

**STATE OF HAWAII**  
**DEPARTMENT OF HEALTH**  
P. O. Box 3378  
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**Testimony COMMENTING on HB1519**  
**RELATING TO SUNSCREEN**

REPRESENTATIVE NICOLE LOWEN, CHAIR  
HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION  
Hearing Date: 2/8/2022 Room Number: 325/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 seeks to amend HRS 342D to require that sunscreens sold or  
6 distributed in Hawaii only contain active ingredients classified by the United States Food and  
7 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 including oxybenzone and  
8 octinoxate. If SB3001 were to pass with effective date Jan 1, 2023, oxybenzone and octinoxate  
9 would no longer be prohibited in Hawaii until FDA’s rule change went into full effect.

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

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

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

22  
23 **Offered Amendments:** None

24 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**  
**ENERGY & ENVIRONMENTAL PROTECTION**

**Tuesday, February 8, 2022**  
**8:50 AM**

**State Capitol, Conference Room 325, Via Videoconference**

**In consideration of**  
**HOUSE BILL 1519**  
**RELATING TO SUNSCREEN**

House Bill 1519 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.

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CHAIRPERSON  
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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 octinoxate<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup>

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.<sup>3</sup> This could reduce coral resilience during warming events as bleached corals depend extensively on fat metabolism in order to survive.<sup>4</sup>

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 communities<sup>5</sup>. 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

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

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<sup>3</sup> 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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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.

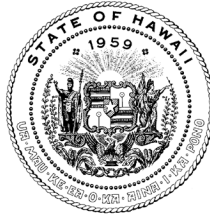
It should be noted that, although it is important to address all potential coral reef ecosystem stressors, the primary concerns with Hawaii’s coral reefs continue to be related to land-based sources of pollution, unsustainable fishing practices, invasive species, and climate change. Continued legislative 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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Thank you for the opportunity to comment on this measure.

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2/4/2022

TO:

Representative Nicole E. Lowen, Chair  
Representative Lisa Marten, Vice Chair

Members of the House Committee on Energy & Environmental Protection  
Thirty-First Legislature  
Regular Session of 2022

FROM:

The members of the Hawaii Skin Cancer Coalition

**RE: OPPOSITION to House Bill 1519, – RELATING TO SUNSCREENS**  
**Hearing Date – Tuesday, February 8, 2022**

Dear Chair Lowen, Vice Chair Marten, and Members of the Committee,  
the members of the Hawaii Skin Cancer Coalition strongly oppose House Bill 1519.

The Hawaii state law signed in July 2018 eliminated the OTC sale of the ingredients oxybenzone and octinoxate. SB 3001 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 limited peer-reviewed scientific evidence on sunscreen ingredients and its impact on environmental and human health.

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 and 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

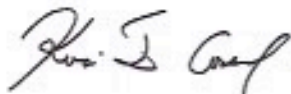
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The Hawaii Skin Cancer Coalition's mission is to provide clear, concise messages on skin cancer prevention, early detection, and effective treatment for both the public and health professionals based upon current and accurate information. The Coalition 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.

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, (HB 1519) on behalf of the Hawaii Skin Cancer Coalition.

Sincerely,



Kevin D. Cassel, DrPH

President, Hawaii Skin Cancer Coalition

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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.





HAWAII

AMERICANS FOR DEMOCRATIC ACTION

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**MAILING ADDRESS**

P.O. Box 23404  
Honolulu  
Hawaii 96823

February 4, 2022

TO: Chair Lowen and Members of the EEP Committee

RE: HB 1519 Relating to Sunscreen

Support for a Hearing on February 8 with comments

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 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



Re: Hearing HB1519 Relating to Sunscreen

Tuesday, February 8, 2022, 8:50 am, by videoconference

Position: **Support HB 1519 with an amendment!**

**STRONG SUPPORT for HB1519 with proposed amendments to continue the existing law banning the sale of sunscreens containing oxybenzone and octinoxate.**

Aloha Honorable Chair Nicole Lowen; Vice-Chair Lisa Marten; and Members of the Energy & Environmental Protection Committee

On September 24, 2021, **the FDA issued a proposed order concerning nonprescription sunscreen drug products. In the proposed order, two mineral products zinc oxide and titanium dioxide are deemed generally recognized as safe and effective (GRASE), and fourteen products are deemed NOT GRASE.** Of the fourteen products, twelve products do not currently contain sufficient data to support positive GRASE classification. The twelve products that require additional data are avobenzone, cinoxate, dioxybenzone, ensulizole, homosalate, meradimate, octinoxate, octisalate, octocrylene, oxybenzone, padimate O, and sulisobenzene.

The Environmental Protection Agency, Center for Disease Control, American Cancer Society, World Health Organization, as well as hundreds of scientists and dermatologists, have reported that certain chemical sunscreens are harmful to many forms of 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.

**PLEASE AMEND HB 1519 AT THE BEGINNING OF THE BILL AS FOLLOWS:**

SECTION 1. Section 342D—21, Hawaii Revised Statutes, is amended to read as follows:

**“342D-21 Sale and distribution of sunscreen containing oxybenzone or octinoxate, or both; prohibition; active ingredients; generally recognized as safe and effective.**

**(a) Beginning January 1, 2021, it shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains oxybenzone or octinoxate, or both. Beginning January 1, 2023, it also 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.”**

The definitions of oxybenzone and octinoxate struck in the bill from the existing law (page 2, line 6 through page 3, line 5) also should be restored.

**We ask your strong support for HB1519 with proposed amendments. Prohibiting the sale, offer for sale, or distribution of non-mineral sunscreens that have questionable effects on the health of humans and marine life is in alignment with 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, allowing us to protect our environment and communities for future generations.**

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



**Mālama Pūpūkea-Waimea**  
**Post Office Box 188**  
**Hale'iwa, HI 96712**

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**Federal Nonprofit Organization**  
**501(c)(3) FEIN 27-0855937**  
**[www.pupukeawaimea.org](http://www.pupukeawaimea.org)**  
**[info@pupukeawaimea.org](mailto:info@pupukeawaimea.org)**

February 6, 2022

Re: **STRONG SUPPORT** for **HB1519** Relating to Environmental Protection

Aloha Chair Lowen, Vice Chair Marten, and House Committee on Energy and Environmental Protection,

Mālama Pūpūkea-Waimea (MPW) is a Hawai'i non-profit organization founded on the North Shore of O'ahu in 2005. Our mission is "working to replenish and sustain the natural and cultural resources of the Pūpūkea and Waimea ahupua'a for present and future generations through active community stewardship, education, and partnerships." For eighteen years, we have focused our stewardship and education efforts on the Pūpūkea Marine Life Conservation District (MLCD), one of only three MLCDs on O'ahu and eleven statewide.

Due to the area's extreme popularity with visitors, we see first-hand the unfortunate destructive and cumulative impacts chemicals in sunscreens have on our nearshore environment. We **strongly support HB1519** 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.

We make an effort to educate beachgoers about coral health and the detrimental effects chemical sunscreens have on them. In speaking with visitors, they often say they chose their sunscreen because a sticker on the front of the bottle said "reef safe – no oxybenzone" but after learning more, they realize that those products do indeed still contain coral-killing chemicals such as avobenzone, homosalate, octisalate, and octocrylene – all of which are no longer recognized as safe and effective as defined by the Food and Drug Administration.

It is our hope that the only choices available in stores will be "really reef safe" sunscreens – and thanks to environmentally conscious companies, many of which are local, there are numerous mineral sunscreen options readily available for consumers.

Please support and pass **HB1519** to benefit the health and resiliency of Hawai'i's coral reef ecosystems.

