope to avoid any preemption of county ordinances that bar bad sunscreens.

Thank you for your consideration.

Sincerely,

John Bickel, President



*Dedicated to the conservation of coastal and marine environments,
emphasizing stewardship of the natural resources of Hanauma Bay*

To: Representative Aaron Johanson, Chair; Representative Lisa Kitagawa, Vice Chair;
and Members of the House Committee on Consumer Protection and Commerce

Date: Tuesday, February 15, 2022

Time: 2 pm

Place: Conference Room 329 & Via Videoconference

Re: **OPPOSITION FOR HB1519 HD1**

Aloha Chair Johanson, Vice Chair Kitagawa, and CPC Committee Members,

Friends of Hanauma Bay thanks Chair Johanson for hearing HB1519 HD1, and EEP Chair Lowen for passing it out of the House Energy and Environmental Protection Committee.

We have been staunch advocates for the mitigation of the harmful effects of petrochemical sunscreens to Hawaii's environmental and public health for years. We joined the thousands of Hawai'i residents that formed a grass-roots advocacy coalition that strongly supported visionary State leadership that led the world with Act 104, 2018 prohibiting the sale and distribution of sunscreens containing the petrochemical UV filters oxybenzone and octinoxate effective January 1, 2021.

The weight of scientific evidence over the past twenty plus years recognizes that petrochemical UV filters in sunscreens pose a threat to corals and other marine wildlife, as well as public health. But HB1519 as written is not the best vehicle to further mitigate these impacts to our marine environment.

We therefore ask that HB1519 HD1 be deferred, with sincere appreciation for being allowed to discuss these issues before this Committee this year.

With Aloha,

Lisa Bishop
President

February 14, 2022

TO: Representative Aaron Ling Johanson
Chair
Representative Lisa Kitagawa, Vice Chair

Members of the House Committee on Consumer Protection & Commerce
Thirty-First Legislature
Regular Session of 2022

FROM: The members of the Hawaii Skin Cancer Coalition

RE: OPPOSITION to House Bill 1519, HD1– RELATING TO SUNSCREENS
Hearing Date – Tuesday, February 15, 2022

Dear Chair Ling Johanson, Vice Chair Kitagawa, and Members of the Committee,

The members of the Hawaii Skin Cancer Coalition strongly oppose House Bill 1519, HD1.

The Hawaii state law signed in July 2018 eliminated the over the counter (OTC) sale of the ingredients oxybenzone and octinoxate. HB 1519, HD 1 would expand this ban to include the most utilized alternative sunscreen ingredients and could potentially remove approximately 64% of the sunscreens currently available in the United States from being sold in Hawaii.

The guidance from the Food and Drug Administration (FDA) has been misinterpreted. It is inaccurate that the FDA has labeled current sunscreen ingredients as not safe. What the FDA has done is issue a proposed rule, which asks manufacturers to provide more data about the safety of several sunscreen ingredients. The FDA is asking for more safety data to find out the following:

- To what extent your skin absorbs sunscreen ingredients
- Whether absorbing sunscreen has any effects on your skin or body

The FDA proposed rule only classifies that two ingredients are not “generally recognized as safe and effective” (GRASE):

- Para-aminobenzoic acid (PABA)
- Tolamine salicylate

However neither of these ingredients in sunscreen are legally sold in the United States. The FDA proposed rule also classifies two ingredients that are “generally recognized as safe and effective” (GRASE). These ingredients are:

- Titanium dioxide
- Zinc oxide

The Hawaii Skin Cancer Coalition’s mission is to provide clear, concise messages on skin cancer prevention, early detection, and effective treatment for both the public and health professionals based upon current and accurate information. The Coalition is a collaborative effort between concerned local organizations and businesses including, the University of Hawai’i Cancer Center, American Cancer Society, Hawai’i Pathologists’ Laboratory, the Friends of the University of Hawai’i Cancer Center, the Hawai’i Dermatological Society, Kaiser Permanente, the Hawai’i Lifeguard Association, Queen’s Healthcare Plan, the University of Hawai’i Dermatology Interest Group Students and the Hawai’i Ophthalmological Society. All of these organizations share a common goal to help prevent skin cancer.

However, the GRASE determination only considers the effects on humans, it does not consider the effects of these ingredients in the marine environment. In other words, it is not known whether these ingredients (titanium and zinc oxide sunscreens) can harm marine life or corals. Some current research has suggested that these ingredients do have the potential to harm the marine life including corals. The FDA is calling for more safety data on the following 12 ingredients before determining whether these ingredients can be classified as GRASE:

- Those commonly used in the U.S. include: ensulizole, octisalate, homosalate, octocrylene, octinoxate, oxybenzone, avobenzone.
- Those commonly not used in the U.S.: Cinoxate, dioxybenzone, mcradimate, padimate O, sulisobenzonc.

While the FDA is asking for more data, it does not say that these ingredients are unsafe. It does not ask the public to stop using sunscreens that contain any of these ingredients. We at the Hawaii Skin Cancer Coalition and in recognition of the American Academy of Dermatology Association (AADA) and Hawaii Dermatological Society (HDS) recommendations to help prevent skin cancer suggest, "That a comprehensive sun protection plan that includes seeking shade; wearing protective clothing, including hats and sunglasses; and generously applying a broad-spectrum, water-resistant sunscreen with an SPF of 30 or higher to exposed skin. Those who are concerned about the reported effects of chemical sunscreen ingredients can opt for a physical sunscreen containing the active ingredients zinc oxide or titanium dioxide." We believe these actions can help prevent skin cancers and protect our marine environment.

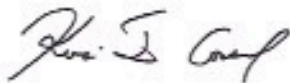
Morbidity and deaths from skin cancers are on the rise in the U.S. and Hawaii. The current focus of Hawaii's legislative policy limiting the sale of sunscreen products will undermine years of progress towards addressing the effects of unprotected sun exposure, a primary risk factor for skin cancer. The leading scientific agencies in the U.S., all emphasize that using sunscreens is a critical part of regimens to prevent skin cancers, along with protective clothing, hats with brims, and shade. In open water, hats and shade are not options.

According to the National Cancer Institute, nearly 5 million people in the US are treated for skin cancers at the cost of over 8 billion dollars to our U.S. health care system. In Hawaii, ~7,000 people are treated for skin cancers each year. Melanoma, the deadliest form of skin cancer, is now the second most common form of cancer for females aged 15-29 years old. Each year more than 10,000 people die of melanoma across the U.S. In Hawaii, 400 people are diagnosed, and ~50 people die each year. It is essential that we conduct valid research to understand the potential environmental effects of sunscreen use better to protect Hawaii's natural resources.

Mahalo for the opportunity to submit testimony in strong OPPOSITION to House Bill 1519, HD1 (HB 1519, HD1) on behalf of the Hawaii Skin Cancer Coalition.

The Hawaii Skin Cancer Coalition's mission is to provide clear, concise messages on skin cancer prevention, early detection, and effective treatment for both the public and health professionals based upon current and accurate information. The Coalition is a collaborative effort between concerned local organizations and businesses including, the University of Hawai'i Cancer Center, American Cancer Society, Hawai'i Pathologists' Laboratory, the Friends of the University of Hawai'i Cancer Center, the Hawai'i Dermatological Society, Kaiser Permanente, the Hawai'i Lifeguard Association, Queen's Healthcare Plan, the University of Hawai'i Dermatology Interest Group Students and the Hawai'i Ophthalmological Society. All of these organizations share a common goal to help prevent skin cancer.

Sincerely,



Kevin D. Cassel, DrPH
President, Hawaii Skin Cancer Coalition

The Hawaii Skin Cancer Coalition's mission is to provide clear, concise messages on skin cancer prevention, early detection, and effective treatment for both the public and health professionals based upon current and accurate information. The Coalition is a collaborative effort between concerned local organizations and businesses including, the University of Hawai'i Cancer Center, American Cancer Society, Hawai-i Pathologists' Laboratory, the Friends of the University of Hawai'i Cancer Center, the Hawai'i Dermatological Society, Kaiser Permanente, the Hawai'i Lifeguard Association, Queen's Healthcare Plan, the University of Hawai'i Dermatology Interest Group Students and the Hawai-i Ophthalmological Society. All of these organizations share a common goal to help prevent skin cancer.

HB-1519-HD-1

Submitted on: 2/14/2022 12:38:11 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Ted Bohlen	Hawai'i Reef and Ocean Coalition	Oppose	Yes

Comments:

To: The Honorable Aaron Ling Johanson, Chair, the Honorable Lisa Kitagawa, Vice Chair, and members of the House Consumer Protection and Commerce Committee

From: Hawai'i Reef and Ocean Coalition (by Ted Bohlen)

Re: Hearing HB1519 HD1 RELATING TO SUNSCREEN.

Tuesday February 15, 2022, 2:00 p.m., by videoconference

Aloha Chair Johanson, Vice Chair Kitagawa, and members of the House Consumer Protection and Commerce Committee:

Position: **Hawai'i Reef and Ocean Coalition OPPOSES HB1519 HD1**

The Hawai'i Reef and Ocean Coalition (HIROC) is concerned about protecting coral reefs and other marine life from harmful effects of certain sunscreens.

HIROC appreciates the bill's intent to protect the public health by prohibiting sales of sunscreens not generally recognized as safe and effective (GRASE) by the FDA; the public health is very important!

However, the environment is also very important! This bill's approach is not appropriate at this time because it does not ensure protection of the marine environment.

HIROC asks the Committee to please hold this bill!

Mahalo for hearing the bill and providing the opportunity to testify!

Hawai'i Reef and Ocean Coalition (by Ted Bohlen)



Re: Hearing Relating to Sunscreen

Tuesday, February 15, 2022, 2:00 p.m., by videoconference.

Position: **Oppose HB1519 HD1**

Aloha Honorable Rep. Johanson, Chair, The Honorable Vice-Chair Kitagawa, and Members of the Consumer Protection & Commerce Committee:

The Kohala Center appreciates Chair Johanson's willingness to schedule this hearing for HB1519 HD1.

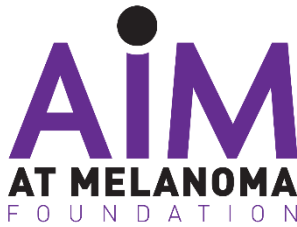
We recognize that coral reefs are intrinsic to Hawaiian culture and provide critical natural protection against coastal erosion and sea-level rise. Further, our coral reefs underpin our vibrant tourism industry, Hawai'i's primary and vital economic engine. Currently, these reefs we depend on are at risk. Where people use marine environments as recreational resources, there is sunscreen pollution. Swimmers put on sunscreen products before they get into the water, and over an hour, much of that sunscreen will slough off, potentially contaminating the surrounding water. Chemical sunscreens are a grave concern because it has been reported in the scientific literature that specific petrochemicals in sunscreen can have irreversibly detrimental effects on marine life. Including changes in fish behavior, damage to coral DNA and larvae, and the health of algae, fish, shellfish, urchins, and marine mammals.

The Environmental Protection Agency, Center for Disease Control, American Cancer Society, World Health Organization, and hundreds of scientists and dermatologists have reported that certain chemical sunscreens are harmful to human life and have not been shown to decrease skin cancer.

To protect from the sun and reduce the impact on coral reefs, they suggest that people avoid the mid-day sun, wear a protective hat and clothing, and apply sunscreen with only zinc oxide or titanium dioxide as the main ingredient. This is a much better course for public health and the environment than using a petrochemical sunscreen that may cause harm to the coral reefs and other marine life.

Petrochemical sunscreens are harmful to both environmental and public health, but HB1519, as written, is not the best vehicle to further mitigate these impacts to our marine environment. We, therefore, ask that HB1519 HD1 be deferred.

Mahalo,
Cynthia Punihaole Kennedy
Director, The Kahalu'u Bay Education Center



February 14, 2022

Rep. Aaron Johanson, Chair, Consumer Protection & Commerce Committee
Rep. Lisa Kitagawa, Vice Chair, Consumer Protection & Commerce Committee
Hawaii State Capitol
Honolulu, HI 96813

Dear Representatives Johanson and Kitagawa,

I write to you on behalf of *AIM at Melanoma* and AIM's companion organization *The Skin Cancer Education & Research Foundation* concerning bill HB1519. **Whether this bill is spurred by environmental concerns or health concerns, neither issue has evidence to warrant banning products that are critically important to skin cancer prevention in humans. I urge you to oppose HB 1519.**

Though I am a California resident, my parents, children, husband, and I have spent a lot of time in Hawaii over the last 50 years, as we own a home on Maui. My husband is a Stage III melanoma survivor. In fact, we discovered his melanoma on Oneloa Beach in Maui in 2013 when he showed me a mole on his arm that had changed in color from brown to black. I am also the vice president of AIM at Melanoma, a global non-profit whose community includes many melanoma survivors in Hawaii. AIM's goal is to end this disease in our lifetime while improving the lives of those it affects.

And melanoma affects a lot of people. In 2022, it is estimated that 197,700 cases of melanoma will be diagnosed in the United States, more than half of those invasive cases¹. Over 7,600 people are estimated to die of the disease². In 2019, the estimate for the number of new invasive melanoma cases diagnosed in the U.S. was 40% higher than the estimate in 2009³. But it's not just melanoma that's concerning: Squamous and basal cell skin cancer diagnoses number over 5 million every year⁴, and squamous cell skin cancer deaths are estimated in the multiple

¹ American Cancer Society. "Cancer Facts and Figures 2022". Atlanta: American Cancer Society; 2022.

