

STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P. O. Box 3378  
Honolulu, HI 96801-3378  
doh.testimony@doh.hawaii.gov

WRITTEN  
TESTIMONY ONLY

**Testimony COMMENTING on SB2778  
RELATING TO PRODUCTS CONTAINING SUN PROTECTION FACTOR  
INGREDIENTS**

SENATOR ROSALYN BAKER, CHAIR  
SENATE COMMITTEE ON COMMERCE, CONSUMER PROTECTION AND HEALTH  
Hearing Date: 2/19/2020 Room Number: 229

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 **Department Testimony:** SB2778 seeks to amend HRS 328 and HRS 342D to require that  
5 sunscreens sold or distributed in Hawaii only contain active ingredients classified by the United  
6 States Food and Drug Administration (FDA) as Category 1: *Generally Recognized as Safe and*  
7 *Effective*. The Department has the following comments.

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

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

1           Currently, the only FDA Category 1 active ingredients in sunscreens are zinc oxide and  
2 titanium dioxide, both of which are mineral sunscreens. Of the remaining fourteen approved  
3 ingredients, twelve are classified as Category 3 – *insufficient evidence to determine if they are*  
4 *safe and effective* and two are Category 2 – *Not safe or effective*.

5           Restricting the sale and distribution of sunscreens to only two approved active ingredients  
6 has the potential to increase the risk of skin cancer to Hawaii residents and visitors. This is  
7 particularly pertinent to certain individuals who have skin sensitivity or allergy to mineral  
8 sunscreens. While the language describing Category 3 - *insufficient evidence to determine if they*  
9 *are safe and effective* may sound alarming, it reflects lack of data, not evidence that they are  
10 harmful. In fact, many commonly used over-the-counter products rely on Category 3  
11 medications, such as aspirin, some antacids, dandruff shampoos and cough medicines among  
12 many others. The Department is not aware of any states or jurisdictions that have passed  
13 legislation using FDA Category 3 status as justification for banning or restricting medications or  
14 personal care products.

15           The Department supports FDA efforts to evaluate the safety and effectiveness of over-  
16 the-counter medications including sunscreens and encourages further study of these chemicals.  
17 At this time, the risk of greatly restricting available sunscreen options in Hawaii outweighs the  
18 potential benefits.

19   **Offered Amendments:** None

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



1050 Bishop St. PMB 235 | Honolulu, HI 96813  
P: 808-533-1292 | e: info@hawaiiifood.com

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TO:

Committee on Commerce, Consumer Protection, and Health  
Senator Rosalyn H. Baker, Chair  
Senator Stanley Chang, Vice Chair

FROM: HAWAII FOOD INDUSTRY ASSOCIATION  
Lauren Zirbel, Executive Director

DATE: February 19, 2020  
TIME: 10am  
PLACE: Conference Room 211

RE: SB2778 Relating to Products Containing Sun Protection Factor Ingredients

Position: Oppose

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

HFIA is opposed to this measure, which disadvantages local retailers and benefits mainland and online retailers. This bill dramatically limits the number of desirable sunscreen products available for sale by local businesses. Internet sales of these same products will likely continue as it is very difficult to enforce this law for items sold online.

This ban would impact a number of products that are used to prevent skin cancer, we believe that a higher standard of review is necessary before banning products that many Hawaii residents rely on to prevent cancer.

The FDA's proposed rules regarding the GRASE status of sunscreen ingredients is not a ban. Per FDA Commissioner Scott Gottlieb, M.D. "The proposal we've put forward would improve quality, safety and efficacy of the sunscreens Americans use every day. We will continue to work with industry, consumers and public health stakeholders to ensure that we're striking the right balance."<sup>1</sup>

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<sup>1</sup> FDA News Release, FDA Advances New Proposed Regulation to Make Sure That Sunscreens Are Safe and Effective  
<https://www.fda.gov/news-events/press-announcements/fda-advances-new-proposed-regulation-make-sure-sunscreens-are-safe-and-effective>

The FDA's press release on the proposed rule also quotes Janet Woodcock, M.D., director of the FDA's Center for Drug Evaluation and Research as saying, "It is important that, as this rulemaking effort moves forward and the FDA gathers additional scientific information, given the recognized public health benefits of sunscreen use, consumers continue to use sunscreen in conjunction with other sun-protection measures."

We understand that there are some mineral sunscreens available that contain only the mineral ingredients currently classified as GRASE however, the classification for these ingredients could also change with better testing. Consumer Reports has noted, "Mineral sunscreen have consistently underperformed in CR's testing, not always testing at the claimed SPF label on the package and failing to provide adequate protection from either UVA or UVB rays. None of the 18 sunscreens in our current ratings that contain only titanium dioxide, zinc oxide, or both scored high enough to receive a recommended designation from CR."<sup>2</sup>

**If this measure is passed before the FDA has a chance to gather information and update GRASE status of sunscreen ingredients it can send a confusing and potentially dangerous message to consumers about these products.**

There are also still questions about which ingredients are safest for the environment. In April 2019 Civil Beat reported, "The new research introduces the possibility that titanium dioxide sunscreen is not as safe for ocean life and human health as previously thought."<sup>3</sup> **Researcher Craig Downs, who was a leading proponent of the oxybenzone ban, is now stating that only expensive sunscreen is acceptable.**<sup>4</sup>

**The head of science for the Great Barrier Reef Marine Park Authority is not supporting calls to ban people from using potentially damaging sunscreens on the Reef.** Amid calls for a crackdown on the products in Queensland, the acting Chief Scientist for the Great Barrier Reef Marine Park Authority (GBRMPA) said currently, the health benefits are outweighing any reef risks. "There's ample evidence oxybenzone plays a role in human health, so protecting us from DNA damage and the risks of skin cancer," Dr James Kerry told the ABC. **"The science behind the impact of the products on corals is not well established at all.** The only studies that have established any link to damage to corals have been done in a lab and they haven't replicated the conditions on the reef. They've been done these in confined spaces, in tanks, and if you treat coral that way it tends to get stressed. When we look for concentration of these chemicals out on the reef we're finding very, very low concentrations." Dr Kerry said people who are concerned about the health of the reef would be far better off reducing their carbon footprint. **"This issue of sunscreen is a distraction from what we really need to focus on the reef, which is climate change," he said.**

Hawaii has high rates of skin cancer and we don't believe there is enough evidence to warrant additional bans on functional products.

Thank you for the opportunity to testify.