Mahalo nui,

Jenny Yagodich  
Director of Educational Programs &  
Makai Watch Coordinator  
Mālama Pūpūkea-Waimea



**HB-1519**

Submitted on: 2/6/2022 9:30:34 AM

Testimony for EEP on 2/8/2022 8:50:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Ted Bohlen	Hawai'i Reef and Ocean Coalition	Support	Yes

Comments:

To: The Honorable Nicole Lowen, Chair, the Honorable Lisa Marten, Vice Chair, and Members of the House Committee on Energy and Environmental Protection

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

Re: Hearing HB1519 RELATING TO SUNSCREEN.

Tuesday February 8, 2022, 8:50 a.m., by videoconference

Aloha Chair Lowen, Vice Chair Marten, and Members of the House Committee on Energy and Environmental Protection!

**Position: Strongly Support HB1519 if amended to retain existing oxybenzone and octinoxate ban law!**

**The HAWAI'I REEF AND OCEAN COALITION – HIROC – STRONGLY SUPPORTS HB1519 and proposes amendments to continue the existing law banning the sale of sunscreens containing oxybenzone and octinoxate.**

HIROC was formed in 2017 by coral reef scientists, educators, local Hawai'i environmental organizations, elected officials, and others to address the crisis facing Hawaii's coral reefs and other marine life. HIROC thanks the Legislature for passing Act 104 in 2018, which provided for **the world's first ban on sale or distribution for sale of sunscreens containing oxybenzone and octinoxate, effective January 1, 2021. That ban should continue, as it is needed to help protect our precious coral reefs and marine life!**

As drafted, this bill would supplant rather than supplement the oxybenzone-octinoxate ban bill that passed in 2018. **This bill should supplement and not supplant the existing law.** Oxybenzone and octinoxate harm reefs and need to be banned from sale in Hawai'i whether or not the FDA eventually finds them to be GRASE for human health.

This bill has a slightly different focus: to protect consumers from petrochemical sunscreens that have not been found to be "generally recognized as safe and effective" (GRASE) by the US Food and Drug Administration (FDA). Consumers should not be exposed to chemicals that have not

been demonstrated to be safe, especially where there are scientific studies suggesting these chemicals disrupt hormones and may cause cancers as well as harm corals and other marine life.

It has been argued that banning sunscreens containing petrochemicals from the market would lead to additional skin cancers, because people therefore won't use any sunscreen. This false argument ignores the fact that there are ample safer alternatives available on the market containing the active ingredient minerals zinc oxide or titanium dioxide.

Sunscreen preparations were designed to protect against sunburn; because of this they are assumed to protect against skin cancer, but unfortunately this relationship is inferential only. There are no definitive studies that demonstrate that sunscreens protect against skin cancers, as evidenced by research published by the World Health Organization, US Environmental Protection Agency and some dermatologists.

The argument also ignores what the World Health Organization has called "suntan abuse." Petrochemical sunscreens are often not applied sufficiently or frequently enough, and wash off in water, so may not actually protect as much as people are led to believe. A false sense of protection against both UVB and UVA pathologies may cause people to spend more time in the sun. This additional exposure to the sun, or "suntan abuse," increases the risk of melanoma and may cause MORE skin cancers.

The best course is to avoid the mid-day sun, but if you will be in the sun, wear a protective hat and clothing and sunscreens with zinc oxide or titanium dioxide. This is much better course for public health and the environment than using a petrochemical sunscreen that gets absorbed into your bloodstream and may disrupt your hormones, potentially causing cancers, and may wash off and harm coral reefs and other marine life.

With these amendments proposed by HIROC, the bill beginning would read:

SECTION 1. Section 342D—21, Hawaii Revised Statutes, is amended to read as follows:

**"342D-21 Sale and distribution of sunscreen containing oxybenzone or octinoxate, or both; prohibition; active ingredients; generally recognized as safe and effective.**

(a) Beginning January 1, 2021, it shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains oxybenzone or octinoxate, or both. Beginning January 1, 2023, it also 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."

The definitions of oxybenzone and octinoxate stricken in the bill from the existing law (page 2, line 6 through page 3, line 5) also should be restored.

Mahalo for the opportunity to testify in **STRONG SUPPORT for HB1519 with proposed amendments!**

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



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

To: Representative Nicole Lowen, Chair; Representative Lisa Marten, Vice Chair; and  
Members of the Committee on Energy and Environmental Protection

Date: Tuesday, February 8, 2022

Time: 8:50 am

Place: Conference Room 325 & Via Videoconference

Re: **STRONG SUPPORT FOR HB1519 IF AMENDED TO SUPPLEMENT EXISTING  
LAW ACT 104, 2018 INSTEAD OF SUPPLANTING IT**

Aloha Chair Lowen, Vice Chair Marten, and Committee Members,

Friends of Hanauma Bay thanks the Legislature for passing Act 104, 2018 which led the world in banning the sale and distribution of sunscreens containing the petrochemical UV filters oxybenzone and octinoxate effective January 1, 2021. This landmark ban must remain in effect to help protect our fragile coral reefs and other marine wildlife.

As drafted, HB1519 would supplant rather than supplement the oxybenzone-octinoxate ban bill that passed in 2018. **HB1519 should supplement and not supplant the existing law.** Oxybenzone and octinoxate harm reefs and need to continue to be banned from sale in Hawai'i whether or not the FDA finds them to be GRASE for human health.

Meanwhile, the weight of hundreds of studies over the last 25 years from recognized experts all over the world, document that petrochemical UV filters in sunscreen pose a threat to both marine environments and public health.

HB1519 has a slightly different protection focus from Hawaii's Act 104, 2018. It aims to protect consumers from petrochemical sunscreens that have not been found to be "generally recognized as safe and effective" (GRASE) by the US Food and Drug Administration (FDA). Consumers should not be exposed to chemicals that have not been demonstrated to be safe, especially where there are scientific studies suggesting these chemicals disrupt hormones and may cause cancers as well as harm corals and other marine life.



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

It has been argued that banning sunscreens containing petrochemicals from the market would lead to additional skin cancers, because people therefore won't use any sunscreen. This false argument ignores the fact that there are ample safer alternatives available on the market containing the active ingredient minerals zinc oxide or titanium dioxide, which the FDA finds to be GRASE in their September 2021 proposed final order on sunscreens.

Sunscreen preparations were designed to protect against sunburn. However, there are no definitive studies demonstrating that sunscreens protect against skin cancers, as evidenced by numerous research published by the World Health Organization, US Environmental Protection Agency and some dermatologists.

The argument also ignores what the World Health Organization has called "suntan abuse." Petrochemical sunscreens are often not applied sufficiently or frequently enough, and wash off in water, so may not actually protect as much as people are led to believe. A false sense of protection against both UVB and UVA pathologies may cause people to spend more time in the sun. This additional exposure to the sun, or "suntan abuse," increases the risk of melanoma and may cause MORE skin cancers.

The best course is to avoid the mid-day sun, but if you will be in the sun, wear a protective hat and clothing and sunscreens with zinc oxide or titanium dioxide. This is much better course for public health and the environment than using a petrochemical sunscreen that gets absorbed into your bloodstream and may disrupt your hormones, potentially causing cancers, and may wash off and harm coral reefs and other marine life.

**We join the Hawaii Reef and Ocean Coalition in recommending the following amendments to ensure HB1519 supplements, NOT SUPPLANTS, ACT 104, 2018:**

SECTION 1. Section 342D—21, Hawaii Revised Statutes, is amended to read as follows:



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

**“342D-21 Sale and distribution of sunscreen containing oxybenzone or octinoxate, or both; prohibition; active ingredients; generally recognized as safe and effective.**

(a) Beginning January 1, 2021, it shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains oxybenzone or octinoxate, or both. Beginning January 1, 2023, it also 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."

The definitions of oxybenzone and octinoxate stricken in the bill from the existing law (page 2, line 6 through page 3, line 5) also should be restored.