² American Cancer Society. "Cancer Facts and Figures 2022". Atlanta: American Cancer Society; 2022.

³ American Cancer Society. "Cancer Facts and Figures 2019". Atlanta: American Cancer Society; 2019.

⁴ American Cancer Society. "Cancer Facts and Figures 2020". Atlanta: American Cancer Society; 2020.

#endmelanoma

AIM at Melanoma is a 501(c)(3) organization. Tax ID #56-2427805

thousands each year. For many millions of people, skin cancers are disfiguring, costly, and frightening.

But skin cancers are mostly preventable because the vast majority are caused by UV damage from the sun⁵. Sunscreen is a key component to protect skin from UV damage. AIM at Melanoma stresses using broad spectrum sunscreen of 30 SPF or higher daily; wearing protective clothing, hats, and sunglasses; and seeking shade. Additionally, we warn that it's critical to avoid sunburns, especially blistering sunburns, as your risk for melanoma doubles if you've had more than five sunburns⁶. Further, one blistering sunburn in childhood or adolescence more than doubles your chances of developing melanoma later in life⁷. **It is exactly these facts that should be most concerning for HI legislators, as both residents and visitors to the islands are susceptible to sunburns on a daily basis.**

Banning the entire category of organic (chemical) sunscreens is an enormous public health concern. Banning chemical filters leaves only the less effective mineral filters. Additionally, it's essential to remember that sunscreen is only effective if used—and used as directed. Many people prefer the feel, texture, and look of chemical sunscreens, because mineral sunscreens can feel “heavy” on the skin and leave a whitish residue. **People won't use a sunscreen they don't like, or they won't use the right amount of it, and that leaves them vulnerable to UV damage and all types of skin cancer.**

The FDA is considering several time-and-extent applications (TEAs) for new sunscreen ingredients to be added to the FDA over-the-counter (OTC) sunscreen monograph, and the FDA is currently working with industry on safety testing for currently marketed sunscreen ingredients. AIM at Melanoma applauds the consideration of these new ingredients: We hope the U.S. can soon market filters that have been used safely in Europe for many years. **And we understand the FDA's further safety testing of currently approved sunscreen ingredients, while we highlight the FDA's own language that “Absorption does NOT equal risk – The FDA advises continued use of sunscreens. The findings in these studies do not mean that the FDA has concluded that any of the ingredients tested are unsafe for use in sunscreens, nor does the FDA seeking further information indicate such. The agency's proposed rule requested additional safety studies to fill in the current data gaps for these ingredients.”**

As for environmental concerns, AIM joined many other melanoma and skin cancer-related organizations to advocate for the National Academy of Sciences (NAS) study authorized in late 2019 that looks at current data gaps related not only to sunscreen access and public health but also to the effects of sunscreen on the environment. It was clear that more research is needed to understand any potential environmental concerns. That report is expected in Spring 2022 and will give us all guidance on sunscreens, human health, and the environment. We eagerly await the results of this study.

⁵ Parkin DM, Mesher D, Sasieni P. Cancers attributable to solar (ultraviolet) radiation exposure in the UK in 2010. *Br J Cancer* 2011; 105:S66-S69.

⁶ Pfahlberg A, Kölmel KF, Gefeller O. Timing of excessive ultraviolet radiation and melanoma: epidemiology does not support the existence of a critical period of high susceptibility to solar ultraviolet radiation-induced melanoma. *Br J Dermatol* 2001; 144:3:471-475.

⁷ Lew RA, Sober AJ, Cook N, et al. Sun exposure habits in patients with cutaneous melanoma: a case study. *J Dermatol Surg Onc* 1983; 12:981-6.

#endmelanoma

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On behalf of *AIM at Melanoma* and *The Skin Cancer Education & Research Foundation*, I urge you to delay consideration or passage of any sunscreen legislation at least until the NAS study is published—at which time more information would be available on any true environmental concerns as well as a greater understanding of the public health threat that this ban would create.

In summary, I'll quote Hawaii's own DOH from a letter to The Honorable Kelly Takaya King of the Maui County Council dated July 30, 2021, when they were considering similar legislation: **"From a skin cancer/human health perspective, it is not advisable to limit sunscreens to only zinc/titanium as the active ingredients. Some people have hypersensitivity type reactions to these ingredients, or just don't like them and would likely not use sunscreen at all if these were the only options. In addition, research is definitely needed to better understand the risks to the environment from other chemical sunscreen constituents."**

We at AIM at Melanoma completely agree.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read 'AR', with a long horizontal line extending to the right.

Alicia Rowell
Vice President
AIM at Melanoma
925/800-9275

#endmelanoma

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February 15th 2022

House of Representatives, 31st Legislature 2022

Testimony to the Consumer Protection and Commerce Committee

House Bill 1519

Aloha Chair Johanson, Vice-Chair Kitagawa and the rest of the members of the Consumer Protection and Commerce Committee,

On behalf of Pacific Whale Foundation (PWF), a 501 (c)(3) non-profit with nearly 4,000 supporting members, I am testifying in support of HB 1519, relating to sunscreen. It is our mission to protect the ocean through science and advocacy and inspire environmental stewardship. PWF has long advocated for science-based solutions to the major threats facing the health of the ocean, including educating our supporters on the harmful impacts of excess chemical pollutants to coral reefs.

Through our wholly owned, for-profit subsidiary, PacWhale Eco Adventures, we educate an estimated 300,000 people a year who partake in on-water activities on Hawai'i's unique and fragile environment, ocean ecosystems, and marine inhabitants. Through these education programs, we teach about the impacts of chemical-based sunscreens on fragile coral reefs, advocate for sun-protective clothing, instruct on how to identify whether their sunscreen is the safe for the environment and encourage the use of mineral-based sunscreens.

As a science-based organization, we ensure that we are advocating based on sound science. Although the research on the impacts of certain chemicals to reefs is evolving, we also take the precautionary approach in our advocacy work; we emphasize caution when a decision has the potential to cause harm. In this instance, there is enough science to support certain chemicals have adverse impacts to coral reef health, and therefore the health of the entire ocean ecosystem.

Coral reefs are among the most biologically diverse ecosystems in the world, supporting nearly one million species of algae, invertebrates, and fish. In Hawai'i, coral reefs house more than 7,000 *known* species of marine plants and animals, almost 20% of which are endemic to Hawai'i, they provide protection to our coastlines from storm surge and hurricanes and have over \$33 billion in economic value. The science is clear that many of the elements in chemical sunscreens are harmful to coral and other marine life. Research has shown that some chemicals commonly found in sunscreen can damage coral reefs by disrupting coral reproduction, inhibiting growth, deforming coral DNA, and increasing the rate of zooxanthellae viruses and coral bleaching. Action must be taken.

We know that conservation success is only possible when all stakeholders are heard, and when those perspectives are integrated into solutions. The United States



Protecting the ocean through science and advocacy and inspiring environmental stewardship

Food and Drug Administration (FDA) has identified active ingredients that are generally recognized as safe and effective, and these should be the only allowable ingredients found on shelves throughout the State of Hawai'i. Consumers have *many* choices when it comes to sun protection, and this decision will go a long way to not only protecting our fragile reefs from damaging chemical pollutants and people from harmful UV exposure, but it will also lead the way for similar environmental legislation to protect corals reefs around the world. Hawai'i has an opportunity to be a leader here, and it should be taken.

Mahalo for your time.
Shelby Serra
Conservation Advocate

Testimony by George Martin, MD, FAAD
on behalf of the Hawaii Dermatological Society and the American Academy of
Dermatology Association
State of Hawaii House Consumer Protection and Commerce

In Opposition of Bill 1519, HD1

February 15, 2022

Thank you distinguished members of the House Consumer Protection and Commerce for the opportunity to provide testimony in opposition of Bill 1519, which beginning January 1, 2023, prohibits the sale, offer for sale, or distribution in the State of any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the Food and Drug Administration, without a prescription issued by a licensed health care provider.

My name is Dr. George Martin and I am a board-certified dermatologist from Kihei. I am here representing the Hawaii Dermatological Society and the American Academy of Dermatology Association.

I have practiced dermatology on Maui since 1989 and during that time have treated over 20,000 patients and over 30,000 skin cancers. My wife and I have raised our 7 children on Maui and now have 4 grandchildren living on Maui, all of whom share our passion and concern for the health of our ocean and coral reefs. I am an avid waterman who finds his way into the ocean several times a week. I have also been involved in sunscreen research and development since 1986 and plan to launch a line of "reef safe" sunscreen products under the brand Doc Hawaii in the second quarter of 2022.

As dermatologists, we dedicate our lives to promoting habits in our patients that ensure healthy skin. UV radiation damages the skin's DNA, which is the beginning stage of skin cancer. We oppose this legislation and urge you to strongly consider the broad implications of banning the use of sunscreens containing certain ingredients, bearing in mind the grave dangers of sun exposure without adequate protection that the residents and visitors of Maui County face.

Chemical (organic) sunscreen filters are an important component of many sunscreen products. They are efficient and provide ample broad-spectrum protection against UV radiation. This legislation would remove access to chemical filters, leaving only mineral filters, which are known to be less effective filters. Further, mineral sunscreen products often leave a whitish residue on the skin that many, especially individuals with darker skin tones, find to be unacceptable for use.

UV light exposure is a risk factor for all types of skin cancer and sunscreen use is one photoprotection method to protect against it. UVA damages deeper layers of the skin and

contributes to the development of melanoma, the deadliest form of skin cancer. UVB is the primary cause of sunburn and plays a key role in the development of skin cancer in the skin's more superficial layers. In addition, both types of rays can cause suppression of the immune system. Unprotected sun exposure is the most preventable risk factor for skin cancer. According to current estimates, at least one in five Americans will develop skin cancer in their lifetime. Melanoma, the deadliest form of skin cancer, is now the second most common form of cancer for females aged 15-29 years old, and Caucasian men over 50 years of age are at a higher risk of developing melanoma than the general population.

In 2021, 460 new cases of melanoma are expected to be diagnosed in Hawaii. Further, the annual cost of treating nonmelanoma skin cancer in the U.S. is estimated at \$4.8 billion, while the average annual cost of treating melanoma is estimated at \$3.3 billion.

To prevent skin cancer, the AADA recommends a comprehensive sun protection plan that includes seeking shade; wearing protective clothing, including hats and sunglasses; and generously applying a broad-spectrum, water-resistant sunscreen with an SPF of 30 or higher to exposed skin.

Dermatologists have an interest in patient and public access to safe and effective sunscreen ingredients. The FDA is currently working with industry on safety testing for currently marketed sunscreen ingredients. The FDA is also considering several time-and-extent applications (TEAs) for new sunscreen ingredients to be added to the FDA over-the-counter (OTC) sunscreen monograph. The FDA's conclusion from recent studies on sunscreen ingredient absorption "supports the need for further studies to determine the clinical significance of these findings." FDA further stated that "these findings do not indicate that individuals should refrain from the use of sunscreen." It should be noted that sunscreen ingredients have been used since the 1970s without any reported systemic adverse side effects. This issue highlights the urgent need for new safe and effective ingredients to be introduced in the United States. With the approval of ingredients that utilize alternative UV filters available to sunscreen product manufacturers, the public's health will be increasingly protected. The AADA continues to take part in the discussion with the FDA and manufacturers regarding availability of current and new ingredients.

We are aware of and concerned about the potential environmental impact of UV-filters. However, the potential adverse effects, if any, related to the levels of UV-filters in the water supply and marine life (as well as humans) is an emerging science. In a recent 2021 review¹ by Mitchelmore (article attached in my written submission) of this topic, 12 studies evaluating up to 14 different organic UV filters in seawater near coral reefs were critically analyzed. The authors concluded that the majority of concentrations found in seawater were in the nanograms per liter range. Nine papers report toxicological findings from no response to a variety of biological effects, however, these effects were detected in the micrograms per liter to milligrams per liter range, namely, at least **1000-fold higher** than those reported in seawater in real life. The review concludes **"there is currently limited evidence to suggest that corals are adversely impacted by environmental exposure to UV filters."**

Our organizations advocated for the enactment of the Further Consolidated Appropriations Act, 2020, under which the U.S. Congress directed the Environmental Protection Agency (EPA) to contract with the National Academy of Sciences (NAS) to conduct a scientific literature review of current sunscreens' potential risk to the marine environment. The study will also consider scientific literature on the potential public health implications as a result of reduced use of sunscreens. This type of further research is required in order to definitively understand how UV-filters may affect the environment. We encourage you to consider these ongoing efforts before taking any action to remove a product that has been proven effective to protect humans from skin cancer. Based on current data, removing specific sunscreen active ingredients and products from the market would be premature, and would deprive the public of an integral component of photoprotection to decrease the risk of skin cancer.

Speaking as a concerned citizen and scientist, I feel that we need to step back and await the final guidance expected in 2022 from the **FDA** and the **"ad hoc Committee of the National Academies of Sciences, Engineering, and Medicine on Environmental Impact of Currently Marketed Sunscreens and Potential Human Impacts of Changes in Sunscreen Usage"**. We all share the same concerns about the health of our ocean and coral reefs as well as the health and safety of children and adults who are "at risk" for skin cancer. Let us move forward in a spirit of *"malama pono"* and find the common ground for reef and human safety.