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<sup>2</sup> <https://www.consumerreports.org/sunscreens/what-you-need-to-know-about-sunscreen-ingredients/>

<sup>3</sup> <https://www.civilbeat.org/2019/08/some-reef-safe-sunscreens-may-not-be-safe-after-all/>

<sup>4</sup> <https://www.civilbeat.org/2019/08/some-reef-safe-sunscreens-may-not-be-safe-after-all/>

February 18, 2020

TO:

Senator Rosalyn H. Baker, Chair  
Senator Stanley Chang, Vice Chair  
Members of the Senate Committee on Commerce, Consumer Protection, and Health

Thirtieth Legislature  
Regular Session of 2020

FROM:

The members of the Hawaii Skin Cancer Coalition

**RE: Comments on Senate Bill 2778, RELATING TO PRODUCTS CONTAINING SUN PROTECTION FACTOR INGREDIENTS**

Mahalo for the opportunity to submit comments on Senate Bill 2778 on behalf of the Hawaii Skin Cancer Coalition. SB 2778 proposes to allow only sunscreen products containing active ingredients classified by the United States Food and Drug Administration (FDA) as a category I, generally recognized as safe and effective, shall be sold, offered for sale, or distributed for sale in the State without a prescription issued by a licensed healthcare provider. This would limit sunscreen products to only those containing zinc oxide or titanium dioxide as active ingredients. However, there is currently strong scientific evidence suggesting that sunscreen products with ingredients classified as a category I, specifically those containing zinc oxide, may be prime contributors to coral bleaching [1].

While zinc oxide has been deemed by the FDA to be safe and effective for use by humans to prevent sunburn, we do not know the biologic and in vivo effects of these UV filters on our marine environment. It is possible that the utilization of these products may *increase* stress and damage to our coral. We must conduct valid research to understand the potential environmental and societal impact of sunscreen use to protect all of Hawaii's natural resources. Therefore, studies must be done to examine the concurrent effects of these products, not only to reduce risks for skin cancers, but also to prevent the decline in our coral reefs.

Before modifying the current statutory exclusion for the sale of sunscreens that contain oxybenzone or octinoxate, the Hawaii Skin Cancer Coalition members suggest that Hawaii's legislators put forth efforts and resources to utilize the vast scientific expertise found at the University of Hawaii, including its world-renowned Hawaii Institute of Marine Biology, Department of Chemistry, and the UH Cancer Center's Population Sciences in the Pacific Program to collaboratively identify the causes of coral decline, while developing, testing, and promoting use of safe and effective sunscreen products. Such a study to better assess the impact of sunscreen on both marine and human life is feasible, and could be completed within a year at a cost of approximately \$165,000. These studies will provide valuable information about the

effects of active sunscreen ingredients from categories I, II and III on our marine ecosystem in order to better inform future legislative initiatives.

According to the National Cancer Institute, nearly 5 million people in the US get skin cancer annually at the cost of over \$8 billion to the 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. In Hawaii, 400 people are diagnosed with melanoma, and ~50 people die from this disease each year. Melanoma is one of the few cancer types increasing in incidence each year in the US.

We believe that together, we can define the most acceptable sunscreen products that are both effective for cancer prevention and safe for our environment. Thank you for the opportunity to submit comments on behalf of the Hawaii Skin Cancer Coalition. For more information, please contact us at Hawaii Skin Cancer Coalition ([hawaiiiskincancercoalition.org](http://hawaiiiskincancercoalition.org)).

Sincerely,

Kevin Cassel, DrPH  
President, Hawaii Skin Cancer Coalition

#### REFERENCES

Corinaldesi C, Marcellini F, Nepote E, Damiani E, Danovaro R. Impact of inorganic UV filters contained in sunscreen products on tropical stony corals (*Acropora* spp.). *The Science of the total environment*. 2018;637-638:1279-85. Epub 2018/05/29. doi: 10.1016/j.scitotenv.2018.05.108. PubMed PMID: 29801220.





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1445 New York Ave., NW, Suite 800  
Washington, DC 20005-2134

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MAIN: (202) 842-3555  
FAX: (202) 842-4355  
www.aad.org



February 18, 2020

The Honorable Rosalyn H. Baker  
Chair, Committee on Commerce, Consumer Protection, and Health Hawaii Senate  
Conference Room 229, State Capitol  
415 South Beretania Street  
Honolulu, HI 96813

Dear Chairperson Baker:

On behalf of the Hawaii Dermatological Society (HDS) and the nearly 14,000 U.S. members of the American Academy of Dermatology Association (AADA), we write concerning SB 2778, legislation that would prohibit the sale and distribution in Hawaii of ultraviolet (UV) sun protection factor (SPF) sunscreen personal care products containing ingredients that are not classified as Category 1, generally recognized as safe and effective, by the U.S. Food and Drug Administration (FDA). 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 urge you to strongly consider the broad implications of banning sunscreens containing certain ingredients, and bear in mind the dangers of sun exposure without adequate protection that the residents and visitors of Hawaii face.

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.<sup>1</sup> 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

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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.

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lifetime.<sup>2,3</sup> 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.<sup>4,5,6</sup> Over 500 new cases of melanoma are expected to be diagnosed in Hawaii in 2020.<sup>7</sup> 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.<sup>8</sup>

To help 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. Those who are concerned about the reported effects of chemical sunscreen ingredients can opt for a physical sunscreen containing the active ingredients zinc oxide or titanium dioxide.

Dermatologists have an interest in patient and public access to safe and effective sunscreen ingredients. The FDA is currently considering eight time-and-extent applications (TEAs) for new sunscreen ingredients to be added to the FDA over-the-counter (OTC) sunscreen monograph. 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 manufacturers, the public's health will be protected. The AADA will continue to take part in the discussion with the FDA and manufacturers regarding adding new ingredients to the monograph.

We are aware of and concerned about the potential environmental impact of UV-filters. However, the potential adverse effects, if any, related to absorption levels of all UV-filters in humans and wildlife is an emerging science. The latest studies conducted in Hawaii conclude that levels in the ocean and corals are at significantly lower levels than those reported to be toxic to coral reefs in laboratory settings.<sup>9</sup> The FDA, in its study on sunscreen absorption, concluded that "these findings do not indicate that individuals should refrain from the use of

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<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 2020. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2020/cancer-facts-and-figures-2020.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

<sup>9</sup> Mitchelmore CS, He K, Gonsior M, Hain E, Heyes A, Clark C, et al. Occurrence and distribution of UV-filters and other anthropogenic contaminants in coastal surface water, sediment, and coral tissue from Hawaii. *Science of the Total Environment* 670 (2019). 398-410

**February 18, 2020**

**SB 2778**

**Page 3 of 3**

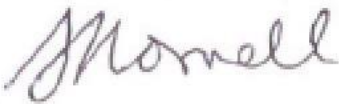
sunscreen.”<sup>10</sup> Further investigation is required in order to understand how UV-filters affect the environment and human health. We encourage you to consider this before taking any action to remove a product that has been established to protect from skin cancer.

Please consider the public safety consequences of removing access or attaching stigma to sunscreens containing certain ingredients. We request that Hawaii give the FDA more time to add new sunscreens for public use. We appreciate the opportunity to provide written comments on this important public health issue. For further 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,



George J. Hruza, MD, MBA, FAAD  
President  
American Academy of Dermatology Association



Sarah Howell, MD, FAAD  
President  
Hawaii Dermatological Society

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<sup>10</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.