Mahalo for the opportunity to testify in **STRONG SUPPORT of HB1519 with proposed amendments to supplement but not supplant Act 104, 2018.**

With Aloha,

Lisa Bishop  
President



# Environmental Caucus of The Democratic Party of Hawai'i

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Sunday, February 6, 2022

To: House Committee on Energy and the Environment  
Hon. Nicole E. Lowen, Chair  
Hon. Lisa Marten, Vice Chair

Re: HB 1519 relating to Sunscreens  
Hearing: Tuesday, February 8, 2022, 8:50 a.m., Room 325 & videoconference

Position: Strong support, with amendments

Aloha, Chair Lowen, Vice Chair Marten, and Members of the Committee on Energy and the Environment:

The Environmental Caucus of the Democratic Party of Hawai'i strongly supports this bill, provided it is amended. We strongly support legislation that will rid our ocean environment of chemicals that adversely affect the endocrine systems of both vertebrate and invertebrate aquatic life and thereby threaten to destroy our coral reefs and our entire nearshore ocean life.

We join the Hawaii Reef and Ocean Coalition (HIROC) and others who respectfully request that this legislation be amended as follows: (1) Preserve our world-leading statute, now codified as HRS §342D-21, that bans sunscreens containing oxybenzone, octinoxate, or combinations thereof. This is needed lest this new bill be declared invalid and HRS §342D-21 not revived. EXCEPT that we applaud the proposal in this bill to repeal subsection (b) of this section, which bars County-level bans on certain sunscreens. (2) We strongly support adoption of the basic concept of this bill in prohibiting sunscreens until they are shown to be "GRASE" – generally recognized as safe and effective. It is important to shift the burden of producing evidence onto the cosmetic industry and to require that the proof of safety PRECEDE introduction of a chemical into our environment, rather than having a situation where the public must continually try to ban chemical products AFTER they have already been introduced into the environment and are ALREADY CAUSING DAMAGE. Accordingly, the amendments to HRS §342D-21 that this bill proposes should be made into a stand-alone new section in Chapter 342D.

This is a great bill, if amended along these lines. Thank you very much!

*Melodie P. Adyja*

*Alan B. Burdick*

Co-Chairs, Environmental Caucus



2/8/2022

EEP Committee  
Hawaii State Capitol  
Honolulu, Hawaii 96813

Dear Chair Lowen, Vice Chair Marten, and Members of the House Committee on Energy and Environmental Protection,

**Position: Strongly support HB1519 with amendments that the existing oxybenzone/octinoxate ban law must be supplemented not supplanted.**

The Surfrider Foundation is a national nonprofit organization dedicated to the protection and enjoyment of our ocean, waves, and beaches. Surfrider maintains a network of over 150 chapters and academic clubs nationwide, including 4 chapters in the Hawaiian Islands. The Surfrider Foundation focuses on many aspects of the environment such as coastal protection, plastic pollution, and water quality.

Already in this state we have banned the chemicals oxybenzone and octinoxate from legal sale in sunscreens. This is a huge step in protecting not only our coral reef areas but also the people who use these products, as they are shown to be harmful to both (Downs et al. 2016, DiNardo and Downs 2017, and Siller et al. 2018). These chemicals are among those that are readily absorbed into the skin (Matta et al. 2019) and have shown toxic hormonal effects in some vertebrates (Zhang et al. 2016).

With the amendment that ensures HB1519 will supplement and not supplant the existing oxybenzone/octinoxate ban law, HB1519 will strengthen the statewide protection of Hawaii's marine environment.

The Surfrider Foundation works with many companies already striving to make a suitable alternative, and there are many zinc based sunscreens on the market that are hugely popular and easily accessible. Making these the norm would help drive down costs as well, further increasing accessibility to lower income sectors of Hawaii. And from personal experience, they just feel better on your skin.

Thank you for your consideration of this testimony in support of HB1519 with amendments, submitted on the behalf of the Surfrider Foundation's 4 Chapters in Hawaii and all of our members who live in the state and visit to enjoy the many coastal recreational opportunities offered by all of the islands' coastlines.

Sincerely,

Camile Cleveland  
Volunteer Policy Coordinator  
Surfrider Foundation, O'ahu Chapter



To: The Honorable Nicole Lowen, Chair, the Honorable Lisa Marten, Vice Chair, and Members of the House Committee on Energy and Environmental Protection

From: Climate Protectors Hawai'i (by Sherryl Royce)

Re: Hearing HB1519 RELATING TO SUNSCREEN.

Tuesday February 8, 2022, 8:50 a.m., by videoconference

Aloha Chair Lowen, Vice Chair Marten, and Members of the House Committee on Energy and Environmental Protection!

Position: **Strongly Support HB1519 if amended to retain existing oxybenzone and octinoxate ban law!**

The CLIMATE PROTECTORS HAWAII'— **STRONGLY SUPPORTS HB1519 and proposes amendments to continue the existing law banning the sale of sunscreens containing oxybenzone and octinoxate. Our State law was the world's first ban passed on sale or distribution for sale of sunscreens containing oxybenzone and octinoxate, effective January 1, 2021. That ban should continue, as it is needed to help protect our precious coral reefs and marine life!**

As drafted, this bill would supplant rather than supplement the oxybenzone-octinoxate ban bill that passed in 2018. **This bill should supplement and not supplant the existing law.** Oxybenzone and octinoxate harm reefs and need to be banned from sale in Hawai'i whether or not the FDA eventually finds them to be GRASE for human health.

This bill has a slightly different focus: to protect consumers from petrochemical sunscreens that have not been found to be "generally recognized as safe and effective" (GRASE) by the US Food and Drug Administration (FDA). Consumers should not be exposed to chemicals that have not been demonstrated to be safe, especially where there are scientific studies suggesting these chemicals disrupt hormones and may cause cancers as well as harm corals and other marine life.

It has been argued that banning sunscreens containing petrochemicals from the market would lead to additional skin cancers, because people therefore won't use any sunscreen. This false argument ignores the fact that there are ample safer alternatives available on the market containing the active ingredient minerals zinc oxide or titanium dioxide.

Sunscreen preparations were designed to protect against sunburn; because of this they are assumed to protect against skin cancer, but unfortunately this relationship is inferential only. There are no definitive studies that demonstrate that sunscreens protect against skin cancers, as evidenced by research published by the World Health Organization, US Environmental Protection Agency and some dermatologists.

The argument also ignores what the World Health Organization has called "sunscreen abuse." Petrochemical sunscreens are often not applied sufficiently or frequently enough, and wash off in water, so may not actually protect as much as people are led to believe. A false sense of protection against both UVB and UVA pathologies may cause people to spend more

time in the sun. This additional exposure to the sun, or “sunscreen abuse,” increases the risk of melanoma and may cause MORE skin cancers.

The best course is to avoid the mid-day sun, but if you will be in the sun, wear a protective hat and clothing and sunscreens with zinc oxide or titanium dioxide. This is much better course for public health and the environment than using a petrochemical sunscreen that gets absorbed into your bloodstream and may disrupt your hormones, potentially causing cancers, and may wash off and harm coral reefs and other marine life.

With these amendments proposed, the bill beginning would read:

SECTION 1. Section 342D—21, Hawaii Revised Statutes, is amended to read as follows:

**“342D-21 Sale and distribution of sunscreen containing oxybenzone or octinoxate, or both; prohibition; active ingredients; generally recognized as safe and effective.**

(a) Beginning January 1, 2021, it shall be unlawful to sell, offer for sale, or distribute for sale in the State any sunscreen that contains oxybenzone or octinoxate, or both. Beginning January 1, 2023, it also 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.”

The definitions of oxybenzone and octinoxate stricken in the bill from the existing law (page 2, line 6 through page 3, line 5) also should be restored.

Mahalo for the opportunity to testify in **STRONG SUPPORT for HB1519 with proposed amendments!**

Climate Protectors Hawai'i (by Sherryl Royce)

**Testimony by George Martin, MD, FAAD**  
**on behalf of the Hawaii Dermatological Society and the American Academy of**  
**Dermatology Association**  
**State of Hawaii House Committee on Energy & Environmental Protection**  
**In Opposition of Bill 1519**  
**February 8, 2022**

Thank you distinguished members of the House Committee on Energy & Environmental Protection 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 review<sup>1</sup> 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 style with a large, sweeping "G" and "M".