Please consider the public health consequences of removing access, banning use, or attaching stigma to sunscreens containing certain ingredients. We oppose Bill 1519 for the reasons above, and we request that Hawaii give the FDA more time to add new sunscreens for public use and for the NAS to conduct its review and publish a report.

In summary, it is my scientific opinion that the House Committee on Energy & Environmental Protection is prematurely engaged in decision making on HB 1519, a bill that is based on faulty science as evidenced by the critical review by Mitchelmore et al published in 2021. ***I implore the members of the House Committee on Energy & Environmental Protection to defer voting on this bill and wait for the release of the findings FDA Sunscreen Safety monograph and National Academy of Science ad hoc Task Force on Sunscreens guidance, both of which are to be released in 2022.***

I appreciate the opportunity to provide testimony on this important public health issue. Malama pono!

With aloha,

A handwritten signature in black ink that reads "George Manton MD". The signature is written in a cursive, flowing style.

George Martin MD, FAAD

Dermatologist, Kihei, Maui, Hawaii

¹ Mitchelmore C.L, Burns E, Conway A, Heyes A, Davies IA. A critical review of organic ultraviolet filter exposure, hazard and risk to corals. *Environmental Toxicology and Chemistry*, 40(4), 967-988. 2021.

Critical Review

A Critical Review of Organic Ultraviolet Filter Exposure, Hazard, and Risk to Corals

Carys L. Mitchelmore,^{a,*} Emily E. Burns,^b Annalise Conway,^a Andrew Heyes,^a and Iain A. Davies^{b,*}^aUniversity of Maryland Center for Environmental Science, Chesapeake Biological Laboratory, Solomons, Maryland, USA^bPersonal Care Products Council, Washington, DC, USA

Abstract: There has been a rapid increase in public, political, and scientific interest regarding the impact of organic ultraviolet (UV) filters to coral reefs. Such filters are found in sunscreens and other consumer products and enter the aquatic environment via direct (i.e., recreational activities, effluents) or indirect (i.e., land runoff) pathways. This review summarizes the current state of the science regarding the concentration of organic UV filters in seawater and sediment near coral reef ecosystems and in coral tissues, toxicological data from early and adult life stages of coral species, and preliminary environmental risk characterizations. Up to 14 different organic UV filters in seawater near coral reefs have been reported across 12 studies, with the majority of concentrations in the nanograms per liter range. Nine papers report toxicological findings from no response to a variety of biological effects occurring in the micrograms per liter to milligrams per liter range, in part given the wide variations in experimental design and coral species and/or life stage used. This review presents key findings; scientific data gaps; flaws in assumptions, practice, and inference; and a number of recommendations for future studies to assess the environmental risk of organic UV filters to coral reef ecosystems. *Environ Toxicol Chem* 2021;00:1–22. © 2021 The Authors. *Environmental Toxicology and Chemistry* published by Wiley Periodicals LLC on behalf of SETAC.

Keywords: UV filters; Corals; Sunscreen; Environmental chemistry; Hazard/risk assessment; Personal care products

INTRODUCTION

Organic ultraviolet (UV) filters are used in a diverse array of consumer products to inhibit the infiltration of UV light to prevent sunburns or photodegradation. Examples include sun protection products (e.g., sunscreens), personal care products, plastics, paints, and textiles (Fent et al. 2010; Ramos et al. 2015). Recently, growing scientific, public, and regulatory concern over the presence of organic UV filters, primarily those used in sun protection products, in the environment has emerged (Kim and Choi 2014; Wood 2018; Schneider and Lim 2019). The presence of organic UV filters in the marine environment, primarily released during recreational activities (e.g., swimming), has been highlighted because they are suspected of adversely impacting ecologically important coral communities (Raffa et al. 2019).

Coral reefs are highly productive and economically vital ecosystems, providing an array of ecosystem services and biodiversity (Moberg and Folke 1999; Woodhead et al. 2019). In recent years, coral reef health globally has significantly declined as a result of climate change impacts (sea level rise, ocean acidification), and repeated bleaching events from sustained elevated temperature events have occurred (Hoegh-Guldberg et al. 2017; Hughes et al. 2018). Meanwhile, local-scale stressors including municipal and industrial wastewater effluents, overfishing, recreational activities, and overland runoff (urban and agricultural inputs) have also been shown to directly contribute to coral decline and/or reduce the resilience of corals to global stressors (Owen et al. 2005; Negri and Hoogenboom 2011; Spalding and Brown 2015; Duprey et al. 2016). In particular, heavy metals, nutrients, and various organic chemicals can adversely impact corals at potentially environmentally relevant levels (e.g., van Dam et al. 2011; Forbes et al. 2016; Kroon et al. 2020), particularly in densely populated areas or those that experience significant tourism, especially when combined with sheltered beach environments (Wood 2018).

Toxicological effects resulting from coral exposure to organic UV filters is an emerging hypothesis first proposed by Danovaro et al. (2008) and subsequently explored by

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HB-1519-HD-1

Submitted on: 2/11/2022 1:20:30 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Megan Lamson	Individual	Support	No

Comments:

We are in full support of this bill (HB1519 HD1) that would reduce chemical-sunscreen pollution in our environment. Please see our previous testimony for more details. Mahalo for your time and consideration.

Best,

Megan Lamson Leatherman, M. Sc.

Hawaii Wildlife Fund

President & Program Director

HB-1519-HD-1

Submitted on: 2/12/2022 9:29:45 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Kathleen Clark	Individual	Support	No

Comments:

Re: Hearing HB 1519 HD1 RELATING TO SUNSCREEN

Date: Tuesday, February 15, 2022, 2:00 p.m., by videoconference

Position: Strongly Support HB1519 HD 1

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to express my **STRONG SUPPORT** of HB 1519 HD1. It is imperative that we take this important step to protect the health of our marine life and our community. There are ample, safe and effective sunscreens available for consumers. Our community and the visitors who come to Hawai'i are looking for clear messaging from our leadership. This legislation helps to do that by confirming and supporting the FDA's current science that only Zinc Oxide and Titanium Dioxide are considered safe and effective ingredients for sun protection.

Mahalo for your consideration.

Kathleen Clark

HB-1519-HD-1

Submitted on: 2/12/2022 9:36:06 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Paul Montague	Individual	Support	No

Comments:

I strongly support HB1519 HD1. Reducing chemicla sunscreens will help protect our fragile coral reefs and human health.

HB-1519-HD-1

Submitted on: 2/12/2022 9:38:43 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
John Cranshaw	Individual	Support	No

Comments:

I am writing to express my **STRONG SUPPORT** of HB 1519 HD1. It is time we allow only sunscreens which are both generally recognized as safe by the FDA, and are safe for our reefs and wildlife.

HB-1519-HD-1

Submitted on: 2/12/2022 11:22:50 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Laura Cartwright	Individual	Support	No

Comments:

I strongly support HB1519 and hope you will too. We need to protect our oceans and this is one important way to do that. The zinc and titanium sunscreens are also much safer for human use.

HB-1519-HD-1

Submitted on: 2/12/2022 11:32:43 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Eleanor Thomas	Individual	Support	No

Comments:

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to express my **STRONG SUPPORT** of HB 1519 HD1. Having lived and visit the islands for 15 plus years I have seen the damage that has been done to our reefs.

HB-1519-HD-1

Submitted on: 2/12/2022 11:27:42 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Robert P Thomas Jr	Individual	Support	No

Comments:

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to express my **STRONG SUPPORT** of HB 1519 HD1. Having lived and visit the islands for 15 plus years I see the damage that has been done to our reefs. Having natural based sunscreens is one step in keeping our reefs safe and flourishing. I know when possible I will continue to volunteer and educate visitors to Kahaluu Bay.

HB-1519-HD-1

Submitted on: 2/12/2022 12:05:56 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Ira Warren	Individual	Support	No

Comments:

Re: Hearing HB 1519 HD1 RELATING TO SUNSCREEN

Date: Tuesday, February 15, 2022, 2:00 p.m., by videoconference

Position: Strongly Support HB1519 HD 1

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to express my **STRONG SUPPORT** of HB 1519 HD1. I have been a volunteer at Kahaluu Beach Park on the island of Hawaii for several years. As such I am personally familiar with the effects on coral of sunscreen with components such as oxybenzone and avobenzone, among other harmful ingredients. We are proud that we helped pass the existing state law which bans some of the harmful sunscreen ingredients (but not all), and that we now have sunscreen dispensers at Kahaluu Beach that provide beach-goers with sunscreen that is really safe for the reefs (as opposed to some sunscreens which claim to be Reef Safe when they in fact are not).

HB1519 is well conceived in that it allows only sunscreens with ingredients approved as safe for reefs and skin. The current law, while a good first step, is like playing whack-a-mole. While it lists some ingredients known to be harmful, there are always others which are harmful but not specified as illegal.

Note that I have no business interest in this bill, and my only interest is in seeing our reefs protected. I would question the interests of those opposed to the bill, as generally they are representatives of the sunscreen industry or their paid consultants who are more interested in making a buck than in protecting our reefs.

Thank you for your attention.

HB-1519-HD-1

Submitted on: 2/12/2022 1:35:44 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Michael McGuire	Individual	Support	No

Comments:

Aloha, Our family strongly supports HB1519 to safeguard our reefs and marine creatures for generations to come. Mahalo

HB-1519-HD-1

Submitted on: 2/12/2022 1:39:51 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Fran Warren	Individual	Support	No

Comments:

Aloha to the Hawaii Legislative Team - Mahalo for your quality consideration of this very important piece of legislation. I am writing to express my **STRONG SUPPORT** of HB 1519.

Science has demonstrated that the ingredients in many sunscreens today which make these cosmetics sheerer are also so devastating for our coral - they not only kill the coral, but they also prevent the coral from being able to reproduce. Its a double-whammy! We've already seen that reduced coral = reduced fish observations = reduced tourist enjoyment in our bays = fewer tourists (& tax \$\$) = reduced tourist business as well. Its actually a good business decision for us to protect our natural marine environments and preserve them for our residents and for our tourists.

We have definitely seen a modest improvement since the ban of oxybenzone. But the sunscreen ingredient variants are filling in the toxic gap and we need to close this gap. My husband is a PhD in Chemistry from Harvard and he has explained this quite clearly to me.

What we do know is that zinc oxide has been prescribed to protect babies' skin for decades - and its been demonstrated to be safe for all parts of the body. A thin film of zinc oxide or titanium oxide provides protection from the UV rays of the sun and "does no harm." I volunteer to educate the public about the use of safe sunscreens and, unilaterally, everyone is surprised at the scientific findings, had no idea that many of the sunscreens on the market are toxic to the coral, and they are very happy to switch to something that is safer, not only to themselves, but also for the environment. The problem is that today, the industry markets the unsafe ingredients as "Reef Safe" because those particular ingredients are not on the Hawaii list of banned ingredients. The marketing literature is so misleading to the general public - the public needs your protection.

If I can be of any further assistance, please do feel free to contact me. We are all ohana on these islands and we need to do the best we can to care for one another.

Mahalo Nui, Fran Warren

HB-1519-HD-1

Submitted on: 2/12/2022 1:52:07 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Susan Menton	Individual	Support	No

Comments:

I am writing to express my **STRONG SUPPORT** of HB 1519 HD1, especially as it relates to damaging the reef environment and disrupting the natural growth cycle of marine life.

Thank you,

Susan Menton

HB-1519-HD-1

Submitted on: 2/12/2022 2:03:04 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Mary Ellen Jaske	Individual	Support	No

Comments:

Aloha Chair Johnson, Vice-Chair Kitagawa and members of the CPC Committee

I am writing to express strong support of HB1519 HD1. Eliminating chemicals dangerous to Hawaii's precious marine life is an important part of keeping them healthy and protecting their viability for the future. Mahalo for considering my input.

HB-1519-HD-1

Submitted on: 2/12/2022 3:22:49 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Ann Seed	Individual	Support	No

Comments:

Re: Hearing HB 1519 HD1 RELATING TO SUNSCREEN

Date: Tuesday, February 15, 2022, 2:00 p.m., by videoconference

Position: Strongly Support HB1519 HD 1

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to express my **STRONG SUPPORT** of HB 1519 HD1. The elimination of chemical based sunscreens from Hawaii is of vital importance to the health of our coral reefs.

Thank you for your consideration of the very important issue.

Ann Seed

Re: Hearing HB 1519 HD1 RELATING TO SUNSCREEN

Date: Tuesday, February 15, 2022, 2:00 p.m., by videoconference

Position: Strongly Support HB1519 HD 1

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to express my STRONG SUPPORT of HB 1519 HD1. This bill will aid consumers who want to protect the beautiful marine environment that Hawaii is blessed to have. Consumers are being confused by products that are currently labeled "Reef Safe" or "Reef Friendly", but contain numerous ingredients that are not recognized by the FDA as safe or friendly. HB 1519 HD 1 will help residents and visitors protect Hawaii's natural resources by purchasing products that are truly Reef Friendly..

Mahalo,

Vince Carr

75-6009 Alii Dr. F-4

Kailua Kona, HI 96740

HB-1519-HD-1

Submitted on: 2/12/2022 4:43:59 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Arthur John Tarsa, Jr.	Individual	Support	No

Comments:

Position: Strongly Support HB1519 HD 1

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to express my STRONG SUPPORT of HB 1519 HD1. Our reefs are the basis of our tourism industry. Banning sunscreens that harm the reefs as well as the people using these sunscreens should be banned.