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COMMITTEE ON COMMERCE, CONSUMER PROTECTION AND HEALTH  
Senator Rosalyn H. Baker, Chair  
Senator Stanley Chang, Vice Chair  
Wednesday, Feb 19, 2020 10:00AM  
Room 229 Hawaii State Capitol

Testimony in Strong Support to SB2778

Dear Senator Baker, Chair; Senator Chang, Vice Chair; and Members of the Committee:  
My name is Richard Kersten, I am President of Sea Paradise Scuba Inc. in Keauhou Kona, Hawaii. We have been taking visitors and residents alike snorkeling to Kealakekua Bay since 1985. Over the years as tourism has grown, we have seen a negative effect on our coral reef's health.

We understand the harmful chemicals in the popular sunscreens have caused many of our corals to become sterile. Now, that the FDA has declared its concerns about the effects of chemical sunscreens on human health, removing the chemicals from sunscreen should be supported by everyone concerned with the health of every living thing that has an endocrine system. That includes every mammal and corals too because they are animals.

Sun Protection Factor ingredients are drugs regulated by the FDA. The FDA is extremely concerned about their safety and efficacy for human use because chemical sunscreen manufacturers have still not provided the data the FDA requires in order to determine if their products are safe. Therefore, for the first time in its 40-year history, the FDA has re-opened one of its monographs for updating - the monograph on sunscreens.

The mineral sunscreen prevents sunburns when used as directed, that is why FDA has given it their GRASE stamp of approval. There are many locally made, safe mineral sunscreens available for us to buy and use. Please make this the only sunscreen products on our shelves to sell, safe choices! Do away with chemicals that are harmful to both humans, cetaceans, fish and coral.

Sincerely,  
Richard Kersten



808.895.0003



[rich@seaparadise.com](mailto:rich@seaparadise.com)  
[www.seaparadise.com](http://www.seaparadise.com)



78-6831 Alii Drive Suite 144  
Kailua Kona, Hi 96740



COMMITTEE ON COMMERCE, CONSUMER PROTECTION AND HEALTH  
Senator Rosalyn H. Baker, Chair  
Senator Stanley Chang, Vice Chair  
Wednesday, Feb 19, 2020 10:00AM  
Room 229 Hawaii State Capitol

Testimony in Strong Support of SB2778

Dear Senator Baker, Chair; Senator Chang, Vice Chair; and Members of the Committee:

We need to protect our natural resources for future generations to be able to enjoy healthy coral reefs which are the habitats for our beloved tropical fish. It has been reported a 40% loss of our Hawaiian coral reefs. We ask what can we do? Well, if we act now supporting this bill, we will take a huge step to save what is left of our coral reefs.

As it has been brought to all of our attention, one of the damaging pollutants to these coral reefs is chemical sunscreens and we appreciate the decision your committees had in passing Act 104 to help with this serious problem. Now, we are asking for your help again, to require that only sunscreens seen as category 1 GRASE by the FDA be sold or distributed in our beautiful state.

Given the FDA's recent and alarming announcement that all of the chemical sunscreens pose a toxicologic risk to public health and only mineral sunscreens are safe and effective, we strongly support to allow only sale of FDA Category 1 safe and effective sunscreens as soon as possible- and certainly no later than 2023. We do not want the damaging health side effects caused by sun protection products. Most visitors and residents use sunscreen which is primarily a product they bring to our beaches whereas we only can control the products we sell. As we try to educate our community, it is less effective than if it was taken off of the shelves altogether and only safe FDA approved sunscreen products were available for sale in Hawaii. If we have a law that is only 50% effective, we need to make the appropriate change, so it is 100% effective. Which can be done with approval of SB2778.

Our group strongly support the mineral sunscreens, zinc oxide and titanium dioxide as the best ingredients for sunscreen protection along with clothing, hats and staying out of the sun when possible for the very best sun protection.

Please support this measure SB2778 as it is our responsibility to protect our reefs.

Sincerely,  
Holly Kersten  
Chair  
Surfrider Foundation Kona Chapter



**TESTIMONY OF THE SURFRIDER FOUNDATION, OAHU  
IN REGARD TO SB2778, RELATING TO PRODUCTS CONTAINING SUN  
PROTECTION FACTOR INGREDIENTS.  
BEFORE THE  
COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH  
FEBRUARY 19, 2020**

Chair Baker, Vice-Chair Chang, and members of the committee, my name is Alexandra Kahn and I represent the Surfrider Foundation of Oahu, Hawaii.

The Surfrider Foundation is a non-profit environmental organization dedicated to the protection and enjoyment of the world's oceans, waves and beaches for all people, through conservation, activism, research and education. Comprised of over 50,000 members and supporters at 60 chapters across the United States, Surfrider has been fighting to protect the world's oceans for over 35 years.

Surfrider Foundation Oahu **supports SB2778** and provides comments. This measure requires that, beginning 1/1/2023, only sunscreen products containing active ingredients classified by the United States Food and Drug Administration as a category I, generally recognized as safe and effective, ingredient, shall be sold, offered for sale, or distributed for sale in the State

**Coral reefs our essential for the safety and economy of our islands**

Corals provide billions of dollars in coastal protection, tourism, and fisheries. Their protection prevents beach sand erosion, provides nurseries for commercially important fish, and supports the snorkeling, scuba diving, and surfing industries. Additionally, coral reefs are likely the most important ecosystem the ocean provides, creating essential habitats and food sources for thousands of fish and bird species.


Common chemical UV blockers (including oxybenzone and octinoxate) and other additives (octocrylene & octisalate) in sunscreen products have severely toxic impacts on our marine ecosystems, especially to coral reefs, fish, and marine mammals. While there are many stressors on our marine environments, this is one that we can immediately prevent by simply changing what products we use.

According to NOAA, chemicals in sunscreens can affect marine life in the following ways:


- Green Algae: Can impair growth and photosynthesis.
- Coral: Accumulates in tissues. Can induce bleaching, damage DNA, deform young, and even kill.
- Mussels: Can induce defects in young.
- Sea Urchins: Can damage immune and reproductive systems, and deform young.
- Fish: Can decrease fertility and reproduction, and cause female characteristics in male fish.
- Dolphins: Can accumulate in tissue and be transferred to young. <sup>1</sup>

## SUNSCREEN CHEMICALS AND MARINE LIFE


### How sunscreen chemicals enter our environment:



The sunscreen you apply may not stay on your skin.




When we swim or shower, sunscreen may wash off and enter our waterways.




### How sunscreen chemicals can affect marine life:

**Chemicals in sunscreens that can harm marine life:**




Oxybenzone, Octinoxate, Octocrylene, Benzophenone-1, Benzophenone-8, OD-PABA, 4-Methylbenzylidene camphor, 3-Benzylidene camphor, nano-Titanium dioxide, nano-Zinc oxide


**GREEN ALGAE:** Can impair growth and photosynthesis.




**CORAL:** Accumulates in tissues. Can induce bleaching, damage DNA, deform young and even kill.




**MUSSELS:** Can induce defects in young.




**SEA URCHINS:** Can damage immune and reproductive systems, and deform young.



**FISH:** Can decrease fertility and reproduction, and cause female characteristics in male fish.




**DOLPHINS:** Can accumulate in tissues and be transferred to young.




### How we can protect ourselves and marine life:


Seek shade between **10 am & 2 pm**, use Ultraviolet Protection Factor (UPF) sunwear, and choose sunscreens with chemicals that don't harm marine life.