George Martin MD, FAAD

Dermatologist, Kihei, Maui, Hawaii

<sup>1</sup> 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,<sup>a,\*</sup> Emily E. Burns,<sup>b</sup> Annaleise Conway,<sup>a</sup> Andrew Heyes,<sup>a</sup> and Iain A. Davies<sup>b,\*</sup><sup>a</sup>University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory, Solomons, Maryland, USA<sup>b</sup>Personal 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

This article contains online-only Supplemental Data.

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TO: Committee on Energy and Environmental Protection  
Rep. Nicole E. Lowen, Chair  
Rep. Lisa Marten, Vice Chair

FROM: HAWAII FOOD INDUSTRY ASSOCIATION  
Lauren Zirbel, Executive Director

DATE: February 8, 2022  
TIME: 8:50am  
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.

The 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."<sup>1</sup>

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

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1

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



daily use in small amounts. Many or all of these products would be unnecessarily banned 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.<sup>2</sup>

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.

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



CONSUMER  
HEALTHCARE  
PRODUCTS  
ASSOCIATION

Taking healthcare personally.

February 7, 2022

To: Committee on Energy & Environmental Protection  
The Honorable Nicole E. Lowen, Chair  
The Honorable Lisa Marten, Vice Chair

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

**RE: HB 1519 Relating to Sunscreen- OPPOSE**

Dear Chair Lowen,

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 - 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.<sup>1</sup> 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

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<sup>1</sup> 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>

to UV exposure, is a matter of public health and sunscreen use has been proven to reduce the risk of skin cancer.<sup>2</sup> For these reasons, we oppose passage of HB 1519.

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,



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

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<sup>2</sup> Watts *et al.*, 2018 Sunscreen Use and Melanoma Risk Among Young Australian Adults. JAMA Dermatol, 154(9):1001-1009.



**TESTIMONY OF TINA YAMAKI, PRESIDENT  
RETAIL MERCHANTS OF HAWAII  
February 8, 2022  
Re: HB 1519 RELATING TO SUNSCREEN**

Good morning, Chairperson Lowen and members of House Committee on Energy and Environmental Protection. 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 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.

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 a 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.

**HB-1519**

Submitted on: 2/3/2022 5:16:15 PM

Testimony for EEP on 2/8/2022 8:50:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Barbara Barry	Individual	Support	No

Comments:

Aloha,

I strongly support HB 1519.

Mahalo,

Barbara Barry

## In Strong Support of HB1519 (EEP Public Hearing February 8, 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 Lowen, Marten, Hashem, Matayoshi, Perruso, Todd, Tokioka and Matsumoto**

**In STRONG SUPPORT of HB1519, in addition to any new amendment(s) banning organic chemical sunscreens be added to the existing law banning the sale of sunscreens containing oxybenzone and octinoxate and not supersede the existing law.**

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 all living things!

All of the lobbyists use the same talking points in their testimonies, including how skin cancer will increase in Hawaii. This is simply fearmongering! The incidence of and deaths associated with skin cancer have been on the rise since at least 1975 (based on American Cancer Society data) and has been increasing globally (based to World Health Organization data) with or without the use of sunscreens. What is at risk here is human and environmental safety **VS** \$10+ BILLION in annual sunscreen sales, plus \$10+ BILLION in annual antiaging product sales (that use the same chemicals as sunscreens), plus \$8+ BILLION (US only) being spent annually to medically treating skin cancer cause by industry and the medical community telling people to use these ineffective unsafe products when at work, driving in a car, putting the garbage out, while playing out in the sun ... etc.

Example of lobbyists talking points noted in testimonies:

**1) “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!

**2) 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 proof that the existing chemicals in question are safe AND effective for human use.

PLEASE, move SB3001 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](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. Klaper – in 2006 and 2017, Ms Klaper 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 **methy 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**.

**HB-1519**

Submitted on: 2/5/2022 5:16:20 AM

Testimony for EEP on 2/8/2022 8:50:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Angela Huntmer	Individual	Support	No

Comments:

Dear Chair and Committe Members,

Please support the end of allowing toxic ingredients in skincare products. This is one threat to our marine ecosystems that we can eliminate. There are wonderful products vailable that use mineral sunscreens that do not make your skin look plastered in white. I have used them for years on my face. The most effective and best for your skin protection is clothing. There are so many cool options now in this department. Thank you for supporting our marine ecosystems!

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

TO: House Committee on Energy and Environmental Protection  
Representative Nicole Lowen, Chair  
Representative Lisa Marten, Vice Chair

FROM: Carla Nip-Sakamoto MD, Dermatologist

DATE: Tuesday, February 8, 2022

TIME: 8:50 a.m.

TESTIMONY: Written

RE: HB 1519 – Relating to Sunscreen

Position: Opposed

As a 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.

The current data 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's 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 ask that 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](mailto:cnipsakamoto@oahuderm.com)

**HB-1519**

Submitted on: 2/6/2022 12:11:29 PM

Testimony for EEP on 2/8/2022 8:50:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Megan Lamson Leatherman	Individual	Support	No

Comments:

Thank you for the opportunity to testify in support of the proposed House Bill 1519, which "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". I am in full support of this initiative that would reduce the amount of chemical stressors on our coral reefs, however, due to the current list of two chemicals currently deemed unsafe by FDA, this effectively does nothing at the moment.

However, FDA is currently evaluating 12 chemical sunscreen ingredients: cinoxate, dioxybenzone, ensulizole, homosalate, meradimate, octinoxate, octisalate, octocrylene, padimate O, sulisobenzene, oxybenzone and avobenzone. Two of which (octinoxate and oxybenzone) are already banned within the State, but others should be considered due to their presence in the bloodstream of users and impacts to marine species prior to allowing them for sale. I would suggest adding to this bill a thorough literature review of common pharmaceutical chemical impacts to aquatic wildlife in determining whether or not these products should be allowed for sale.

Research has already shown that certain chemicals in sunscreen, including oxybenzone, have been detrimental to the health of coral larvae. In this time when our oceans are already negatively impacted from the threats of rising temperatures (causing bleaching), overfishing, eutrophication (excessive nutrient inputs), marine debris, and the spread of invasive species, it is critical for us to take steps towards protecting coral reef ecosystems. Coral reef ecosystems are intimately connected to the health and welfare of our island communities. Our reefs not only support life in Hawai'i but equate to \$360 million directly to the state's economy each year (directly and indirectly). There are better ways to protect residents and visitors from UV rays without putting our reefs at risk.

In light of the devastating declines in coral cover in recent years, now more than ever, we need to commit to conservation efforts such as this one. Mahalo for voting to pass this bill.

**HB-1519**

Submitted on: 2/6/2022 1:48:35 PM

Testimony for EEP on 2/8/2022 8:50:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Elizabeth Benyshek	Individual	Support	No

Comments:

Aloha,

I am writing to express my strong support for HB1519, which bans any sunscreen that contains active ingredients that are not generally recognized as safe and effective by the Food and Drug Administration. Sunscreen is a necessity living on the island, but there are often several ingredients that pose hazards to public and environmental health. Please vote to protect our health and our ocean.

Thank you for your time and consideration.

Elizabeth Benyshek, Chair, Oahu Chapter

**HB-1519**

Submitted on: 2/6/2022 2:33:00 PM

Testimony for EEP on 2/8/2022 8:50:00 AM

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

Comments:

**I am submitting testimony for Dr Denis Dudley and his wife Dr Sharyn Laughlin. Although this testimony relates to SB2949, it is relevant to HB1519 as well. Thank you for your consideration.**

**To:** The Honorable Michael Gabbard, Chair, The Honorable Clarence Nishihara, Vice Chair, and Members of the Senate Committee on Agriculture and Environment (AEN).