HB-1519-HD-1

Submitted on: 2/12/2022 9:45:21 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Cynthia Urry	Individual	Support	No

Comments:

Position: Strongly Support HB1519 HD 1

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to express my **STRONG SUPPORT** of HB 1519 HD1. I work as a volunteer at one of Kona's most loved beaches / parks, teaching what is real "reef safe" sunscreen is and how the other affects our reefs. I noticed most people are surprised that they have bought the wrong sunscreen when I ask them what they are using. There is a difference between "Reef Safe" and "reef friendly" which stores are selling . Reef friendly is a trick the manufacturers are using to sell sunscreen." Reef friendly" still has oxybenzine and othe bad componets. How can they get away with this? We have lost 95% of our Califlower coral at our reef. Please help us!

In Strong Support of HB1519 HD1 (CPC Public Hearing February 15, 2022)

Joe DiNardo – Toxicologist

The following comments are based on my experience with product development, regulatory compliance as well as pre-clinical and clinical toxicology testing with some environmental testing of OTC sunscreen actives and formulations dating back to 1976.

Dear Representatives Johanson, Kitagawa, Aquino, Har, Hashem, Kong, Mizuno, Morikawa, Onishi, Tarnas and Matsumoto

Incorrect scientific “ASSUMPTIONS” continue to be spread by industry and their lobbyists. The Personal Care Products Council, Consumer Healthcare Products Association and the Public Access to Sunscreen Coalition to name a few have all spent untold millions of dollars fighting the published data (the science) instead of using the time and money to develop safe and effective sunscreen/antiaging products that would actually protect consumers from UV exposure without poisoning the environment and all living things!

1) “The PASS Coalition opposes this measure as it will create additional barriers for consumers to access their choice of safe, effective and FDA-approved sunscreens as a skin cancer prevention tool.”

The only “safe, effective FDA-approved sunscreens” are Titanium Dioxide and Zinc Oxide. That in addition to sun avoidance measures are the only “safe/effective” ways currently known to avoid skin cancers. Additionally, consumers don’t always make well informed decisions (like in the case of vaccinations) and often incorrectly pick what is “safe and/or effective”. The same holds true when consumers are asked their skin “phototype” (how fast do you burn/tan) when selecting a product that will protect them – most will underestimate how quick they burn. Consumers only know what the industry and their doctors tell them, which at best is a very poor and biased representation of the scientific data.

2) “Hawaii Residents Are at Higher Risk for Skin Cancer”

Based on the data from the American Cancer Society and the World Health Organization **we are all at a higher risk for skin cancer.**

Table 1: Melanoma Data: Based on Siegel et al (American Cancer Society) Cancer Statistics

Year	2017	2018	2019	2020 ²	2021 ²	2022 ²
Estimated New Melanoma Cases ¹	87,110	91,270	96,480	100,350	106,110	100,350
Melanoma Deaths ³	9,730	9,320	7,230	6,850	7,180	6,850
New Melanoma ⁴ Hawaii	460	490	490	520	460	520

Notes - Hawaii law to ban the sale of products containing oxybenzone and octinoxate came into effect in 2021:

1) Data does not include basal or squamous cell carcinomas, which at last count (2015) by the Health and Human Services (HHS) was around 4.9 million incidence (~80% are basal cell carcinomas – both cancers often occur multiple times in the same person) at a costs of \$8.1 BILLION ... HHS concluded **“These findings demonstrate that the health and economic burden of skin cancer treatment is substantial and increasing.”**

- 2) It is unclear what the impact of covid-19 is on skin cancer rates.
- 3) The death rate associated with melanoma has been and hopefully will continue to fall annually. This benefit is related to **advances in the treatment** and **not prevention** of melanoma as evidenced by the increasing rates of skin cancers.
- 4) Hawaii is and has maintained the **10th lowest rate of skin cancer in the country** – before or after the reduction of sunscreen products and actives caused by the Hawaii Law.

Additionally, Table 2 below demonstrates that regardless of a 38% decrease in the number of sunscreen products in the marketplace, there has been no disruption in the continuing increase of skin cancer only industry sales have been impacted.

Table 2: Number of organic sunscreen actives in products registered with FDA to be sold in the US for February 2018 and February 2022:

	February 2018	February 2022	Increase/Decrease in Usage
Total SPF Products	11,361	7,061	38% Decrease
Avobenzene	2,950	2,462	17% Decrease
Ensulizole	192	102	47% Decrease
Homosalate	1,807	1878	4% Increase
Octinoxate	6,800	2518	63% Decrease
Octisalate	3,554	2819	21% Decrease
Octocrylene	2,628	2359	10% Decrease
Oxybenzone	2,946	1086	63% Decrease

Inorganic sunscreen data: Titanium dioxide products in 2018 database = 55% vs. 2022 = 61%. The number of zinc oxide products slightly decreased ... 2018 = 72% vs. 2022 = 64%. The decrease in products containing zinc oxide may be reflective of products being cancelled that contain a combination of organic actives and zinc oxide.

3) “We ask that the legislature hold off on passing SB 3001 or any other legislation on sunscreen ingredients, until more data on environmental and public health impacts are available.”

First, SB3001, HB1519 or any other GRASE Bill under review **IS NOT ABOUT** the “environmental” impact of sunscreens which according to hundreds of scientific publications (with many newer papers noting that the concentration(s) tested were at relevant concentrations in the habit(s) reviewed) is of significant concern GLOBALLY. SB3001, HB1519 or any other GRASE Bill **IS ABOUT** the 14 organic sunscreen chemicals that the Food & Drug Administration (FDA) already considers **NOT** Generally Recognized As Safe and Effective for HUMAN USE (GRASE). The “public health impacts” being reviewed by NAS has nothing to do with the exposure of these toxic chemicals, but everything to do with the continuing saga and false belief that “sunscreen save lives” for which there is absolutely no definitive data to substantiate. Since 1975, the incidence of skin cancers have increased (and continue to increase) significantly and to date there have been approximately 450,000 Americans who have died from skin cancers regardless of sunscreen use. The current organic chemical sunscreens used simply do not absorb the ultraviolet light that causes basal cell carcinoma and melanoma. Inhibiting the visual signs of sunburn (which is what current sunscreens do) has relatively little to do with protecting against skin cancer, as evidenced by the significant rise in skin cancers and skin cancer deaths!

The use of the 14 organic sunscreen chemicals considered “**NOT GRASE**” by the FDA (first proposed in February 2019 and upheld in September 2021) based on the **CURRENT** scientific literature is what needs to be placed on “hold” not Hawaii’s Bills. These substances should be banned until industry tests them (not argue about existing data they don’t agree with) as outlined by the FDA and are deemed to be safe and effective for human use. In other words, the sunscreen industry must do what every other industry selling an Over-the-Counter (OTC) or prescription drug has to do to comply with the “LAW”... test the products for safety and efficacy and demonstrate that they are GRASE for their intended use!

4) This NAS study, titled “Environmental Impact of Currently Marketed Sunscreens and Potential Human Impact of Changes in Sunscreen Usage,” is being conducted right now as an objective review of these issues by leading scientific experts.

Again, what is being done “right now” by industry is a “**REVIEW**” not new testing to demonstrate safety or efficacy. Industry has hired “a scientist” who is willing to make a variety of personal assumptions (not definitive scientific proof) and disagrees with at least nine other independent scientific coral papers as well as ignore hundreds of other published papers that demonstrate a variety of toxicities caused by organic sunscreen chemicals in both aquatic and terrestrial species – not just coral. Furthermore, not only was this scientist included in the NAS panel, but the scientist who is named 16 times in the SB3001 testimonies alone (Dr. Downs), was not allowed to participate? The NAS panel has at least 8 other individuals on the panel that have supported the sunscreen industry’s belief (see below) making it just another biased industry controlled opinion with a conclusion that was written before the research was even started.

The “Potential Human Impact of Changes in Sunscreen Usage” is not related to the toxicological science demonstrating harm to humans and other animals. It is merely an expression that supports industries position that “sunscreen save lives” and if not used will cause an increase in cancer – similar to what they are saying will happen if Hawaii bans non-GRASE products. Instead of protecting profits, industry needs to be working to develop either new ingredients that can protect people from skin cancer without harming the environment and/or definitively prove that the existing chemicals in question are safe AND effective for human use.

PLEASE, move HB1519 HD1 and other GRASE Bills forward to becoming law and protect both the people and environment. **Mahalo!**

The following publicly available information shows that nine of the twelve original panelists NAS selected for the study have clear ties to the organic chemical sunscreen Industry which compromises the legitimacy and integrity of the NAS study:

1. Charles Menzie (Chair) - currently works for Exponent, Inc., a leader in litigation defense and regulatory science. It is a go-to destination for major industries with liability problems which accepts money from the Petrochemical Sunscreen Industry, including members of the American Chemistry Council.

<https://www.exponent.com/professionals/m/menzie-charles-a>

<https://business-ethics.com/2016/12/13/1724-big-companies-in-legal-scrapes-turn-to-science-for-hire-giant-exponent/>

2. Scott Belanger - recently retired from the "Global Product Stewardship Global Capability Organization (Environmental Stewardship and Sustainability) of the Procter & Gamble Company". He has long argued that

the volume-use of surfactants has no environmental impact.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4130171/pdf/best44_1893.pdf

3. Karen Glanz – appears to have already determined the impact of sunscreens on coral before the NAS panel discussions even started. She co-authored an Op-Ed for the Honolulu Star Advertiser with Kevin Cassel (also appointed to the Study) titled “Sunscreens save lives, have limited impact on coral reefs” (<https://www.staradvertiser.com/2018/03/29/editorial/island-voices/sunscreens-save-lives-have-limited-impact-on-coral-reefs/#story-section>) whereby she and Cassel lobby against Hawaii’s 2018 ban on sale of sunscreens containing the petrochemicals oxybenzone and octinoxate. Additionally, “Sunscreens Save Lives” is a J&J tag line that was used for promoting inappropriate information on High SPF sunscreens to Florida citizens via the Sun Safe Florida web site. The site “sunsafeflorida.com” is no longer on-line, and nothing has been posted on their Twitter page (<https://twitter.com/SunSafeFlorida>) since October 2019.
4. Kevin Cassel - is not an expert on sunscreens but has received funding from the Petrochemical Sunscreen Industry. He co-authored an Op-Ed for the Honolulu’s Star Advertiser with Karen Glanz titled “Sunscreens save lives, have limited impact on coral reefs” (<https://www.staradvertiser.com/2018/03/29/editorial/island-voices/sunscreens-save-lives-have-limited-impact-on-coral-reefs/#story-section>) that claims sunscreens prevent skin cancer and have limited impacts on coral reefs.
5. Carys Mitchelmore – has recently written two papers: one sponsored by, and one co-authored by, the Personal Care Products Council that tries to argue that coral is not negatively impacted by petrochemical sunscreens. Her recent endeavor outlines what she perceives as the problems with the existing nine coral papers currently in the scientific literature. Again, it appears that she determined the outcome of the NAS panel before it convened.
6. Paul K. Westerhoff – between 2010 and 2020, he published 19 nano titanium dioxide papers mostly demonstrating negative impacts to the environment. Although nano-particle minerals have been repeatedly noted as not being healthy for the environment by many, and remain an issue for human safety by the FDA, the concern is that he may be more in favor of the petrochemical sunscreen additives currently under review.
7. Rebecca D. Klapar – in 2006 and 2017, Ms Klapar published three papers on the negative effects of nano-particle sized titanium dioxide, again which is being questioned for human safety by the FDA. The concern is that she would be inclined to promote the petrochemical sunscreens in question and inappropriately concluded their safety before the NAS Panel started.
8. Dirk Elston – a credentialed author of many topics, he has co-authored a response to a sunscreen paper in the Journal of the American Academy of Dermatology (AAD). The paper states, “The hypothesis that a component of sunscreens may promote frontal fibrosing alopecia remains unproven”. Again, this reviewer is prone to conclude that petrochemical sunscreens do not have a negative impact based on AAD propaganda. The AAD strongly promotes the use of petrochemical sunscreens, and he has remained indifferent to the current literature demonstrating the environmental and human impacts of these chemicals.

9. Kanade Shinkai – a respected dermatologist from the University of San Francisco, California who has co-authored two papers in JAMA Dermatology (she is the editor) addressing the FDA Matta et al publications demonstrating the significant absorption levels of sunscreen into the blood via whole body application. The review of the data is well done. However, her bottom line to dermatologists is that the presence of these materials in the blood at levels significantly above the concern for systemic toxicity is still considered safe, regardless of the significant body of scientific data published in the literature, as noted by the FDA.