Seek shade: 10am to 2pm




Umbrella




Sun hat




UV Sun glasses



Sun shirt



Leggings



[oceanservice.noaa.gov/sunscreens](https://oceanservice.noaa.gov/sunscreens)

<sup>1</sup> <https://oceanservice.noaa.gov/news/sunscreens-corals.html>

**Only 2 of the 16 sunscreen chemicals are considered by the FDA to be "generally accepted as safe and effective."**

US law requires that industry sufficiently demonstrates that their drug products are safe and effective before the consumer public is exposed to these drugs. The FDA has recognized this grievous deficiency and is demanding that industry comply with regulatory requirements. To date, the sunscreen industry has failed to comply so the FDA has taken matters into its own hands and *reconsidered* the safety of ingredients previously deemed safe.

Due to a lack of sufficient testing and information concerning the safety of chemicals commonly found in sunscreens, the FDA recently **removed 14 of the 16 chemicals found in sunscreens** from its GRASE (generally accepted as safe and effective) category, leaving only zinc and titanium oxide in category 1. <sup>2</sup>

We can not sit back and wait for companies to further test their chemicals, and they are in no rush to prove that what they provide is dangerous. It is important to consider the fact that the safety factor of these chemicals is unknown and because of that, it is in the best interest of our fragile marine ecosystems, as well as the wellbeing of our people, to ban all chemicals not in the GRASE category.

We **support SB2778** and we urge this committee to pass this measure. Thank you for the opportunity to testify.

Mahalo for your time,

Alexandra Kahn, Policy Coordinator  
Surfrider Oahu

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<sup>2</sup> <https://www.bbc.com/future/article/20190722-sunscreen-safe-or-toxic>

**SB-2778**

Submitted on: 2/18/2020 4:12:59 AM

Testimony for CPH on 2/19/2020 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Lisa Bishop	Testifying for Friends of Hanauma Bay	Support	Yes

Comments:

FROM: Friends of Hanauma Bay

To: COMMITTEE ON COMMERCE, CONSUMER PROTECTION, AND HEALTH

Senator Rosalyn H. Baker, Chair

Senator Stanley Chang, Vice Chair

Re: SB2778 Relating To Products Containing Sun Protection Factor Ingredients

Hearing: Wednesday, February 19, 2020 10:00AM Conference Room 229

Position: STRONGLY SUPPORT

Aloha Chair Baker, Vice Chair Chang, and members of the Committee,

Mahalo for the opportunity to testify. Friends of Hanauma Bay strongly supports this important bill.

Sun Protection Factor (SPF) ingredients are drugs regulated by the FDA and comprise a \$10B a year industry in the United States.

For many years, the FDA has allowed 16 sunscreen monograph active ingredients to be sold over the counter:

1. the mineral sunscreens zinc oxide and titanium dioxide; and
2. the chemical sunscreens aminobenzoic acid (PABA), trolamine salicylate, cinoxate, dioxybenzone, ensulizole, homosalate, meradimate, octinoxate, octisalate, octocrylene, padimate O, sulisobenzene, oxybenzone, and avobenzone.

However, chemical sunscreens are endocrine disruptors. Numerous independent scientific studies over the years continue to demonstrate significant linkages between them and serious human health issues including breast cancer, endometriosis, reduced



sperm viability and other reproductive disorders, Hirschsprung's deformity in newborns, developmental disorders, learning problems, and immune system dysfunction.

Further, these chemicals can adversely affect all living things with endocrine receptors. Numerous studies over the last 20 years have documented similar toxic effects on corals, fish, and other marine life, leading to the enactment of Act 104, Session Laws of Hawaii 2018.

These linkages to public health problems are so serious that for the first time in its history, the FDA re-opened the sunscreen monograph for updates. In 2019, the FDA announced that it is delisting all of the chemical sunscreen actives as safe and effective as follows:

1. The mineral sunscreens (zinc oxide and titanium dioxide) are Generally Recognized as Safe and Effective (GRASE) for human use.
2. The chemical sunscreens aminobenzoic acid (PABA) and trolamine salicylate are NOT GRASE.
3. There is not sufficient data on the remaining 12 chemical sunscreens for the FDA to determine they are safe for human use.

In the interest of promoting the health of Hawaii's residents, Hawaii's near shore marine environment, and the health of over 10 million visitors that visit our State, SB2778 supports the FDA's findings and proposes that only sunscreens the FDA determines are safe and effective be sold in Hawaii starting in 2023.

Manufacturers are responsible for providing the FDA with scientific data supporting the safety and efficacy of their products. After 40 years, industry has failed to do so.

Why should Hawaii continue to allow their sale in our State?

Please pass SB2778!

Respectfully,

Lisa Bishop

President

Friends of Hanauma Bay



COMMITTEE ON COMMERCE, CONSUMER PROTECTION AND HEALTH

Senator Rosalyn H. Baker, Chair

Senator Stanley Chang, Vice Chair

Wednesday, Feb 19, 2020 10:00AM

Room 229 Hawaii State Capitol

Testimony in Strong Support to SB2778

Dear Senator Baker, Chair; Senator Chang, Vice Chair; and Members of the Committee: My name is Puhī Dant, I am President of Fair Wind Cruises and Kona Sunrise Charters in Keauhou Kona, Hawaii. We have been taking visitors and residents alike snorkeling to Kealahou Bay since 1971. Over the years as tourism has grown, we have seen a negative effect on our coral reef's health.

We understand the harmful chemicals in the popular sunscreens have caused many of our corals to become sterile. Now, that the FDA has declared its concerns about the effects of chemical sunscreens on human health, removing the chemicals from sunscreen should be supported by everyone concerned with the health of every living thing that has an endocrine system. That includes every mammal and corals too because they are animals.

Sun Protection Factor ingredients are drugs regulated by the FDA. The FDA is extremely concerned about their safety and efficacy for human use because chemical sunscreen manufacturers have still not provided the data the FDA requires in order to determine if their products are safe. Therefore, for the first time in its 40-year history, the FDA has re-opened one of its monographs for updating - the monograph on sunscreens.

The mineral sunscreen prevents sunburns when used as directed, that is why FDA has given it their GRASE stamp of approval. There are many locally made, safe mineral sunscreens available for us to buy and use. Please make this the only sunscreen products on our shelves to sell, safe choices! Do away with chemicals that are harmful to both humans, cetaceans, fish and coral.

I've heard arguments that without these chemical sunscreens on the marketplace customers will stop buying sunscreen. With education people soon understand the health benefits and are already using mineral only sunscreens. Johnson & Johnson owns Neutrogena and they market a number of all mineral sunscreen products, Sheer Zinc, Neutrogena Naturals, Sensitive Skin and Pure & Free baby sunscreen, to name four that are 100% zinc and or mixed with titanium dioxide, all mineral. On the label it states it is #1 Dermatologist recommended sun care, and it gives superior sun protection against UVA & UVB rays to prevent sunburns, now if this did not protect from the sun as well as

their chemical sunscreens they would be open to a lawsuit. So, their argument that people will get skin cancer if they only use mineral sunscreen is not true based on their own marketing, but more importantly based on scientific studies.