**From:** 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](mailto:DKLD@rogers.com).

Sharyn A. Laughlin MD, FRCP(C), Board Certified Dermatologist, USA & Canada. Sub-Specialty Practice in Photobiology & Laser Dermatology, [slaughlin@rogers.com](mailto:slaughlin@rogers.com).

**Re: Hearing SB2949 RELATING TO ENVIRONMENTAL PROTECTION. Monday January 31, 2022, 1:00 p.m., by videoconference.**

**Position:** We STRONGLY SUPPORT SB2949 and the amendment to eliminate the pre-emption of county regulations until January 1, 2024. **We have a sacred pledge as physicians to “First Do No harm”. We humbly remind this Committee that the potential harm to humans, particularly the unborn and young or adolescent children is more serious and extensive than the effects on coral and marine wildlife. Human risks and toxicity are as important to consider as the adverse effects on land-based or marine wildlife or the environment.** Fifty years of peer-reviewed medical and scientific literature showing that petrochemical or Soluble Organic UV Filters (SOUVF) are neither safe nor effective is difficult to abridge, but was done by the FDA in FEB 2019 in 72 pages with 211 scientific references :

- SOUVF sunscreens that account for 90% of the global market. There is now persuasive evidence that they DO NOT prevent skin cancer – numerous studies from 1973 to 2015, confirmed by two recent reviews in 2018 and 2019. There is a logical and scientific explanation for this set out in Current Problems in Dermatology 2021 (Dudley et al). Removing them from the market in Hawaii WILL have no effect on skin cancer rates.

- Only INSOLUBLE UV filters like zinc oxide can prevent skin cancer because of their superior UVA attenuation. They are also safer for humans and the environment including the coral and marine wildlife as they do not reach the cells or tissue of any organism. Zinc oxide is now available in sunscreens that apply clear, even at 25% concentration. So people of any skin colour can use a sunscreen that is both safe and effective like a former First Lady and Venus Williams (tennis superstar). One ploy used by industry and their dermatology consultants that to ban SOUVF sunscreens will deprive people of color of a desirable option is also false.
- SOUVF are petrochemicals with pesticidal properties that are freely bioavailable to humans who use them, and like DDT mimic estrogen and other hormones causing endocrine and neurological disruption (ENDs). They cause serious and mostly irreversible effects like birth anomalies, reproductive disorders in both genders, numerous cancers from DNA mutations, and effects on future progeny from epigenetic effects.
- The US FDA has confirmed 50 years of medical and scientific literature that petrochemical sunscreens lack the evidence to categorize them “*Generally Regarded As Safe and Effective (GRASE)*” and now defines them as “*Marketed Unapproved Agents*”.
- Their continued use violates principles that oversee both medical and environmental health. There are six ethical principles to guide environmental health decision-making: *principles of sustainability, beneficence, non-maleficence, justice, community, and precautionary substitution*. Modern clinical medicine and related scientific disciplines have codified four guiding principles: *non-maleficence (often translated as “do no harm”), beneficence, justice, and respect for autonomy, all consistent with the environmental health paradigm. The application of just two of these principles: non-maleficence and beneficence calls for an absolute ban on all 12 SOUVF petrochemicals being used as sunscreens.*
- SOUVF like the petrochemical filters being reviewed provide **NO BENEFIT** only serious **HARM** to humans and wildlife. The daily pollution of the entire global water supply with UV filters that are non-biodegradable petroleum products is **insidious and less visible than an oil spill from a tanker or pipeline, but no less consequential.**
- **For the past decade, we advised** that ALL petrochemical filters *are contraindicated* for use by any human, particularly expectant or nursing mothers, young or adolescent children, and couples trying to conceive. They are the most vulnerable to harm from endocrine and neurological disruption, and DNA mutation. Exposure w/o proper informed consent (counselling) has ethical and medicolegal implications, as shown **by the recent lawsuit filed against Coppertone and Biersdorf/Bayer.** It is violation in the standard of medical care and of the Precautionary Principle by regulators. Someone must protect the public and the marine eco-system from these ineffective UV filters with their pesticidal and disruptive effects on endocrine and neurological systems, and on the DNA of future generations.

**Denis Dudley & Sharyn Laughlin,**

**FEB 4, 2022.**



**HB-1519**

Submitted on: 2/6/2022 4:32:14 PM

Testimony for EEP on 2/8/2022 8:50:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Gerard Silva	Individual	Comments	No

Comments:

WE can not Trust The FDA because the Lied about the Covid Vaccine and Now thay are admitting that they lied when they said it was Safe. They are now admitting that they new about all the side effects to!!!

February 6, 2022

To: Hawaii House of Representatives, Committee on Energy and Environmental Protection  
From: Kelli Lundgren, resident of Maui, individual

**Re: HB 1519 (2022) Relating to Sunscreen**

Testimony Summary: **Oppose**

I am a seven-plus-year volunteer at 'Ahihi-Kina'u Natural Area Reserve and have been educating visitors on the effects of sunscreens on Hawaii's reefs for the past five years. I have followed the research of Dr. Craig Downs and others on the effect of sunscreens on the ocean's reefs.

This is my argument in opposition to HB 1519 as written:

The bill's language uses an FDA "not GRASE" designation. Using an FDA designation that determines sunscreen petrochemical effects on people does not address sunscreen petrochemical effects on reef life. The bill is intended to protect reef life. Studies on people do not address studies on aquatic environments.

Significant research on the 14 plus petrochemical sunscreen active ingredients (including those proposed to be omitted in the new bill's language 'oxobenzene and octinoxate") are endocrine disruptors and have been found to harm reef life.

The FDA has three sunscreen active ingredient designation choices: 1) GRASE, 2) non-GRASE, and 3) not yet labeled GRASE or non-GRASE. The 14 sunscreen petrochemicals are not yet labeled. Is "not GRASE" the same as "non-GRASE"? It's confusing. If "not GRASE" is the same as "non-GRASE", the 14 ingredients could then be sold and used in Hawaii because they are not yet labeled (choice 3) by the FDA.

If you choose to use an FDA designation for protection of people for protection of reef life:

Please delete and change the language: "Prohibit any sunscreen active ingredients that are not generally recognized as safe and effective by the United States Food and Drug Administration"

And replace with stronger, clearer language: "Accept only FDA designated GRASE (Generally Recognized As Safe and Effective) by the United States Food and Drug Administration as the only permitted sunscreen active ingredients for sale and use in Hawaii."

Zinc oxide and titanium dioxide are designated GRASE by the FDA and are currently offered by most major and independent sunscreen producers. These minerals do not cause harm to the reefs in small quantities. These minerals work to protect people from the sun with SPFs up to 50 plus. I've been using minerals for years. Visitors to the reef are happy to use minerals. People do not need to look pasty-white if applied properly.

When visitors realize "reef safe" is many times only a marketing term and at many times untrue, it's discouraging. How much easier it would be to walk into any store in Hawaii and know that what you select from the shelf has already been determined safe and effective for you, and for Hawaii's reefs.

I appreciate your time and consideration.

Mahalo,  
Kelli Lundgren  
Ka'anapali, HI

**HB-1519**

Submitted on: 2/6/2022 10:33:54 PM

Testimony for EEP on 2/8/2022 8:50:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
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,

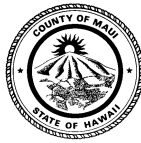
Mika Yamazaki, MD, FAAD

Council Chair  
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Director of Council Services  
Traci N. T. Fujita, Esq.

Deputy Director of Council Services  
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**COUNTY COUNCIL**  
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February 7, 2022

TO: Committee on Energy & Environmental Protection  
Representative Nicole E. Lowen, Chair  
Representative Lisa Marten, Vice Chair

FROM: Kelly Takaya King, Maui County Councilmember

HEARING: February 8, 2022 at 8:50 a.m., House Conference Room 325 via  
Videoconference

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

Dear Honorable Chair Lowen, Vice Chair Marten, and Committee Members,

I wholeheartedly support HB1519, 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.