With respect to EPA, they protect coral reefs by implementing Clean Water Act programs that protect water quality in watersheds and coastal zones of coral reef areas. On the other hand, NOAA is actually the group that more directly deals with this issue ... NOAA coral reef activities include coral reef mapping, monitoring and assessment; natural and socioeconomic research and modeling; outreach and education; and management and stewardship. So, if one was interested in a regulatory group's opinion about environmental toxicity, one would be prudent to go with NOAA's data and not the EPA/NAS/Industry's view. NOAA's current infographic (<https://oceanservice.noaa.gov/news/sunscreen-corals.html>) states "**Common chemicals used in thousands of products to protect against harmful effects of ultraviolet light threaten corals and other (green algae, mussels, sea urchins, fish and dolphins) marine life.** At this point in time, it is doubtful if EPA has anyone's interest at heart other than the chemical industries. In addition to sunscreens, the EPA refuses to recognize that Per- and Polyfluorinated Substances (PFAS) are toxic - which allows industry to dump these chemicals, at will, causing them to accumulate and contaminate our bodies and environment. FYI ... below is EPA's track record over the last few years with respect to approving toxic products for consumer use ... all are major environmental contaminants:

- 15 new products containing neurotoxic **carbamates** or **organophosphates**, including **chlorpyrifos**;
- 17 new products containing the endocrine disruptor **atrazine**;
- 6 new products containing **paraquat**, which is so lethal that one spoonful can kill an adult;
- 4 new products containing the extremely dangerous airborne fumigants **methyl bromide** or **chloropicrin**;
- 91 new **restricted-use pesticides**, which are so dangerous they can only be applied by a professional;
- 69 new products containing an ingredient the EPA recognizes as a "known" or "likely" **carcinogen**.

EXECUTIVE SUMMARY

The cornerstone of clinical medicine and epidemiology is **Benefit Risk Assessment (BRA)**. There is little evidence that this was done for the common use of sunscreens with mixtures of soluble organic UV filters over 6 decades in the face of a steady rise in all forms of global skin cancer. Sunscreens are allowed to make therapeutic label claims in some regulatory jurisdictions, largely based on the assumption that sunscreens could prevent sunburn and by extrapolation skin cancer and other forms of sun damage. Such claims were never preceded by the mandatory rigorous clinical research trials looking at the BRA equation and possible adverse effects of hormone disruption, and genotoxic or mutagenic effects.

The scientific and medical literature for over 3 decades confirm that the 12 Category FDA III Soluble Organic UV Filters (SOUVF) are petrochemical agents like octinoxate and oxybenzone - that permeate human skin (and that of coral and wildlife), becoming bioavailable to every cell in the human body. Any decision to prohibit or ban any of the twelve including oxybenzone and octinoxate, oxybenzone, and octocrylene goes beyond the protection of your pristine coral reefs and marine life. It would deliver a greater direct benefit to all your residents, particularly the unborn, young and adolescent children, and couples trying to conceive, where epigenetic effects may be carried through their progeny to future generations of Hawaiians.

The US FDA (SEPT 2021) still cannot declare the 12 SOUVF to be GRASE (Generally Regarded As Safe and Effective). ***They share structural and functional properties with their chemical cousins – pesticides, the collective term for herbicides, fungicides, and insecticides like DDT, atrazine and glyphosate (Roundup), parabens, Bisphenyl A, and other endocrine disruptors. All resemble human estrogen and each other - with linked benzene rings and side chain substitutions, which gives them the ability to bind and displace normal hormones in humans and wildlife.*** Oxybenzone (benzophenone-3) was developed and patented for use as a pesticide by Monsanto in 1954 [1]. The hormone disrupting and mutagenic effects of several of the SOUVF Group are well documented in the scientific literature. Diverse human and wildlife abnormalities occur from the adverse effects of endocrine disruption and the alterations of DNA and enzymes that methylate genes.

BENEFIT Critical analysis establishes a persuasive evidence based reality that sunscreens, particularly mixtures of soluble organic UV filters, show no benefit in the prevention of skin cancer from the peer-reviewed literature spanning 5 decades referenced below. Sunscreens can prevent sunburn to a degree but any benefits in skin cancer prevention appear to be largely presumptive. Contemporary science establishes UVA as a primary driver of most forms of skin cancer and photoaging. Mixtures of oxybenzone, octinoxate, octocrylene with even 3-4% avobenzone achieve high SPF values (UVB extinction) with inadequate UVA (particularly UVA1) filtering. This is well established from modern analytic studies where UVA protection is measured by the gold standard in-vivo test of HDRS (Hybrid Diffuse Reflectance Spectroscopy). UVB-BIASED sunscreens with soluble organic UV filters have dominated world markets for 60 plus years and transmit up to 10X more UVA radiation than UVB to underlying skin. Their use over this time has paralleled the unrelenting rise in skin cancer rates and provides an intellectual and logical explanation for rising skin cancer rates and their spectacular failure to protect against all forms of skin cancer.

Proof of no benefit first comes from several reviews in peer reviewed literature:

- In 1973 Emmett questioned sunscreen efficacy in skin cancer prevention saying there was no evidence but merely inference that in preventing sunburn they prevented skin cancer [2]. The International Agency for Research on Cancer (IARC) reported their concern in 2001 over the significant lack of evidence that sunscreens prevent melanoma [2]. The WHO in 2000 and the EPA in 2006 repeated the same concern as studies from 1995 to 2010 that sunscreens failed to prevent any type of skin cancer, and several actually showed increased skin cancer rates in sunscreen users [4-10].

- An encyclopedic review of skin cancer prevention - The Cochrane Database of Systematic Reviews - Sanchez et al 2016 [11] **selected 482 randomized controlled trials (RCT), and found only one study** - the Nambour trial from Queensland Australia done between 1992 and 2006 – to be suitable for inclusion. The review reported that the incidence of Non -Melanoma Skin Cancer or NMSC now called Keratinocyte Cancers, which includes Basal Cell Carcinoma (BCC) and Squamous cell carcinoma (SCC) - **was no different between people who used sunscreen daily and those using it occasionally.** The original papers reported in 1999 that there was a benefit for NMSC [12] and in 2011 a “50% reduction” in melanoma rates from 3% to 1.5% in a study group of 1621 people [13]. The control group of infrequent sunscreen users had 22/809 compared to 11/812 in the daily sunscreen users. A 50% reduction in melanoma seems significant at first glance but the low number in both groups means the result is dubious or of no significance. Despite the 50% reduction claim, data from the Cancer in Australia Report (2019) show that at the time of the study (1992-2006), the incidence of melanoma in Nambour was 71/100,000 and 14 years later was 72/100,000. The general population had derived no benefit in real life. The study was flawed and poorly designed – the control group or infrequent sunscreen users had more people with a history of skin cancer, fair skin that burned more easily, more outdoor exposure lifestyle, more precancerous nevi – a clear bias towards more skin cancer. Statistical principles make any findings from this study to be very low quality evidence, yet it appears that this Nambour Trial was used in 2012 by the FDA and others to justify for the first time that labels could say “ sunscreens prevent skin cancer” i/o “sunscreens prevent sunburn”. Later reviews confirm the conclusions of IARC and the Cochrane Review and question the validity of this decision [14,15]
- There are individual studies cited by industry and the AAD claiming to show a benefit but a recent and appropriate meta-analysis **shows no benefit** from a review in 2018 published in the European J of Dermatology. It analysed the association between skin cancer risk and sunscreen use - from 29 studies: 25 case-controls, two cohorts, one cross-sectional, and one controlled trial - involving 313,717 participants with 10,670 cases of skin cancer. This systematic review analysed the Odds-ratio over time and refuted an earlier concern that sunscreen use was linked to skin cancer but confirms again **there is no evidence that using a sunscreen prevents skin cancer in the general population** [14].
- More proof that organic sunscreens using mixtures of oxybenzone, octinoxate, octocrylene, or others in the category III group and avobenzone DO NOT prevent skin cancer – comes from global cancer statistics. Skin cancer now accounts for 60% of all human cancers in N. America or stated differently - **they outnumber all other cancers combined.** It is likely that this 60% number represents the peak or close to the peak of the maximum incidence. How much higher can it climb in the USA? Probably not much – as there are a group of people who because of genetics, skin colour, and lifestyle will likely never get a skin cancer. So, saying a ban on these proven ineffective agents will push up skin cancer rates is irrational. They were never designed to prevent anything but sunburn and are identified by Laughlin et al as UVB- BIASED since they transmit up to 10X more UVA than UVB to your skin, regardless of the SPF [15]. UVA is now proven by modern science to drive skin cancer and sun damage [16]. Dianne Godar reported in 2015 that contrary to popular opinion, melanoma was as or more common in people who worked indoors, as those with outdoor occupations or lifestyles [17]. In the 6 developed countries studies that included the USA, the factors driving the epidemic of melanoma were everyday ambient exposure to UVA through sunscreens or no sunscreen, window and car glass, and low Vitamin D levels – both worse with UVB-BIASED sunscreens [17]. In a report presently in press, she examined the data from IARC since 1955 and presented persuasive new evidence that melanoma has little to do with sunburn and UVB – but is driven by the two factors just described, aided by another insult that could explain the explosion in melanoma rates over the past 30 years – Human Papilloma Virus or HPV residing in the squamous cells of the skin and acting as a carcinogen as it does in cervical cancer [18].

- The death rate from skin cancer in the USA has risen by 54% between 1975 and 2017 [19]. Data from the Global Burden of Disease Study 2015 reported that from 2005 to 2015 there was a 27.2% and 42.9% increase in the global death rate from melanoma and NMSC, respectively [20].
- Statistics confirm the steady annual rise in global keratinocyte (SCC, BCC) cancer rates at 3-8% [19,21,22]. The National Cancer Institute reports that melanoma rates in the United States tripled between 1975 and 2014. The incidence of BCC (Basal Cell Carcinoma) and SCC (Squamous cell carcinoma) increased by 145% and 263% respectively from 1976-1984 and 2000-2010 [19]. The rate of new melanoma cases among American adults has tripled from 7.9 per 100,000 people in 1975 to 25.2 per 100,000 in 2014. Melanoma is the leading cause of cancer death in women ages 25-30, the second leading cause of cancer death in women ages 30-35, and melanoma is the second most commonly diagnosed cancer age 15-29 [21]. From 1970 to 2009, the incidence of melanoma increased by 8-fold among young women and 4-fold among young men, and in the USA, one person dies of melanoma every 54 minutes and an estimated 11,000 plus people will die of melanoma in coming years [19,21]. Although less common, about 4000 Americans die in a year from SCC. In 2016 over 5.4 million cases of nonmelanoma skin cancer were treated in more than 3.3 million people. The annual cost of treating skin cancers in the U.S. was about \$8.1 billion in 2016: about \$4.8 billion for NMSC and \$3.3 billion for melanoma. Aside from the human cost, the economic outlay is enormous and could double by 2030 [20].

CONCLUSION: No benefit from soluble organic UV filters after 60 years of use is demonstrable at this time. Even some dermatologists now express doubt. –“Could it be that the nearly universal recommendation of dermatologists and professional societies (e.g., American Academy of Dermatology, World Health Organization) to use sunscreen to prevent skin cancer is unfounded?” Quote taken from a review published in the American Academy of Dermatology’s own journal or JAAD [15].

RISKS The risks of these organic UV filters are well documented in a broad section of peer-reviewed literature:

- International panels of experts have warned about the effects of exogenous chemicals for two decades – that exposure to exogenous chemicals can adversely affect the reproductive, endocrine, nervous and immune systems of humans and wildlife, mostly acting as hormone disruptors, but occasionally as teratogens or carcinogens. The International Programme on Chemical Safety (IPCS), a joint programme of the World Health Organization/ United Nations Environmental Programme (WHO/UNEP), and the International Labour Organization concluded in an extensive 2002 report that there was WEAK evidence of human toxicity from exposure to endocrine-active chemicals, but there was conclusive evidence of adverse hormone disruption in some wildlife species supported by laboratory studies and repeated these warnings in 2012, but then cautioned that the evidence for human toxicity was STRONG [23].
- The Second Scientific Statement from the Endocrine Society (2015) has 1322 references for studies on the issue of endocrine disruption – primarily from animal studies and a relatively small number of available human studies, and reinforces their prior 2009 report and that of the 2012 WHO/UNEP, all emphasizing the varied effects on human health, irreversible in some instances even transgenerational [24]. This included reproductive disorders - infertility, cancers (breast, prostate, testicular), genital malformations, defects in gametogenesis, endometriosis, uterine fibroids, and disorders of puberty - other endocrine and metabolic problems – thyroid cancer, Type 2 diabetes, metabolic syndromes and obesity, and to autoimmune and neurological problems – Alzheimer’s , Parkinson’s, ADHD, autism spectrum disorders, and childhood asthma. The germline epigenetic disorders in future generations remain unclear and will likely never be accurately defined. In the past decade it has become apparent that although human and wildlife exposure to pesticides, BPA,

phthalates and other toxic chemicals have declined, organic UV filters as their structural counterparts have become a growing concern.