Our customers are confused when they come to our boats and we tell them the chemicals in their sunscreen are not reef-safe, even though it has a sticker on it – Hawaiian Tropics, and Banana Boat to name a few of the largest culprits, and we explain the mineral sunscreen is the only safe choice available. We should not have these deadly chemicals available for purchase in Hawaii.

Please support this bill SB2778 and protect the public from these harmful and dangerous chemicals.

Sincerely,

Puhi Dant  
President



COMMITTEE ON COMMERCE, CONSUMER PROTECTION AND HEALTH

Senator Rosalyn H. Baker, Chair

Senator Stanley Chang, Vice Chair

Wednesday, Feb 19, 2020 10:00AM

Room 229 Hawaii State Capitol

Testimony of the Ocean Tourism Coalition in **Strong Support of SB2778**

Dear Senator Baker, Chair; Senator Chang, Vice Chair; and Members of the Committee:

The OTC represents over 300 ocean tourism businesses statewide which have been taking visitors and residents out enjoying snorkeling and SCUBA diving to many MLCD's and coral reefs for decades. Our industry relies on healthy coral reefs which are the habitats for our beloved tropical fish. At this point it has been reported a 40% loss of our Hawaiian coral reefs. We ask what can we do? Well, if we act now supporting this bill, we will take a huge step to save what is left of our coral reefs.

As it has been brought to all of our attention, one of the damaging pollutants to these coral reefs is chemical sunscreens and we appreciate the decision your committees had in passing Act 104 to help with this serious problem. Now, we are asking for your help again, to require that only sunscreens seen as category 1 GRASE by the FDA be sold or distributed in our beautiful state.

Given the FDA's recent and alarming announcement that all of the chemical sunscreens pose a toxicologic risk to public health and only mineral sunscreens are safe and effective, we strongly support to allow only sale of FDA Category 1 safe and effective sunscreens as soon as possible- and certainly no later than 2023. We do not want our industry associated with damaging health side effects caused by sun protection products. Most visitors and residents use sunscreen which is primarily a product they bring to our activities, whereas we only can control the products we sell. As we try to educate our clients, it is less effective than if it was taken off of the shelves altogether and only safe FDA approved sunscreen products were available for sale in Hawaii. If we have a law that is only 50% effective, we need to make the appropriate change, so it is 100% effective. Which can be done with approval of SB2778.

Our members support the mineral sunscreens, zinc oxide and titanium dioxide as the best ingredients for sunscreen protection along with clothing, hats and staying out of the sun when possible for the very best sun protection.

Please support this measure SB2778 and Mahalo for all you do to protect the health of all living beings and our environment.

Sincerely,

Mendy Dant  
Secretary, OTC

**SB-2778**

Submitted on: 2/16/2020 11:32:23 AM

Testimony for CPH on 2/19/2020 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
sylvia litchfield	Testifying for Green Party of Hawaii	Support	No

Comments:

Aloha State Legislators,

The quicker we stop polluting our waters, the better chance that marine life and coral reefs can survive. The Green Party of Hawai'i supports SB2778 to protect the reef and our health.

Mahalo,

Sylvia Litchfield, co-chair, Green Party of Hawai'i

415 Dairy Rd.  
Suite # E 414  
Kahului, HI 96732

sylvialitchfield@gmail.com

February 4, 2020

**SUPPORTING HB 2248 - Sale of only GRASE, category 1, Sunscreens in Hawaii**

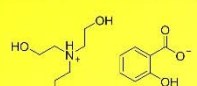
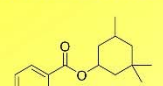
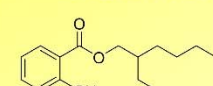

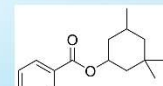

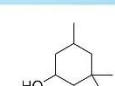
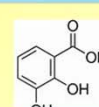
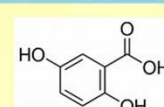
Thank you for sponsoring and supporting this critical legislation that will protect Hawaii's natural resources and the public health.

In 1992, the U.S. National Toxicology Program first demonstrated that rats exposed to relevant concentrations of oxybenzone caused an endocrine disruption pathology, causing a reduction in epididymal sperm density in males, and an increase in the length of the estrous cycle in females. In 1997, scientists Gulati and Mounce demonstrated that oxybenzone exposure in mice caused changes in liver, kidney, and prostate weights, reduction in immune function, and significantly increased uterine weight in juveniles. All these symptoms are consistent with the pathological signs associated with estrogenic-axis endocrine disruption. Since these studies, more than 100 scientific studies have demonstrated that oxybenzone and other non-GRASE sunscreen drugs induce a wide range of toxicities.