Additionally, HB1519 allows for counties or the state to include ingredients that may be added to the FDA GRASE list (generally recognized as safe and effective). 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, but does not mandate ingredients on the GRASE list be automatically included.

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

February 7, 2022  
Page 2

HB1519 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.

Mahalo nui loa,

A handwritten signature in cursive script that reads "Kelly T. King".

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



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 7, 2022

The Honorable Nicole E. Lowen, Chair  
House Committee on Energy and Environmental Protection  
Hawaii State Capitol, Room 425  
Honolulu, HI 96813

Dear Chairperson Lowen:

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,

**CORRESPONDENCE**

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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.<sup>1</sup> Unprotected sun exposure is the most preventable risk factor for skin cancer. At least one in five Americans will develop skin cancer.<sup>2,3</sup> 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.<sup>4,5,6</sup> In 2021, 460 new cases of melanoma are expected in Hawaii.<sup>7</sup> 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.<sup>8</sup>

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<sup>1</sup> 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.

<sup>2</sup> 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.

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

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

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

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

<sup>7</sup> 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>

<sup>8</sup> 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."<sup>9</sup> 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.<sup>10</sup> The review concludes "there is currently limited evidence to suggest that corals are adversely impacted by environmental exposure to UV filters."

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<sup>9</sup> 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.

<sup>10</sup> 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

Oppose HB 1519

February 7, 2022

Page 4 of 4

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](mailto: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



TO: House Committee on Energy & Environmental Protection  
Representative Nicole Lowen, Chair  
Representative Lisa Marten, Vice Chair

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

DATE: Tuesday, February 8, 2022

TIME: 8:50 AM

PLACE: Via Videoconference

Re: HB 1519 - 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:

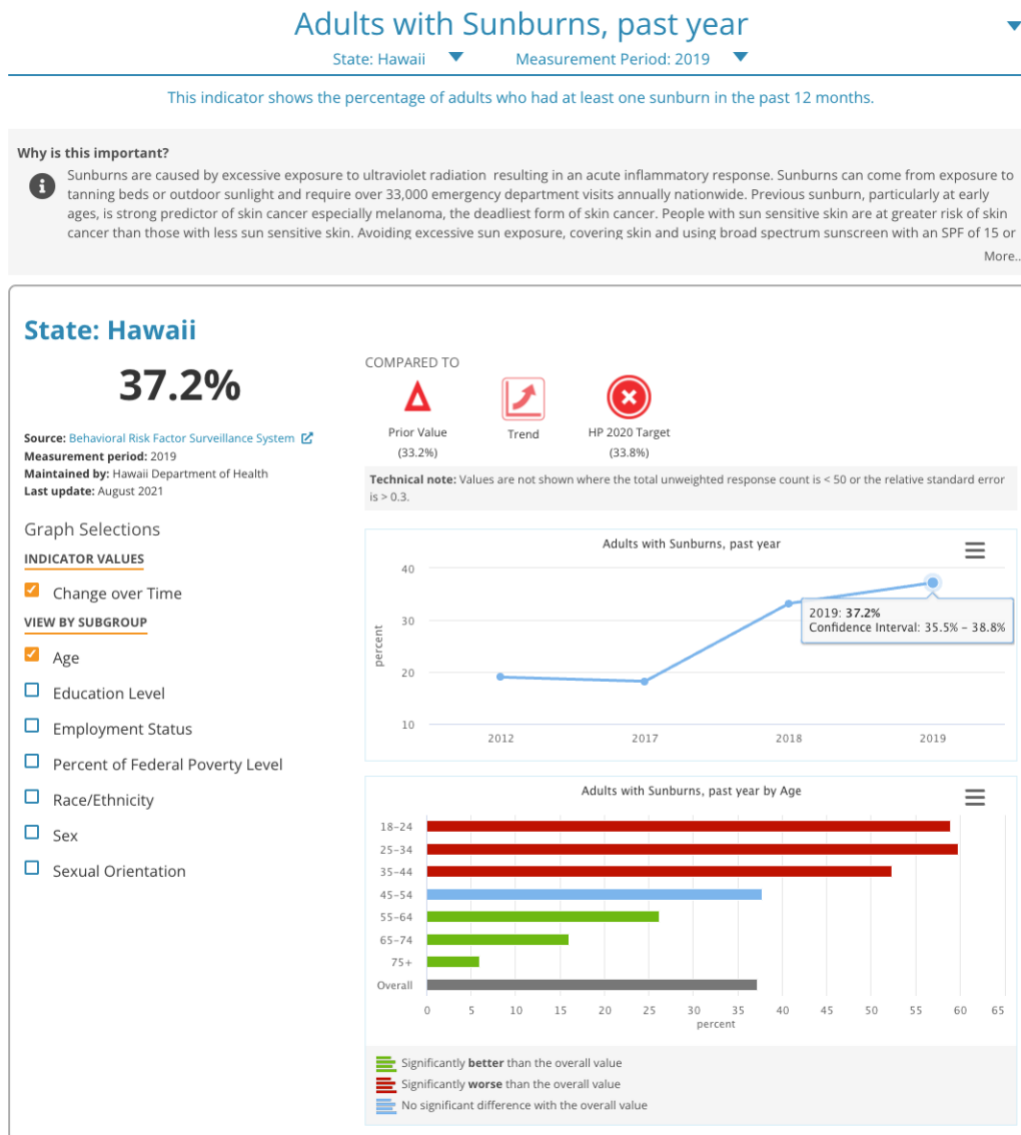
- Native Hawaiians and other Pacific Islanders suffer from double the melanoma mortality rate than the State average<sup>i</sup>
- Researchers have found that just *one* blistering sunburn in childhood or adolescence more than doubles a person's chance of developing melanoma later in life<sup>ii</sup>

- Hawaii has one of the highest daily UV index averages in the nation.<sup>iii</sup> 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<sup>iv</sup> – and having just five or more sunburns in your lifetime is known to double your risk for melanoma<sup>v</sup>
- Sun safe practices are getting significantly worse since 2017, especially among adults ages 18 – 44, according to the Hawaii Health Matters Community Dashboard.

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

Source: Hawaii Health Matters, Department of Health

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



## **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.<sup>vi</sup>

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.

## **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.<sup>vii</sup> Other causes include land-based source pollution, water quality issues due to poor wastewater management, sedimentation and excess nutrification.<sup>viii</sup> 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."<sup>ix</sup>

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](#)<sup>x</sup> 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](#)<sup>xi</sup>” 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.”<sup>xii</sup>

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.** Please see a sample list below for sunscreens that will fall under this ban.

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](mailto:lmiyahira@iq360inc.com).

Mahalo you for the opportunity to testify.