- It is arguable that petrochemical aromatic hydrocarbon or SOUVF have **become the primary exposure source to an Endocrine Disrupting Chemical (EDC)**— otherwise called a hormone disruptor - in developed countries where sunscreen use is highest. The literature on human and wildlife toxicity is extensive – ***hundreds of published peer-reviewed papers over 60 years – too many to cite here.*** Again, this is to be expected from basic physiology - UV filters, phenols and steroid like chemicals are lipophilic and have privileged binding to several endocrine nuclear receptors because of their small size and distinct structure. We have known for over 20 years that soluble UV filters have estrogenic and other hormonal actions in fish and other species [25,26]. These UV filters and their pesticide cousins follow a first principle from basic endocrinology – **isoform function** – chemicals with the same structure will act at a cellular level in a similar manner, and bind to the same nuclear receptors [23,24]. Since oxybenzone and octinoxate exhibit endocrine disrupting properties, any soluble organic UV filter like avobenzone and octocrylene is a potential EDC, like the way the structural analogues dichlorodiphenyltrichloroethane (DDT), Bisphenyl A (BPA), phthalates, and others have similar actions on humans and lower species.
- We present only a few of the numerous contemporary reviews or reports that detail this toxic assault on humans and wildlife [27-31]. Many earlier studies suggest that generally, reproductive organs and the central nervous system represent sensitive targets for developmental effects of endocrine active xenobiotics [25,26]. Contemporary reviews describe widespread effects in human and wildlife from soluble UV filters and their structural analogues like DDT, BPA, and other EDCs [27-31]. A review of 85 scientific papers in humans and lower species concluded that aromatic hydrocarbon UV filters are generally involved in the disruption of the hypothalamic–pituitary–gonadal system [27]. A Change in a hormone level after exposure to a soluble UV filter is evidence of HORMONE Disruption. More recent studies confirm that soluble UV hydrocarbon filters, and other phenols including the preservative parabens, affect levels of virtually every sex hormone, pituitary hormones, thyroid hormones and certain growth factors in both pregnant and non-pregnant women [27,28]. Contemporary reports show the wide spectrum of potential adverse effects in pregnancy – miscarriage, fetal growth retardation, preeclampsia, newborn congenital defects like spina bifida and Hirschsprung’s’ disease [31,32,33]. Particularly worrisome are the subtle effects on neurohormonal programming and the abnormalities in all endocrine and metabolic systems showing up in later life. Reports link soluble UV filters to disorders of puberty, infertility, endometriosis [34,35,36], and metabolic disorders and various cancers in both sexes [27,37].

COMMENTS

It is very clear that if the BRA principle as mandated for medical and public health practice is applied to the use of SOUVF sunscreens to prevent skin cancer, there is NO BENEFIT ONLY RISK. The consumers who use sunscreens to prevent skin cancer derive no useful benefit other than some prevention against sunburn, also a likely risk factor in rising skin cancer rates as it allows fair skin people to stay in the sun longer - described by Autier of IARC in 2009 as sunscreen abuse enabling dysfunctional behaviour not otherwise possible [8]. There is clearly no benefit to the human fetus, the coral, and marine biota, only risk and unintended consequences.

History provides numerous examples of the danger from exposing humans and wildlife to exogenous chemicals. We should remember the stilbestrol catastrophe when this estrogen was used to treat early bleeding in pregnancy. It is foolhardy to think that there is any way to determine the No Adverse Effect Level (NOAEL) for a fetus. Even infinitesimally low undetectable levels can be disastrous. Another rule in human endocrinology is instructive - even infinitesimally low levels of exposure— indeed, any level of exposure at all—may cause endocrine or reproductive abnormalities, particularly if exposure

occurs during a critical developmental window. Surprisingly, low undetectable doses may even exert more potent effects than higher doses.

Prudent physicians and regulators learn from history and are mindful of human physiology. They apply the Precautionary Principle which asserts “that the burden of proof for potentially harmful actions by industry or government rests on the assurance of safety and that when there are threats of serious damage, scientific uncertainty must be resolved in favor of *prevention*”. The Precautionary Principle recognizes that the absence of full scientific certainty shall not be used as a reason for postponing decisions, where there is even minimal risk of serious or irreversible harm. As physicians we march to a more exacting drummer - the first precept in medicine - *primum non nocere*” (first do no harm), particularly when faced with the serious and often irreversible consequences from soluble bioavailable UV filters to exposed individuals and their progeny. Application of The Precautionary Principle is in perfect harmony with our sacred duty to do no harm, and the FDA posting on the 12 Category III UV Filters (FEB 2019), now described by a Washington Post article as “Marketed Unapproved Drugs”.

The unrelenting rise in skin cancer over the past 50 years [19,21,22] while sunscreen use has increased in most developed countries underscores the disconnect between sunscreen and the prevention of skin cancer. The simple fact of a global increase in skin cancer [20] highlights the problem and more studies confirm the disconnect in specific countries like Canada, where there was a 30% increase between 1998 and 2017 in keratinocyte cancers [38]. After 70 years of use there is no evidence of safety or efficacy, perhaps for a simple reason –they are not. Extensive reviews document the diverse adverse effects in humans [37] and wildlife [39]. No BENEFIT only RISK. Another extensive review of relevant studies confirms that sunscreens where 90% use SOUVF fail to prevent skin cancer [40], and affirms other recent reviews showing the “failure to protect” [14,15].

The use of large molecular weight insoluble UV Filters avoids bioavailability and eliminates systemic human risks, and since they pose no risk of contact allergic dermatitis are entirely safe for humans. There is no evidence that zinc oxide is accumulating in the marine environment and as a normal constituent of that habitat poses no apparent risk to the marine ecosystem [41]. Industry sponsored ex-vivo studies in a laboratory setting that use industrial dispersions of zinc oxide and not the non-nanoscale particle type of mineral filters actually used in commercial sunscreens are of no relevance at this time [41]. Mineral filters meet the Precautionary Principle – Safer for Humans Safer for the Environment and the Marine Ecosystem.

Diffey described the principle of SPECTRAL HOMEOSTASIS in 1992 and suggested that this uniform protection similar to that afforded by shade or dense textiles was the logical and intellectual way to prevent any form of sun damage [16,42]. They are now available in 25% zinc oxide dispersions that apply clear and achieve 2-3 time the UVA protection delivered by the unsafe SOUVF sunscreens. They meet all the requirements to be GRASE and the high UVA protection required for the prevention of skin cancer and photoaging [42]. The production of ideal sunscreens using insoluble particle type filters like zinc oxide that mimic the effective and balanced UVB/UVA attenuation of textiles and shade is now possible. They achieve an acceptable therapeutic margin of safety in humans and a favorable ecologic profile.

Prohibiting these petrochemicals that have pesticidal, hormone disrupting, and DNA mutating effects will protect human and wildlife health. There will be enormous rewards with the only downside being that industry will have to reformulate and move to using inorganic or other insoluble filters to stay relevant and provide actual BENEFITS - from better UVA protection and a better chance to prevent skin cancer. Less RISK - safer for humans, the global water supply, and land based or aquatic wildlife and environment. As Hawaiians know – Healthy Land, Healthy People. True in Hawaii but also true for the entire planet.

Respectfully submitted,

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- Denis K. Dudley MD, FRCS(C), Board Certified in OB-GYN, USA, Canada, Great Britain. Sub-Specialty Practice in Maternal Fetal Medicine & Reproductive Endocrinology, DKLD@rogers.com.

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HB-1519-HD-1

Submitted on: 2/13/2022 11:48:34 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
marjorie erway	Individual	Support	No

Comments:

I'm assuming that all legislators will support this very important bill. I'll be watching the voting results.

Mahalo for your consideration.

HB 1519 HD 1 TESTIMONY

To: House Committee on Consumer Protection and Commerce
Hearing on Feb. 15, 2022 at 2:00 p.m.

From: John Kawamoto

Position: Support

The skin is the largest organ of the body, and much care should be taken when determining what the skin comes into contact with, as skin can absorb harmful substances. The precautionary principle should be considered. No substance should be applied to the skin unless there is substantial scientific evidence that it will not cause harm. Government has a social responsibility to protect the public from exposure to potential harm.

This bill protects the public by preventing the sale or distribution of sunscreens with substances that have not been determined to be safe and effective by the U.S. Food and Drug Administration, unless by prescription.

HB-1519-HD-1

Submitted on: 2/13/2022 4:05:52 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Donna Goodale	Individual	Support	No

Comments:

Dear House Representatives: I am strongly in favor of this bill to limit sunscreen in the State of Hawaii to those found to be safe. Please vote in favor of HB 1519.

Mahalo, Donna R. Goodale

HB-1519-HD-1

Submitted on: 2/13/2022 10:35:25 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Sherry Pollack	Individual	Support	No

Comments:

I strongly support HB1519 HD1 to prohibit the sale and distribution of sunscreen products containing ingredients not generally recognized as safe and effective as defined by the Food and Drug Administration. Mahalo for the opportunity to testify on this important legislation.

HB-1519-HD-1

Submitted on: 2/13/2022 11:39:04 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Silvia Diaz Cruz	Individual	Support	No

Comments:

Certainly, the UV radiation that we support on Earth has increased over the years. The incidence of skin cancer has increased and correlates with greater exposure of people to solar radiation. For this reason, it is clearly necessary to use products with sun protection for exposure to the sun. However, this skin protection should not be at odds with maintaining an environment free of contamination from sunscreens. What is really needed are sunscreens that are environmentally friendly. For this reason, only those for which accurate scientific data is available on their harmlessness to the environment should be used. That is why I, as a scientist and researcher of UV filters in water, aquatic organisms, plants, sediments and even humans for more than a decade, support this measure and provide this testimony, because we cannot take care of ourselves at the cost of damaging the environment.

HB-1519-HD-1

Submitted on: 2/14/2022 5:14:21 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Daniel Grumbling	Individual	Support	No

Comments:

Hello, as a multiple time visitor to Hawaii, I ask that you please do everything you can to maintain the coral reefs or your beautiful islands. I am a fan. This ban is a no brainer. There is no reason anyone should be able to buy or use chemical sunblocks that will endanger one of your most valuable resources.

Carla J. Nip-Sakamoto, M.D.
1329 Lusitana Street, Suite 109
Honolulu, Hawaii 96813

TO: House Committee on Consumer Protection and Commerce
Representative Aaron Johanson, Chair
Representative Lisa Kitagawa, Vice Chair

FROM: Carla Nip-Sakamoto MD, Dermatologist

DATE: Tuesday, February 15, 2022

TIME: 2:00 p.m.

TESTIMONY: Written

RE: HB 1519 – Relating to Sunscreen

Position: Opposed

As a board-certified Hawaii dermatologist who has diagnosed and treated thousands of skin cancer patients in my 30 years of experience, I have spent countless hours educating patients, colleagues, friends and family of the proven value of comprehensive sun protection. This includes sunscreen, protective clothing, sunglasses, shade and avoidance of peak sunlight. We, as a community, have come a long way in understanding the perils of repetitive and prolonged sun exposure.

There is widespread awareness of skin cancer prevention and early detection. As a result, many skin cancers are treated at an early stage, reducing morbidity and mortality, as well as disfiguring surgeries. Our keiki have learned that sun safety is smart and prevents sunburn and skin damage. Skin cancer does not discriminate; all skin colors are at risk.

One in five Americans will develop skin cancer in their lifetime. Melanoma often kills people in the primes of their lives. Unprotected sun exposure is the most preventable risk factor for skin cancer, just as not smoking reduces the risk of lung cancer.

The U.S. Food and Drug Administration (FDA) is asking for more safety information on 12 non-mineral sunscreen ingredients (oxybenzone, octinoxate, avobenzone, octocrylene, octisalate, homosalate, ensulizole, padimate O, sulisobenzene, cinoxate, dioxybenzone, meradimate). Legislation to restrict access to these ingredients before such information is presented is

premature. In addition, the National Academy of Sciences (NAS) is undergoing review of the scientific literature related to sunscreen and will assess potential risk to aquatic environments as well as the impact on public health. Their report is forthcoming this year and I encourage our legislators to await results of this important work before making policy changes that are currently poorly supported.

According to the Department of Health's Hawaii Health Matters data dashboard, the number of adults reporting at least one sunburn in the last 12 months doubled since 2017, from 18.2% to 37.2 % between 2017 and 2019. In 2018, during that interval, Hawaii passed a ban on sunscreen ingredients oxybenzone and octinoxate. Further depletion of sunscreen options will increase the risk of sunburn which we know is a risk factor for skin cancer.

The current data on sunscreen and coral reef degradation is inconsistent and not validated amongst investigators. The most damaging influence on coral is ocean water warming. Studies implicating sunscreen have been of poor design, performed under conditions that are not real world and do not replicate actual ocean water habitats. Furthermore, beach locations with high tourist traffic do not demonstrate threatening sunscreen concentrations and locations where coral reef degradation is high, there is minimal beach tourism. An explanation for coral reef death does not lie in sunscreen. Let us not lose sight of the bigger picture.

It is my hope, as a healer and strong proponent of skin cancer prevention, that we will look ahead toward sunscreen innovation and an unbiased assessment of current agents. It makes logical sense to await further guidance from the FDA who on September 24, 2021 (FDA Sunscreen Monograph) did not recommend any changes to currently marketed sunscreens. The NAS review will also provide much needed insight as well.

In summary, I urge the legislature NOT pass HB 1519, or any other legislation on sunscreen ingredients until more reliable data is available.

Thank you for the opportunity to provide written testimony.

Respectfully Submitted,



Carla Nip-Sakamoto, MD
Fellow, American Academy of Dermatology
Diplomate, American Board of Dermatology
Member/Past President, Hawaii Dermatological Society
Private Practice, Queen's Physician Office Building 2
Email: cnipsakamoto@oahuderm.com

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COUNTY COUNCIL
COUNTY OF MAUI
200 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96793
www.MauiCounty.us

February 14, 2022

TO: Committee on Consumer Protection & Commerce
Representative Aaron Ling Johanson, Chair
Representative Lisa Kitagawa, Vice Chair

FROM: Kelly Takaya King, Maui County Councilmember

HEARING: February 15, 2022 at 2:00 p.m., House Conference Room 329 via
Videoconference

SUBJECT: **Testimony in support of HB1519 HD1 RELATING TO
SUNSCREEN**

Dear Honorable Chair Johanson, Vice Chair Kitagawa, and Committee Members,

I support HB1519 HDI, which will strengthen the statewide protection of Hawaii's marine environment. Maui County has already taken such measures, and I am grateful to see this bill does not contain pre-emption of county action.