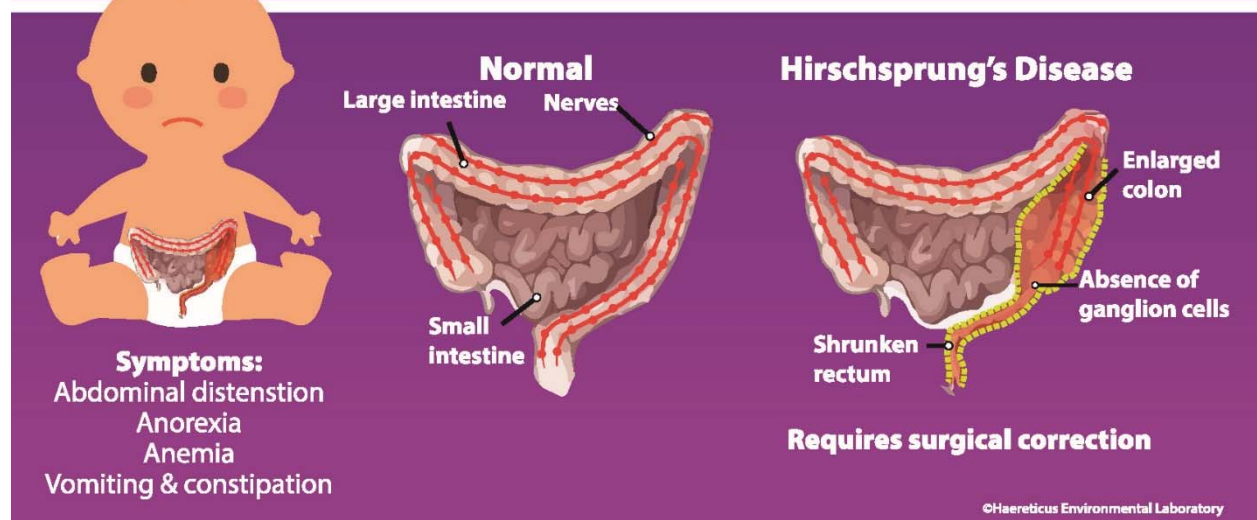
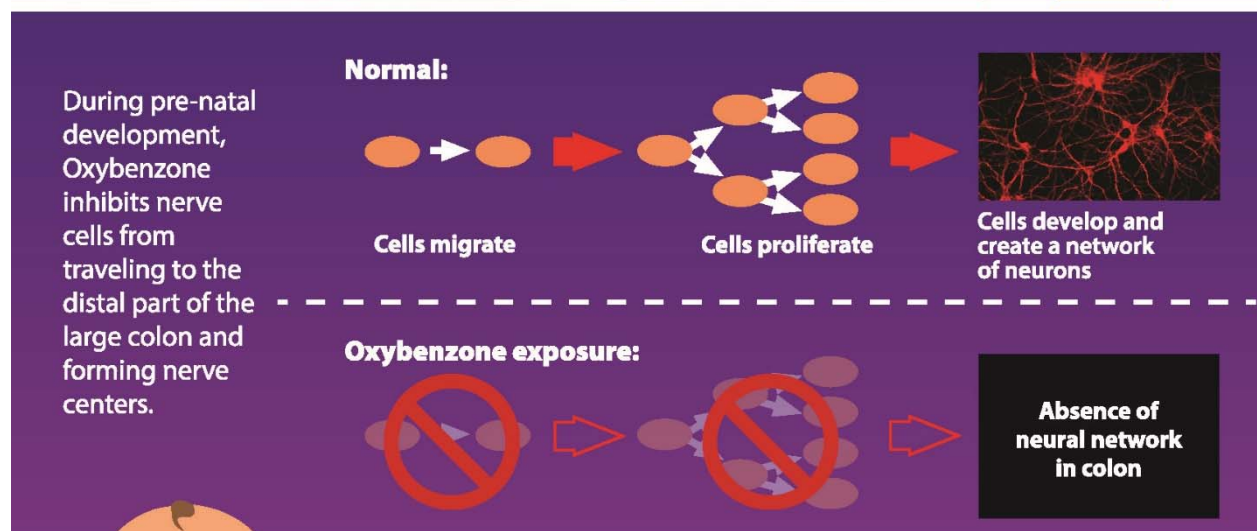
In February of 2019, the U.S. Food and Drug Administration recognized that there was insufficient data in both the safety and effectiveness of 12 of the 16 over-the-counter sunscreen drugs. Two of the 16 sunscreen drugs were regulated as not safe, PABA and a type of salicylic acid.

We argue that all the salicylic acid-based UV drugs (trolamine salicylate, octisalate and homosalate) pose a potential threat for inducing birth defects or miscarriages in pregnant women, based on the fact that all of the UV drugs are metabolized into documented teratogens – chemicals that are embryonic poisons.

**Pregnancy Dangers of Salicylate-Sunscreen Drugs:**

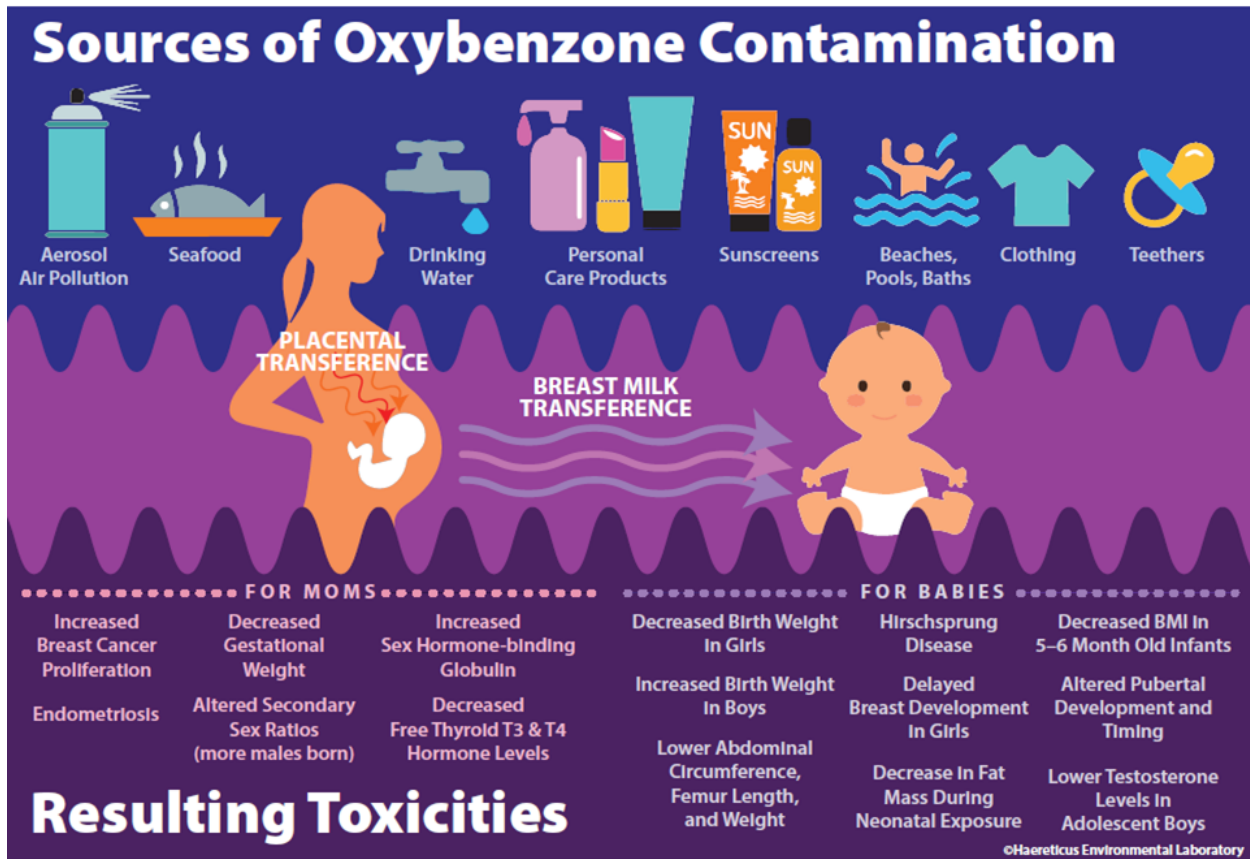
<b>Trolamine Salicylate</b>	<b>Homosalate</b>	<b>Octisalate</b>
 <b>Category 2</b> Banned, 2019	 <b>Category 3</b> Removed from GRASE, 2019	 <b>Category 3</b> Removed from GRASE, 2019
 <p><b>The Salicylate-sunscreens, such as trolamine salicylate, homosalate, and octisalate can be metabolized into salicylic acid. Salicylic acid and its derivatives can cause birth defects.</b></p> <div style="display: flex; justify-content: center; align-items: center;"> <div style="text-align: center;">  Homosalate         </div> <div style="margin: 0 10px;"> <math>\xrightarrow{\text{H}_2\text{O, enzymatic hydrolysis}}</math> </div> <div style="text-align: center;">  Salicylic acid         </div> <div style="margin: 0 10px;">+</div> <div style="text-align: center;">  3,3,5-trimethylcyclohexan-1-ol         </div> </div>		
<p>Salicylic acid is further metabolized into two chemicals known to cause birth defects: 2,3-dihydroxybenzoic acid and 2,5-dihydroxybenzoic acid (Karabulut et al. (2000) Toxicology In Vitro 14(4):297-307).</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  2,3-dihydroxybenzoic acid         </div> <div style="text-align: center;">  2,5-dihydroxybenzoic acid         </div> </div>		
<p><b>Many sunscreen products contain 15% homosalate and 5% octisalate. These chemicals are readily absorbed through the skin and into the blood, where they can cross into the womb and into the developing fetus.</b></p>		