Sincerely,

Lynn Miyahira  
Public Access to SunScreens (PASS) Coalition

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

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

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

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

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

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

<sup>vii</sup> <https://www.nature.com/articles/nature21707>

<sup>viii</sup> <https://www.epa.gov/coral-reefs/threats-coral-reefs>

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

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

<sup>xi</sup> <https://www.fda.gov/news-events/fda-voices/shedding-more-light-sunscreen-absorption>

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



# Sample List of Non-Mineral Sunscreens That Could be Potentially Banned from Hawaii if HB 1519 or SB 3001 pass (Jan 2022)

A	B	C	D	E
Brand Name	Type	Description	SPF	Active Pharmaceutical Ingredient(s)
1	Alba Botanica	Lotion Sunscreen Lotion, Sport, SPF 45, Fragrance Free	45	Avobenzone 3%, Homosalate 10%, Octocrylene 10%, Octyl Salicylate 5%
2	Alba Botanica	Lotion Hawaiian Sunscreen Green Tea SPF 45	45	Avobenzone 3%, Homosalate 10%, Octocrylene 10%, Octyl Salicylate 5%
3	Alba Botanica	Spray Hawaiian Sunscreen Coconut SPF 50	50	Avobenzone 3%, Homosalate 15%, Octocrylene 8%, Octyl Salicylate 5%
4	Alba Botanica	Spray Sensitive Sunscreen Fragrance Free SPF 50	50	Avobenzone 3%, Homosalate 15%, Octocrylene 8%, Octyl Salicylate 5%
5	Alba Botanica	Spray Kids Sunscreen Clear Spray SPF 50	50	Avobenzone 3%, Homosalate 15%, Octocrylene 8%, Octyl Salicylate 5%
6	Alba Botanica	Lotion Sheer Shield Sunscreen Sweet Pea Sheer Lotion SPF 45	45	Avobenzone 3%, Homosalate 10%, Octocrylene 10%, Octyl Salicylate 5%
7	Alba Botanica	Fluid Facial Sheer Shield Fragrance Free SPF 45	45	Avobenzone 3%, Homosalate 10%, Octocrylene 10%, Octyl Salicylate 5%
8	Alba Botanica	Spray Maximum Sunscreen Fragrance Free SPF 70	70	Avobenzone 3%, Homosalate 10%, Octocrylene 10%, Octyl Salicylate 5%
9	Alba Botanica	Lotion Sensitive Sheer Shield Fragrance Free SPF 45	45	Avobenzone 3%, Homosalate 10%, Octocrylene 10%, Octyl Salicylate 5%
10	Alba Botanica	Lotion Soothing Sunscreen Pure Lavender Lotion SPF 45	45	Avobenzone 3%, Homosalate 10%, Octocrylene 10%, Octyl Salicylate 5%
11	Alba Botanica	Lotion Kids Sunscreen Lotion SPF 45	45	Avobenzone 3%, Homosalate 10%, Octocrylene 10%, Octyl Salicylate 5%
12	Alba Botanica	Spray Cool Sport Sunscreen Refreshing SPF 50	50	Avobenzone 3%, Homosalate 15%, Octocrylene 8%, Octyl Salicylate 5%
13	Alba Botanica	Lotion Hawaiian Sunscreen Aloe Vera SPF 30	30	Avobenzone 3%, Homosalate 7.5%, Octocrylene 7.5%, Octyl Salicylate 5%
14	Australian Gold	Lotion Australian Gold Plant Based Lotion Sunscreen, Aloe & Coc	50	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 5%
15	Aveeno	Spray Sunscreen Broad Spectrum Body Spray SPF 60	60	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 10%
16	Aveeno	Lotion Protect & Hydrate Sunscreen Face Lotion - SPF 60	60	Avobenzone 3%, Homosalate 13.5%, Octisalate 5%, Octocrylene 10%
17	Aveeno	Lotion Aveeno Protect + Hydrate Body Sunscreen Lotion, SPF 60	60	Avobenzone 3%, Homosalate 13.5%, Octisalate 5%, Octocrylene 10%
18	Aveeno	Lotion Positively Radiant Sheer Daily Moisturizer with Sunscreen	30	Avobenzone 1.5%, Homosalate 5%, Octisalate 4%, Octocrylene 6%
19	Aveeno	Lotion Ultra Calming Daily Moisturizing Lotion with Sunscreen	15	Avobenzone 3%, Octinoxate 7.5%, Octisalate 2%
20	Aveeno	Lotion Absolutely Ageless Daily Moisturizing Sunscreen	30	Avobenzone 2%, Homosalate 4%, Sunscreen Octisalate 4%, Octocrylene 2%
21	Babyganics	Spray Kid's Sunscreen Continuous Spray - SPF 50	50+	Octisalate 5%, Zinc Oxide 15%
22	Banana Boat	Lotion Ultra Sport Sunscreen Lotion	30	Avobenzone 2.7%, Homosalate 6%, Octisalate 4.5%, Octocrylene 4.5%
23	Banana Boat	Spray Sport Mineral Enriched Sunscreen Spray - SPF 50	50	Homosalate 9%, Octisalate 3%, Octocrylene 6%, Zinc Oxide 7.3%
24	Banana Boat	Lotion Sport Ultra Lotion SFP 30	30	Avobenzone 2.7%, Homosalate 6%, Octisalate 4.5%, Octocrylene 4.5%
25	Banana Boat	Spray Baby Mineral SPF 50 Enriched Sunscreen Spray	50	Homosalate 9%, Octisalate 3%, Octocrylene 6%, Zinc Oxide 7.3%
26	Banana Boat	Spray Protective Dry Oil Clear Sunscreen Spray with Coconut Oil	15	Avobenzone 1.5%, Homosalate 5.0%, Octocrylene 3.5%
27	Banana Boat	Spray Kids Sport Sunscreen Lotion Spray SPF 50	50	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 6%
28	Banana Boat	Spray Simply Protect Kids Sunscreen Spray SPF 50+	50	Avobenzone 3%, Homosalate 9%, Octisalate 4.5%, Octocrylene 6%
29	Banana Boat	Spray UltraMist Deep Tanning Dry Oil Continuous Clear Spray SP	40	Homosalate 3.0%, Octocrylene 1.0%
30	Black Girl Sunscreen	Lotion Moisturizing Sunscreen Lotion SPF 30	30	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 2.75%
31	Biore	Lotion UV Aqua Rich Watery Essence	50	Octinoxate, Uvinul T150, Unival A Plus, Tinosorb S (new generation UV filters used widely in Asia, Europe, Australia etc)
32	Biore	Gel UV Aqua Ricg Watery Gel	50	Octinoxate, Uvinul T150, Unival A Plus, Tinosorb S (new generation UV filters used widely in Asia, Europe, Australia etc)
33	Biore	Lotion UV Aqua Rich Light up Essence	50	Octinoxate, Titanium Dioxide, Tinosorb S, Uvinul T150, Unival A Plus, (new generation UV filters used widely in Asia, Europe, Australia etc)
34	Coola	Lotion Organic Classic Free Sunscreen	40	Avobenzone 1.75%, Homosalate 2.25%, Octisalate 1.5%, Octocrylene 3.75%
35	Coola	Lotion Organic Classic Body Sunscreen Lotion - SPF 30 - Tropical C	30	Avobenzone 1.75%, Homosalate 2.25%, Octisalate 1.5%, Octocrylene 3.75%
36	Coola	Spray Organic Classic Body Sunscreen Spray - SPF 30 - Tropical C	30	Avobenzone 2.8%, Octisalate 4.9%, Octocrylene 7.6%
37	Coola	Stick Organic Classic Sunscreen Face & Body Stick - SPF 30 - Trop	30	Avobenzone 3%, Octisalate 4%, Octocrylene 7%
38	Coppertone	Spray Whipped Sunscreen Lotion Spray SPF 50	50	Avobenzone 3%, Homosalate 9%, Octisalate 4.5%, Octocrylene 9%
39	Coppertone	Lotion Coppertone Sport SPF 50 Sunscreen Lotion	50	Avobenzone 3%, Homosalate 10%, Octisalate 4.5%, Octocrylene 8%
40	Cppertone	Lotion Coppertone Defend & Care SPF 50 Oil Free Face Lotion	50	Avobenzone 3%, Homosalate 8%, Octisalate 4.5%, Octocrylene 6%
41	CVS Health	Lotion Ultra Sheer Lotion Broad Spectrum Sunscreen SPF 45	45	Avobenzone 3.0%, Homosalate 10.0%, Octisalate 5.0%, Octocrylene 2.8%
42	EltamD	Spray UV Aero Broad-Spectrum Full-Body Sunscreen Spray, SPF	45	Zinc Oxide 9.3%, Octinoxate 7.5%
43	Goodsense	Lotion Sunscreen Lotion SPF 30	30	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 10%
44	Hawaiian Tropic	Lotion Antioxidant Plus Lotion Sunscreen	50	Avobenzone 2.7%, Homosalate 9%, Octisalate 4%, Octocrylene 5%
45	Hawaiian Tropic	Lotion Sheer Touch Ultra Radiance Lotion Sunscreen - SPF 30	30	Avobenzone 2%, Homosalate 3%, Octocrylene 4%
46	Hawaiian Tropic	Spray Hawaiian Tropic Silk Hydration Weightless Spray Sunscree	30	Avobenzone 2%, Homosalate 5.5%, Octisalate 4.5%, Octocrylene 4%
47	Hawaiian Tropic	Spray Island Sport Sunscreen Spray, Broad Spectrum SPF 30	30	Avobenzone 2%, Homosalate 7%, Octocrylene 5%
48	innisfree (Korea)	Lotion Daily UV Defense Sunscreen SPF 36	36	Avobenzone 2.5%, Homosalate 7%, and Octisalate 4.3%
49	La Roche-Posay	Fluid Anthelios Light Fluid Face Sunscreen SPF 60	60	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 7%.
50	La Roche-Posay	Lotion Anthelios Clear Skin Dry Touch Sunscreen SPF 60	60	Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octocrylene 7%
51	La Roche-Posay	Fluid Anthelios Sunscreen, Ultra-Light Fluid Face Sunscreen, Oxy	60	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 7%
52	La Roche-Posay	Lotion Anthelios Sunscreen, Melt In Milk Lotion Face and Body Su	60	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 7%
53	Max Block	Lotion Sunscreen Lotion 4 Fl Oz Broad Spectrum Water Resistant	30	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%
54	Max Block	Lotion Sport Sunscreen Lotion Water Resistance Blue 30 SPF	30	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%
55	Max Block	Lotion Sunscreen Lotion 4 Fl Oz Broad Spectrum Water Resistant	30	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%
56	Max Block	Lotion Sunscreen Lotion 4 Fl Oz Broad Spectrum Water Resistant	30	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%
57	Max Block	Lotion Sport Sunscreen Lotion Water Resistance Blue 30 SPF	30	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%
58	Max Block	Lotion Sport Sunscreen Lotion Water Resistance Blue 30 SPF	30	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%
59	Max Block	Lotion Sport Sunscreen Lotion Water Resistance Blue 30 SPF	30	Avobenzone 3%, Homosalate 7.5%, Octisalate 5%, Octocrylene 5%
60	Neutrogena	Lotion Neutrogena Invisible Daily Defense Sunscreen Lotion	30	Avobenzone 1.5%, Homosalate 5%, Octisalate 4%, Octocrylene 6%