HB1519 HD1 will prohibit, as of January 1, 2023, the sale, offer for sale, or distribution for sale of any sunscreen that contains active ingredients that are not generally recognized as safe and effective (GRASE) by the US FDA. However, this language will automatically allow manufacturers to utilize ingredients that the FDA subsequently designates as GRASE. Please keep in mind that it may not necessarily follow that a sun protection ingredient deemed safe and effective for use as a topical product for humans is automatically safe for our coral reefs, ecosystems and/or marine life. Maui's ordinance allows for these additions to be made by our legislative branch, but does not mandate ingredients on the GRASE list be automatically included.

Maui County Code Ordinance 5306 was supported by world renowned molecular biology expert, Dr. Craig Downs, PhD, whose pioneering research first showed the connection between chemical sunscreens and harm to marine life.

February 14, 2022
Page 2

His work, along with others, continues to demonstrate that chemical sunscreen products are devastating to marine life.

The CARE Committee also heard testimony in support of our measure from multiple environmental agencies, Mayor Victorino's office, concerned citizens, students, and employees of the State Dept. of Land and Natural Resources who work at Ahihi Kinau, a precious marine preserve in South Maui.

HB1519 HD1 also supports the Edinburgh Declaration, an international commitment to nature-based solutions that was signed at COP26 by BLNR Chair Suzanne Case for the State of Hawaii and myself for the County of Maui!

Please pass HB1519 HD1 with an effective date which comports with its passage to allow for the prohibitions to be imposed as of, or earlier than, January 1, 2023.

Mahalo nui loa,

Handwritten signature of Kelly T. King in cursive script.

Kelly Takaya King, Maui County Council
Chair, Climate Action, Resilience and Environment Committee
Member, Local Government Advisory Committee to U.S. EPA
ICLEI Delegate to COP26

HB-1519-HD-1

Submitted on: 2/14/2022 11:26:22 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Erin Elizabeth Johnson	Individual	Support	No

Comments:

Aloha, my name is Erin Elizabeth Johnson and I am a resident of Maui County. I am Co-Founder & CEO of ONE LOVE BODY SOUL, a certified organic FDA approved mineral sunscreen LLC. First, I want to thank Maui County and the council for allowing this dialogue.

Our organization is a fervent supporter of passing this bill. The island of Maui has a highly threatened coral reef environment surrounding us. I have worked closely with the Food and Drug Administration and EWG (Environmental Working Group) Scientists on creating an approved formula that is safe and effective for humans and all ecosystems.

In 2019, when the FDA proposed its most recent updates to sunscreen regulations, it found that only two ingredients, zinc oxide and titanium dioxide, could be classified as safe and effective, based on the currently available information. But in the last few years, numerous new studies have raised new concerns about endocrine-disrupting effects from three other ingredients: homosalate, avobenzone and oxybenzone.

The ingredients oxybenzone, octinoxate, octisalate, octocrylene, homosalate and avobenzone are all systemically absorbed into the body after one use (Matta 2019, Matta 2020), according to studies published by the FDA, which also found that they could be detected on the skin and in the blood weeks after no longer being used (Matta 2020). Previous studies detected many sunscreen ingredients in breast milk and urine samples (Schlumpf 2008, Schlumpf 2010). In addition, it's possible for sunscreen users to inhale ingredients in sunscreen sprays and ingest some of the ingredients they apply to their lips, so the ingredients must not be harmful to the lungs or internal organs.

This constant exposure to sunscreen chemicals raises concerns for not only human use, but also for our fragile marine life. Healthy coral reefs are one of the most valuable ecosystems on Earth. They provide billions of dollars in economic and environmental services, such as food, coastal protection, and tourism.

NOAA (National Oceanic and Atmospheric Association) Scientists report the following:

- How sunscreen chemicals can affect marine life:
 - Green Algae: Can impair growth and photosynthesis.
 - Coral: Accumulates in tissues. Can induce bleaching, damage DNA, deform young, and even kill.

- Mussels: Can induce defects in young.
- Sea Urchins: Can damage immune and reproductive systems, and deform young.
- Fish: Can decrease fertility and reproduction, and cause female characteristics in male fish.
- Dolphins: Can accumulate in tissue and be transferred to young

The bigger picture is really at stake here. Passing this Bill is a huge wave in the right direction. Let's preserve aquatic life on Maui by eliminating chemical sunscreen use so it can continue to provide and connect us all to life on the planet. Mahalo Nui Loa

HB-1519-HD-1

Submitted on: 2/14/2022 12:38:06 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Daniel N Robinson	Individual	Support	No

Comments:

It's undeniable that tourism has had a large affect on the health of the reefs that help protect our shorelines. We can't control what sunscreen gets brought in by individuals, but we can at least control how we contribute to the problem. I believe this bill is a step in the right direction, but would also like to see better management of agricultural runoff in the future. I'm concerned by the use of pesticides/ fertilizers and apparent lack of transparency regarding the downstream (pun intended) effects.

If I was in your position, I would do my best to mane sure every visitor understands their lasting environmental impact.

Mahalo for your time -

HB-1519-HD-1

Submitted on: 2/14/2022 1:11:30 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Matthew Geyer	Individual	Support	Yes

Comments:

This is common sense.

The industry is going to push back and say we are all gonna die of skin cancer if we enact this law, when in reality they have been pushing these unproven chemical concoctions on the public which may be causing, not preventing cancer, and are definitely harming our environment.

It just makes sense, how could anyone argue against the following without an ulterior motive?

" it shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the United States Food and Drug Administration, without a prescription issued by a licensed health care provider."

Thank you for hearing and supporting this measure.

HB-1519-HD-1

Submitted on: 2/14/2022 1:11:42 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Clayton Akatsuka	Individual	Oppose	No

Comments:

To Members of the House Committee on Consumer Protection & Commerce,

I am strongly opposed to HB 1519, HD 1. I use sunscreen daily to prevent skin cancer as I do gardening, driving, walking for exercise as well as to the stores in Kaneohe. I do want any more additional sunscreen ingredients banned in Hawaii.

Thank you for the opportunity to testify in opposition of HB 1519, HD 1.

HB-1519-HD-1

Submitted on: 2/14/2022 1:39:46 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Jennifer Navarra	Individual	Support	No

Comments:

Please pass this bill to protect our oceans, wildlife, and human health.

HB-1519-HD-1

Submitted on: 2/14/2022 1:52:17 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Virginia Tincher	Individual	Support	No

Comments:

I strongly support HB 1519. Hawaii has the opportunity to send a strong message to the world that it's important to take care of people and the environment. There are other options for sunscreens that are safe. I use them and find them comfortable and they provide strong protection from the sun.

HB-1519-HD-1

Submitted on: 2/14/2022 1:53:30 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Jadda Miller	Individual	Support	No

Comments:

[STRONG SUPPORT HB 1519 HD1](#)



LATE

**TESTIMONY OF TINA YAMAKI, PRESIDENT
RETAIL MERCHANTS OF HAWAII
February 15, 2022
Re: HB 1519 HD1 RELATING TO SUNSCREEN**

Good afternoon, Chairperson Johanson and members of House Committee on Consumer Protection and Commerce. I am Tina Yamaki, President of the Retail Merchants of Hawaii and I appreciate this opportunity to testify.

The Retail Merchants of Hawaii was founded in 1901, RMH is a statewide, not for profit trade organization committed to the growth and development of the retail industry in Hawaii. Our membership includes small mom & pop stores, large box stores, resellers, luxury retail, department stores, shopping malls, local, national, and international retailers, chains, and everyone in between.

We are opposed to HB 1519 HD 1 Relating to Sunscreen. Beginning January 1, 2023, this measure prohibits the sale, offer for sale, or distribution in the State of any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the Food and Drug Administration, without a prescription issued by a licensed health care provider. Effective 7/1/2100.

This measure would go beyond the already current state law banning sunscreens with oxybenzone, octinoxate.

Hawaii is known for its many sunny days and many residents and visitors who uses sunscreen include little leaguers, hikers, golfers, soccer and baseball players, and joggers to name a few. With the pandemic we are seeking more people and families enjoying outdoor sports biking, playing outside, and going to the park. Sunscreen is not just used for beach and other water activity purposes. **Sunscreen also comes in many forms that include foundation makeup, face moisturizers, eye creams, hair care products, after shave balm, eyeshadows, setting powders, lipsticks, lip balm, hand creams, body lotions, insect repellent and more.** If this measure passes, we will continue to see many of these types of beauty products stop being sold in our local stores and instead customers will purchase them online with companies who have no ties to Hawaii.

Many of us do NOT go to the beach but wear sunscreen daily to protect ourselves from the effects of the sun like skin cancer - the most common form of cancer. Every year there are more cases of skin cancer in the United States than incidences of breast cancer, prostate cancer, lung cancer, and colon cancer combined. One out of five Americans will develop skin cancer in their lifetime, and one person dies of melanoma (the deadliest form of skin cancer) every hour. Most melanomas are caused by the sun, and **a person's risk of melanoma doubles if he or she has had more than five sunburns.**

We may also run the risk of people no longer wearing sunscreen and thus increasing their chances of skin cancer. This ban would also penalize those who do not go to the beach but use sunscreen on a regular basis like hikers, golfers, tennis players and joggers to name a few. Sunscreen products should be affordable and accessible first line of defense for individuals seeking protection from the sun's cancer-causing UV rays. Banning the sale of these products will drastically reduce the selection of sunscreen products available in Hawaii as well as compel local residents to purchase products online or not use sunscreen at all and our visitors to bring their own in their suitcases. **How many will actually take time off from work, pay a co-payment to see a doctor and then wait in the pharmacy to get a prescription for suntan lotion? Not to mention having to pay for the expensive sunscreen because insurance may not cover it.**

We also would like to point out that the Food and Drug Administration (FDA) considers sunscreens to be a nonprescription drug. The FDA has issued a proposed order NOT A FINAL ORDER, which data is being gathered to fill the identified safety gaps. These sunscreen ingredients have been used for years. We should wait to see what the FDA final order is.

For these reasons, we respectfully urge you to hold this bill.

Mahalo again for this opportunity to testify.

LATE



Environmental Caucus of The Democratic Party of Hawai'i

To: The Honorable Aaron Ling Johanson, Chair
The Honorable Lisa Kitagawa, Vice Chair
House Committee on Consumer Protection & Commerce

Re: **HB 1519, HD 1 - RELATING TO SUNSCREEN**

Hearing: Tuesday, February 15, 2022, 2:00 p.m., Conference Room 329 and Via Videoconference

Position: Strong Support

Aloha, Chair Johanson and Vice Chair Kitagawa and Members of the Committee on Consumer Protection and Commerce:

The Environmental Caucus of the Democratic Party of Hawai'i strongly supports HB 1519, HD1 and requests that this measure be PASSED by your Committee. This bill would prohibit the sale, offer for sale, or distribution in the State of any sunscreen and contains active ingredients that are not generally recognized as safe and effective by the Food and Drug Administration, without a prescription issued by a licensed health care provider, beginning on January 1, 2023. This bill has a defective date of July 1, 2100.

The Environmental Caucus requested the introduction of SB 2850 and HB 2357 which would have prohibited the distribution and sale of sunscreens containing avobenzone and octocrylene beginning on January 1, 2024. HB 1519, HD1 would cover these two additional sunscreen chemicals for being harmful to coral reefs and reef fish and not being "generally recognized as safe and effective (GRASE)" by the FDA. As such, we wholeheartedly support this bill especially since it does not supplant references to Octinoxate and Oxybenzone.

Mahalo nui loa for this opportunity to testify. Please pass this bill.

Respectfully submitted,

Melodie Adyja

Alan Burdick

Co-Chairs, Environmental Caucus of the Democratic Party of Hawai'i

Email: legislativepriorities@gmail.com



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Toby Taniguchi, KTA Superstores, *Advisor*
Joe Carter, Coca-Cola Bottling of Hawaii, *Immediate Past Chair*

TO: Committee on Consumer Protection and Commerce
Rep. Aaron Ling Johanson, Chair
Rep. Lisa Kitagawa, Vice Chair



FROM: HAWAII FOOD INDUSTRY ASSOCIATION
Lauren Zirbel, Executive Director

DATE: February 15, 2022
TIME: 2pm
PLACE: Via Videoconference

RE: HB1519 Relating to Sunscreen

Position: Oppose

The Hawaii Food Industry Association is comprised of two hundred member companies representing retailers, suppliers, producers, and distributors of food and beverage related products in the State of Hawaii.

HFIA proposes that since this bill would ban many products that are used to prevent skin cancer a strong justification should be provided for this measure and high standard of review should be conducted. The FDA is continuing to gather information about a range of sunscreen ingredients and per their website, “Given the recognized public health benefits of sunscreen use, Americans should continue to use broad spectrum sunscreen with SPF 15 or higher with other sun protective measures as this important rulemaking effort moves forward.”¹

This measure will hurt local retailers by encouraging consumers to buy their favorite sunscreens online, where it is unlikely this law will be enforceable. The promotion of this bill will adversely impact human health, serving only to demonize wearing sunscreen, and increase people’s risk of skin cancer.