With the passing of Hawaii Act 104 in 2018, most of you are familiar with the dangers of oxybenzone to pregnancy. Oxybenzone has been shown to induce a causative mechanism that gives rise to a birth defect called Hirschsprung's disease. Women in their first trimester or within 20 days of conceiving who are exposed to oxybenzone are especially at risk, because of the timing of the exposure with interference with development and migration of nerve clusters in the lower colon.





There are more than 30 other scientific papers on oxybenzone alone that associate exposure to oxybenzone with pregnancy complications, birth defects, and neonatal and child developmental retardation.



All the category 3 drugs have yet to be sufficiently demonstrated to be safe, or even effective in protecting our skin from the complete harmful effects of UV light from the sun.

We hear a lot of claims that “sunscreen” protects against skin cancer. Unfortunately, skin cancer rates have only increased despite increased sunscreen usage. It is easily and consistently argued from over a dozen epidemiology studies that the use of certain sunscreens is providing a false sense of safety and effectiveness, and that the use of sunscreen may be the cause of increased rates of melanomas and skin carcinomas.

In a 2005 scientific paper by a team of researchers from a federal medical-research facility, they stated in their conclusion that, “As such, sunscreens might promote instead of protect against melanoma.” (Chiang et al., 2005 Sunscreen ingredients inhibit inducible nitric oxide synthase: a possible biochemical explanation for the sunscreen melanoma controversy. *Melanoma Research* 15:3-6)

This study was a foundation stone for a work published by the International Agency for Research on Cancer that, “Advertising for sunscreens and labeling of sunscreen bottles should inform consumers of the carcinogenic hazards associated with sunscreen abuse.” (Autier 2009. Sunscreen abuse for intentional sun exposure. *British Journal of Dermatology* 161:40-45)



In 2011, Dutch and French scientists published a study that “Epidemiological evidence that UVA radiation is involved in the genesis of cutaneous melanoma.” And that “...sunscreens may partly explain why melanoma incidence increases in most light-skinned populations without concomitant increase in mortality.” (Autier et al. 2011. Epidemiological evidence that UVA radiation is involved in the genesis of cutaneous melanoma. Current Opinions in Oncology 23)

It should be noted that the only UV drugs that are considered Generally Recognized as Safe and Effective (GRASE) are zinc oxide and titanium dioxide. Both of these drugs protect against broad-spectrum UV radiation (400nm to 300 nm), while 12 of the 14 petroleum-based drugs that are not GRASE only protect against UVB radiation. Oxybenzone and avobenzone do absorb partially in the UVA spectrum, but at a fraction of their UVB absorption. GRASE products are widely available in Hawaii, and almost every major manufacturer of sunscreens carries a GRASE product line (only mineral sunscreens).

It was pointed out to me that several product-protection firms have been slandering me and my colleagues’ scientific research in this Hawaii Legislative season. This is an old game that these firms have played, reminiscent of the tobacco wars, the leaded-gas wars, the asbestos wars, the DDT wars, and the opioid wars. They also go on to say that the only science that has merit was generated by a researcher that they have wholly funded and promoted. By all means, listen carefully to their propaganda, but please also consider this article:

[https://www.salon.com/2020/02/02/the-art-of-scientific-deception-how-corporations-use-mercenary-science-to-evade-regulation/?ct=t\(RSS\\_EMAIL\\_CAMPAIGN\)](https://www.salon.com/2020/02/02/the-art-of-scientific-deception-how-corporations-use-mercenary-science-to-evade-regulation/?ct=t(RSS_EMAIL_CAMPAIGN))

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Craig A. Downs". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

---

Craig A. Downs, Ph.D.  
Executive Director



TESTIMONY OF TINA YAMAKI  
PRESIDENT  
RETAIL MERCHANTS OF HAWAII  
February 19, 2020

**Re: SB 2278 RELATING TO PRODUCTS CONTAINING SUN PROTECTION FACTOR INGREDIENTS**

Good morning Chair Baker and members of the Senate Committee on Commerce Consumer Protection & Health. I am Tina Yamaki, President of the Retail Merchants of Hawaii and I appreciate this opportunity to testify.

The Retail Merchants of Hawaii (RMH) as founded in 1901 and is a statewide, not for profit trade organization committed to the growth and development of the retail industry in Hawaii. The retail industry is one of the largest employers in the state, employing 25% of the labor force.

We are opposed to SB 2278 Relating to Products Containing Sun Protection Factor Ingredients. This measure requires that, beginning 1/1/2023, only sunscreen products containing active ingredients classified by the United States Food and Drug Administration as a category I, generally recognized as safe and effective, ingredient, shall be sold, offered for sale, or distributed for sale in the State.

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.**

Many of us 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. The vast majority of melanomas are caused by the sun, and **a person's risk of melanoma doubles if he or she has had more than five sunburns.**

The FDA Study results revealed there is evidence that some sunscreen active ingredients may be absorbed. However, the fact that an ingredient is absorbed through the skin and into the body does **NOT mean that the ingredient is unsafe, nor does the FDA seeking further information indicate such. Rather, this finding calls for further industry testing to determine the safety and effect of systemic exposure of sunscreen ingredients, especially with chronic use.**

**This measure is too premature to ban ingredients.** 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.

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. Most people will not take time off from their work to have to pay for a visit to the doctors and then have to pay for an expensive prescription for sunscreen that may not be covered under their healthcare.

For these reasons, we respectfully urge you to hold SB 2778

Mahalo again for this opportunity to testify.

14 February 2020

Michael Ferreira  
92-7049 Elele St.  
Kapolei, HI 96707

S.B. 2778 relating to products containing sun protection factor ingredients.

SUPPORT

It is well known that in addition to climate change that a perfect storm exists coming from the additional assault on our living reefs from sunscreen chemicals. Having a reef safe alternative not only makes sense, but from a standpoint of Hawai'i being an island, that having reef safe sunscreen exclusively available will not be a difficult proposition when combined with a program educating visitors.

Please accept my support for this Bill.