	A	B	C	D	E
	Brand Name	Type	Description	SPF	Active Pharmaceutical Ingredient(s)
61	Neutrogena	Lotion	Ultra Sheer Lotion Broad Spectrum Sunscreen SPF 45	45	Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octocrylene 2.8%
62	Neutrogena	Lotion	Clear Face Liquid Sunscreen Lotion	30	Avobenzone 2.5%, Homosalate 8%, Octisalate 5%, Octocrylene 8%
63	Neutrogena	Spray	Invisible Daily Defense Sunscreen Face Mist - SPF 50	50	Avobenzone 3% , Homosalate 10%, Octisalate 5%, Octocrylene 10%
64	Neutrogena	Spray	Invisible Daily Defense Body Sunscreen Broad Spectrum SPF 60+	60	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 10%
65	Neutrogena	Spray	Ultra Sheer Body Mist Sunscreen Broad Spectrum SPF 30	30	Avobenzone 3%, Homosalate 8%, Octisalate 5%, Octocrylene 8%
66	Neutrogena	Lotion	Hydro Boost Water Gel Lotion	30	Avobenzone 3%, Homosalate 15%, Octisalate 5%, Octocrylene 2.8%
67	Seaweed Bath Co	Spray	Clear Guard SPF 40 Sport Sunscreen	40	Avobenzone 3%, Octisalate 5%, Octocrylene 10%
68	Shiseido	Lotion	Urban Environment Oil-Free UV Protector Sunscreen SPF 42	42	Homosalate 5%, Octisalate 5%, Octocrylene 5% and Zinc Oxide 9.7%
69	Shiseido	Lotion	Ultimate Sun Protector Lotion 50+	50	Avobenzone 2.3%, Homosalate 10%, Octisalate 5%, Octocrylene 5%
70	Shiseido	Stick	Clear Sunscreen Stick SPF 50+	50	Avobenzone 2.5%, Homosalate 10.0%, Octisalate 5.0%, Octocrylene 10.0%
71	Solimo	Lotion	Sheer Face Sunscreen Lotion SPF 55 (842379152474 UPC)	55	Avobenzone 3%, Homosalate 12%, Octisalate 5%, Octocrylene 10%
72	Sun Bum	Spray	Original Sunscreen Spray	30	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 3.75%
73	Sun Bum	Lotion	Original 'Face 50' SPF 50 Sunscreen Lotion	50	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 10%
74	Sun Bum	Lotion	Sunscreen Lotion SPF 30	30	Avobenzone 3%, Homosalate 5%, Octisalate 3%, Octocrylene 10%
75	Sun Bum	Lotion	SPF 50 Lotion	50	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 10%
76	Sun Bum	Lotion	Oxy Free Zinc Oxide Sunscreen Lotion - SPF 50	50	Homosalate 10%, Octisalate 5%, Octocrylene 10%, Zinc Oxide 7%
77	Supergoop!	Serum	City Sunscreen Serum SPF 30	30	Homosalate 8%, Octisalate 4%, Avobenzone 3%, Octocrylene 2%
78	Supergoop!	Lotion	PLAY Everyday Lotion SPF 50 with Sunflower Extract	50	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 7.5%
79	Supergoop!	Fluid	Unseen Sunscreen SPF 40	40	Avobenzone 3%, Homosalate 8%, Octisalate 5%, Octocrylene 4%
80	Supergoop!	Fluid	Unseen Sunscreen SPF 40 Limited Edition Jumbo	40	Avobenzone 3%, Homosalate 8%, Octisalate 5%, Octocrylene 4%
81	TopCare Everyday	Lotion	Ultimate Sheer Sun Lotion Sunscreen SPF 55	55	Avobenzone 3%, Homosalate 10%, Octisalate 5%, Octocrylene 7%
82	Tula	Gel	Protect + Glow Daily Sunscreen Gel Broad Spectrum SPF	30	Avobenzone, Homosalate, Octisalate
83	Walgreens	Lotion	Sport Lotion Sunscreen SPF 50	50	Avobenzone 3%, Homosalate 10%, Octisalate 4.5%, Octocrylene 8%
84	Walgreens	Lotion	Broad Spectrum Sport SPF 50 Sunscreen	50	Avobenzone 3%, Homosalate 10%, Octisalate 4.5%, Octocrylene 8%
85	Walgreens	Lotion	Sunscreen Sport SPF 50	50	Avobenzone 3%, Homosalate 10%, Octisalate 4.5%, Octocrylene 8%
86	Walgreens	Lotion	Sunscreen Sport SPF 50	50	Avobenzone 3%, Homosalate 10%, Octisalate 4.5%, Octocrylene 8%
87	Walgreens	Lotion	Sunscreen Sport SPF 50	50	Avobenzone 3%, Homosalate 10%, Octisalate 4.5%, Octocrylene 8%
88	up & up (Target)	Lotion	Sport Sunscreen Lotion	50	Avobenzone 3% Homosalate 10% Octocrylene 6%
89					

**HB-1519**

Submitted on: 2/7/2022 8:05:33 AM

Testimony for EEP on 2/8/2022 8:50:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Remote Testimony Requested</b>
Drew Wilkinson	Individual	Support	No

Comments:

I support HB1519 and believe that new regulations pertaining to sunscreens should be implemented to help reduce the impact existing sunscreens have on coral reefs.

thank you,

Drew Wilkinson