Our local businesses care about offering products individuals feel comfortable with and which are affordable for use on a daily basis to prevent skin cancer. Many products that have sun protection factor, such as lotions, tinted moisturizers, and anti-aging products are intended for daily use in small amounts. Many or all of these products would be unnecessarily banned

¹
<https://www.fda.gov/media/124654/download#:~:text=Sunscreens%20active%20ingredient%20safety%20and%20effectiveness&text=FDA%20proposes%20that%20it%20needs,sulisobenzene%2C%20oxybenzone%2C%20avobenzone>

under this bill, as would other federally approved and regulated healthcare products. Having access to these products is especially important here in Hawaii where the rate of skin cancers, including deadly melanoma, is significantly higher than on the mainland.²

Given that this ban would deprive people of products they use to prevent possibly life-threatening skin cancers, we ask that this measure be held. Thank you for the opportunity to testify.

² <http://www.staradvertiser.com/2018/02/28/editorial/island-voices/healthy-people-healthy-places-include-sunscreen/>



CONSUMER
HEALTHCARE
PRODUCTS
ASSOCIATION

Taking healthcare personally.

LATE

February 14, 2022

To: Consumer Protection & Commerce Committee
The Honorable Aaron Ling Johanson, Chair
The Honorable Lisa Kitagawa, Vice Chair

Fr: Carlos I. Gutierrez, Vice President, State & Local Government Affairs
Consumer Healthcare Products Association

RE: HB 1519 HD1 Relating to Sunscreens - OPPOSE

Dear Chairman Johanson,

On behalf of the Consumer Healthcare Products Association (CHPA), the national trade association representing the leading manufacturers of over-the-counter (OTC) medications, dietary supplements, and consumer medical devices, I'm writing to express strong opposition to HB 1519 HD1 – legislation seeking to ban the sale and availability of certain sunscreen active ingredients in the State of Hawai'i.

Scientific studies support wearing sunscreen on a regular basis to protect against skin cancer. Limiting access to sunscreens, especially in a place like Hawai'i which consistently rates high on the ultraviolet (UV) index, needlessly puts both residents and visitors to the Hawaiian Islands at risk of sunburn and one of the most preventable forms of cancer in the world today – skin cancer.

Broad spectrum sunscreens block the full range of ultraviolet rays linked to skin cancer – one of the most common forms of cancer in the world according to the World Health Organization.¹ Eliminating sunscreen options for consumers will likely lead to reduced sunscreen use and needlessly increase the risk of skin cancer for residents, and visitors with no added health benefit from avoiding use of sunscreens altogether.

The State of Hawai'i remains the only American state to have banned the sale of sunscreens containing oxybenzone and octinoxate. Expanding this ban to also include additional sunscreen ingredients increases the risk of skin cancer for Hawaiians and visitors to the state.

Consumer access to sunscreen products containing a broad variety of active ingredients, especially in a state with the highest rate of melanoma cases attributed to UV exposure, is a matter of public health and sunscreen use has been proven to reduce the risk of skin cancer. For these reasons, we oppose passage of HB 1519 HD1.

Thank you for taking the time to consider our concerns and feel free to contact me or our local representative, Lauren Zirbel, directly with any follow up questions you may have.

Respectfully submitted,

A handwritten signature in blue ink that reads 'Carlos I. Gutierrez'.

Carlos I. Gutierrez

Vice President, State & Local Government Affairs
Consumer Healthcare Products Association
cgutierrez@chpa.org | 202-429-3521

¹ U.S. Food and Drug Administration. "Sunscreen: How to help protect your skin from the sun."
<https://www.who.int/news-room/q-a-detail/radiation-protecting-against-skin-cancer>

LATE

HB-1519-HD-1

Submitted on: 2/14/2022 10:16:12 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Diane L Duke	Individual	Support	No

Comments:

Position: Strongly Support HB1519 HD 1

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to express my STRONG SUPPORT of HB 1519 HD1.

It is vital to protecting our coral reefs.

Thank you,

Diane Duke

LATE

HB-1519-HD-1

Submitted on: 2/14/2022 2:05:43 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Keith Neal	Individual	Support	No

Comments:

I support.

Banning known toxic chemicals in sunscreens when effective alternatives are available is the correct thing to do.

LATE

HB-1519-HD-1

Submitted on: 2/14/2022 2:13:21 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Jessica Rosado	Individual	Support	Yes

Comments:

Re: Hearing HB 1519 HD1

RELATING TO SUNSCREEN

Tuesday, February 15, 2022, 2:00 p.m.

By videoconference

Position: Strongly Support HB1519 HD 1 with an amendment to change the effective date back to January 1, 2023

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee,

I am in STRONG SUPPORT of HB 1519 HD1. My name is Jessica Rosado. I live on the island of Maui. I am 12 years old and I go to school at Kihei Charter School. I am supporting HB1519 HD1 to protect all marine species. The health of marine life not only impacts marine ecosystems but our lives too. Chemical ingredients in sunscreen that have not been banned such as avobenzene, cinoxate, dioxybenzone, ensulizole, homosalate, meradimate, octinoxate, octisalate, octocrylene, oxybenzone, padimate O, and sulisobenzene impact our communities in a negative way. HB 1519 HD1 is an opportunity for us to impact our communities in a positive way. We need to ban chemical ingredients in sunscreen now. We cannot wait any longer. Our islands need us to protect them now. Please consider passing HB 1519 HD1 for present and future generations.

Mahalo for your time.

Sincerely,

Jessica Rosado

7th Grade, Kihei Charter School

LATE

HB-1519-HD-1

Submitted on: 2/14/2022 3:06:41 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Roberta L Hotchkiss	Individual	Support	No

Comments:

I am writing to express my strong support of HB 1519 HD1. I am a volunteer at Kahalu'u Bay Education Center. Most people that we speak to regarding harmful chemicals in sunscreen had honestly tried to buy the right product. They are deceived by the stores posting signs stating their chemical sunscreens are Reef Friendly, or the greater lie, Reef Safe. Some product labels even have a special notation that the product is Reef Friendly, even though it contains harmful chemicals. These lies on the part of the suppliers and retailers can only be corrected by legally banning the chemical sunscreens. Thank you for taking action on this important issue.

LATE

HB-1519-HD-1

Submitted on: 2/14/2022 3:12:38 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Paul Herring	Individual	Support	No

Comments:

I would like to submit testimony in strong support of HB 1519 HD1, the bill aimed at prohibiting the sale, offer for sale, or distribution in the State of any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the Food and Drug Administration, without a prescription issued by a licensed health care provider. I find it appalling that companies are allowed to sell sunscreens that do not meet this criteria. In Hawaii, in particular, it is astounding that shops are permitted to sell sunscreens that are harmful to coral reefs which are such an important part of the ecosystem of the islands. Not only are coral reefs vital for the health of the fish and oceans that surround our islands but these natural wonders are also a great draw for tourists. The COVID pandemic has highlighted the importance of tourism on the Hawaii's economy. Why then would we not do everything in our power to help maintain the health of our oceans and coral reefs which help to bring hundreds of thousands of tourists to the islands each year? In talking with both local residents and numerous tourists over the last year or two it is apparent that most people try their best to use sunscreens which will not harm the coral reefs and fish which are dependent on them. Unfortunately the misleading if not outright false labeling of many sunscreens as "reef friendly" greatly impedes these efforts. Many out-of-state tourists that I have talked to specifically waited until they got to Hawaii to buy sunscreen as they assume that whatever they bought here would have to be safe for the reefs. It is very embarrassing to have to tell them that unfortunately this is not true. Clearly this kind of attitude displayed by the tourists should alleviate fears of lost sales due to banning harmful chemicals from sunscreens as the visitors will buy whatever sunscreens are available in the local stores. So if local stores stock only true 'reef friendly' sunscreens which are generally recognized as safe and effective by the FDA they should have no trouble selling them.

In conclusion, I would like to thank you again for your efforts to better protect our islands and look forward to the successful passage of this bill.

LATE

HB-1519-HD-1

Submitted on: 2/14/2022 3:31:12 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Ann Humphrey	Individual	Support	No

Comments:

I STRONGLY SUPPORT HB 1519 "Relating to Sunscreen".

It makes sense for the health of our coral reefs and our people to use products that are "Generally Recognized as Safe and Effective".

The proposed enactment date of this legislation (1 Jan 2023) is critical as the impacts are accruing every day, and the current status of sunscreen regulation is confusing to consumers and retailers.

Lets help everyone do the right thing. Pass HB1519.

Thank you,

Ann Humphrey

HB-1519-HD-1

Submitted on: 2/14/2022 8:31:54 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

LATE

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Dorothy Norris	Individual	Support	No

Comments:

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to express my **STRONG SUPPORT** of HB 1519 HD1. The elimination of unsafe sunscreen not only protects the wearer but also the coral habitat. Please consider both in your deliberations. Mahalo!

LATE

HB-1519-HD-1

Submitted on: 2/14/2022 10:17:13 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
John Paszalek	Individual	Support	No

Comments:

Hello Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to ask you to support HB 1519 HD1. Mineral sunscreen is better for people and for our reefs! In the long term tourism can only be positively impacted by this bill, as it will slow the decay of coral reefs. The only reason not to support this bill is if you are a sunscreen manufacturer.

I hope you all will do what is right.

John Paszalek

LATE

HB-1519-HD-1

Submitted on: 2/14/2022 10:31:50 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Mika Yamazaki	Individual	Oppose	No

Comments:

As a board-certified dermatologist practicing in Hawaii, I urge you to oppose legislation that would further restrict access to sunscreen ingredients. Strongly consider the broad implications of banning the use of certain sunscreens, bearing in mind the grave dangers of sun exposure without adequate protection that the residents and visitors of Hawaii face.

As dermatologists we dedicate ourselves to promoting habits in our patients that ensure healthy skin. UV radiation damages the skin's DNA, which is the first stage of skin cancer. Unprotected sun exposure is the most preventable risk factor for skin cancer. At least one in five Americans will develop skin cancer. Melanoma, the deadliest form of skin cancer, is the second most common form of cancer in women, aged 15-29 years old. The annual cost of treating non-melanoma skin cancer in the U.S. is estimated at \$4.8 billion, and the average annual cost of treating melanoma is approximately \$3.3 billion.

The potential adverse effects related to the levels of UV-filters in the water supply and marine life are an emerging science. A recent review in the journal Environmental Toxicology and Chemistry of 12 studies concludes "there is currently limited evidence to suggest that corals are adversely impacted by environmental exposure to UV filters." The studies evaluating 14 different organic UV filters in seawater near coral reefs determined that the majority of concentrations found in seawater were in the nanograms per liter range. Nine papers reported toxicological findings from no response to a variety of biological effects; these effects were detected in the micrograms per liter to milligrams per liter range, namely, at least 1000-fold higher than those reported in seawater in real life.

The National Academy of Sciences (NAS) is conducting a scientific literature review of current sunscreens' potential risk to the marine environment. The study will consider scientific literature on the potential public health implications as a result of reduced use of sunscreens. This type of research is necessary to understand how UV filters may affect the environment. We encourage you to consider these ongoing efforts before taking any action to remove a product that has been proven to be effective against skin cancer.

A large part of my practice involves doing skin checks and treating pre-cancers and skin cancers, and many of these patients regret not seriously taking measures to protect their skin from the sun, especially in their youth. Many of them grew up during a time when the adverse and cumulative effects of sun damage were unknown and a variety of sun protection options were not available. In particular, many patients state that the reason for not wearing sunscreen was the fact that the

zinc sunscreens were too thick and turned their skin white. As a mother of two young, outdoorsy children, I have serious concerns that a premature ban of the majority of our sunscreens will reduce options and dangerously heighten the risk of our keiki developing sun damage and skin cancers that could have otherwise been easily prevented.

I was born and raised in these islands, and I have a deep appreciation of Hawaii's beautiful ocean ecosystem. I agree with doing everything we can in order to preserve nature, but such decisions should be based on reputable and reproducible science, which I feel is not yet available. I have witnessed repeatedly the physical and mental toll of skin cancers upon members of our community, and I would like to prevent our kama'aina and visitors from suffering from these largely preventable diseases.

Based on current data, removing specific sunscreen ingredients and products from the market would be premature and hazardous. Doing so would deprive the public of an integral component of sun protection to decrease the risk of skin cancer. Please oppose any future restrictions on sunscreen ingredients. Thank you.

Sincerely,

Mika Yamazaki, MD, FAAD

LATE

HB-1519-HD-1

Submitted on: 2/15/2022 7:21:27 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Ron Jarvis	Individual	Support	No

Comments:

I am writing to express my strong support of HB 1519 HD1 relating to sunscreen

LATE

HB-1519-HD-1

Submitted on: 2/15/2022 8:17:31 AM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Bella Dadzie	Individual	Support	No

Comments:

Aloha Chair Johanson, Vice-Chair Kitagawa, and members of the CPC Committee:

I am writing to express my STRONG SUPPORT of HB 1519 HD1.

LATE

HB-1519-HD-1

Submitted on: 2/15/2022 12:59:12 PM

Testimony for CPC on 2/15/2022 2:00:00 PM

Submitted By	Organization	Testifier Position	Remote Testimony Requested
Terry Lyons	Individual	Support	No

Comments:

I am writing to express my strong support of HB 1519 HD1