Michael Ferreira  
808-861-7115

**SB-2778**

Submitted on: 2/16/2020 1:43:38 PM

Testimony for CPH on 2/19/2020 10:00:00 AM

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

Comments:

Aloha, I am in support of SB 2778. My name is Kanani Higbee. I live in Lahaina, Maui, Hawaii. I feel that if we cut down on the harmful chemicals in the ocean, caused from sunscreen, we will help the coral reef to proliferate. We have so many tourists that come to Hawaii. Many slather on sunscreen and it comes right off in the water. I worked as a lifeguard for the county of Maui and was well aware of the sunscreen that tourists would put on them jump in the water, only to see an oily slick on the top of the water from their sunscreen that came off. Please help pass this SB2778 in order to protect our coral reef. They are home to our fish and ocean wildlife. I lived in Huntington Beach for a few years and you would be amazed how poorly that place is. It's a ghost town with no coral reef. My dad surfed there as a child and he remembers there being coral reef because he would get scraped on it. To this day, there is no coral reef. Kaanapali is looking like that too. My grampa would speakfish in Kaanapali as a child because the hotel existed. There used to be a lot of coral reef. He would get plenty of tako from the reef. Now there is no more tako and no more reef. It's all gone. That's what happens when we neglect our reef and let everyone where sunscreen in the water. We need to pay special attention to what chemicals these sunscreens have.

Mahalo,

Kanani Higbee

**SB-2778**

Submitted on: 2/17/2020 9:14:46 AM

Testimony for CPH on 2/19/2020 10:00:00 AM

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

Comments:

**SB-2778**

Submitted on: 2/17/2020 11:49:36 AM

Testimony for CPH on 2/19/2020 10:00:00 AM

Submitted By	Organization	Testifier Position	Present at Hearing
Cynthia Punihaole Kennedy	Individual	Support	No

Comments:

Aloha honorable Senator Baker and Senator Chang

I am in support of SB 2778 without amendments. Please review the FDA factsheet on sunscreen ingredients at <https://www.fda.gov/media/124655/download> The only 2 ingredients on the FDA GRASE (Generally Recognized As Safe and Effective) category 1 list is Zinc oxide and Titanium dioxide. **The chemical sunscreens listed in category 3 are ingredients that do not have sufficient data for use in sunscreens.**

FDA concerns of chemical sunscreens and human health are in this article. <https://www.webmd.com/skin-problems-and-treatments/news/20200121/fda-skin-absorbs-dangerous-sunscreen-chemicals>

Senator Baker, we praise your support on Women's Rights. Research shows that chemical sunscreens have a major impact on human health.

Please support SB2778 without any amendments.

Mahalo

Cindi Punihaole

## In Support of SB2778

(Relating to products containing sun protection factor ingredients)

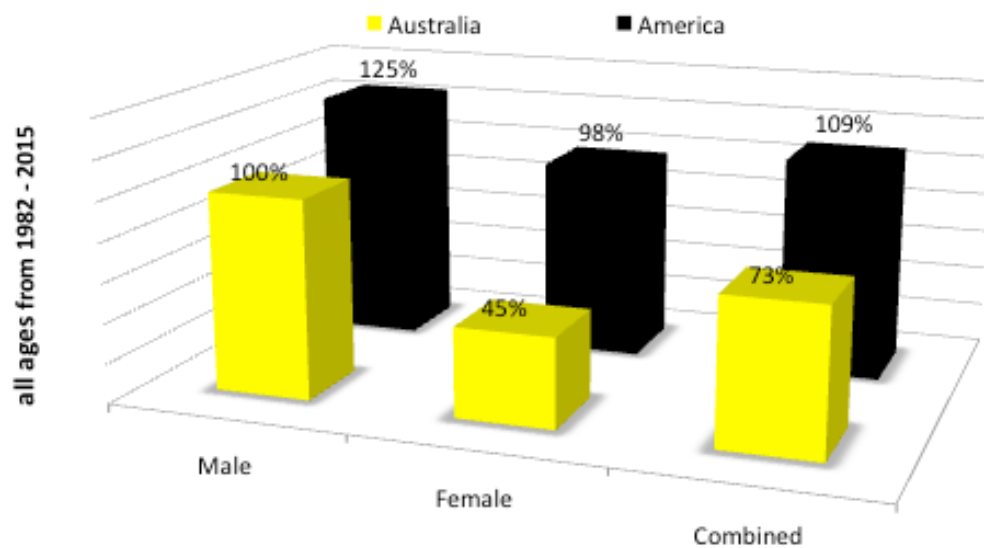
Dear Senators Baker (CPH Chair), Chang (CPH Vice Chair), Nishihara, Wakai, Ruderman, Fevella and Thielen (CPH committee members),

I would like to thank all of you for your continued support of SB2778 and especially thank Senator Baker for being a Champion of Women's Health. I think you might find this new data from Dr. Rebecca Siegel (American Cancer Society) reporting on the incidence of melanoma in Cancer Statistics 2020 interesting: (<file:///Users/joedinardo/Documents/New%20Projects/Hawaii%20Bills/2020%20Hawaii%20Bills/Cancer%20statistics,%202020%20-%20Siegel%20-%202020%20-%20CA:%20A%20Cancer%20Journal%20for%20Clinicians%20-%20Wiley%20Online%20Library.webarchive>)

I asked Dr. Siegel to supply the raw data for melanoma rates reported in the manuscript for the US and she also provided paired data for the annual melanoma rates for Australia (thought to be the country with the highest increase of melanomas) and US (were lobbyists are saying that melanoma rates will soar without chemical sunscreens):

In 1982 the incidence rates for melanoma in Australia were 20.7 per 100,000 women and in 2015 the rate increased to 30.1 per 100,000 women (45% increase). In 1982 the comparable incidence rates for melanoma in the US were 8 per 100,000 women, which increased to 15.8 per 100,000 women in 2015 (98% increase). Additionally, the unpaired data for just the US starting in 1975 demonstrated the incidence rates for melanoma in the US were 5.9 per 100,000 women, which increased to 15.4 per 100,000 women in 2016 (161% increase from 1975 – data not depicted below). This data demonstrates that Americans are experiencing a great increase in the rates of melanoma (regardless of sunscreen use) than Australia, even though Australian women have twice as many melanomas compared to the US.

## Percent Increase in Incidence Rates of Melanoma



I would like to also say that although it is always nice to have more data relating to the aquatic toxicity of sunscreens, ample data has already been presented demonstrating their aquatic impact and that the US Food, Drug & Cosmetic Act still requires that industry be responsible to prove the safety of their products – not the Hawaiian people. Additionally, coral is not the only concern associated with sunscreen aquatic toxicity ... there has also been plenty of data submitted demonstrating that these chemicals are toxic to a variety of aquatic life because they bio-accumulate and bio-magnify in water.

*“Your Committees note that although the appropriation is blank, the Hawaii Skin Cancer Coalition's testimony estimated that an appropriation of \$165,000 would be necessary to conduct a study to prevent the decline in the State's coral reefs due to certain chemicals in sunscreens.”*

I believe the lack of safety as well as the inefficiency of sunscreen chemicals, that have already been removed from the Generally Recognized as Safe & Effective (GRASE) list by FDA, is clear. What is unclear is why the “Hawaii Skin Cancer Coalition” wants to pursue aquatic toxicology instead of working on what can be done to start reducing melanoma in Hawaii ... such as better consumer education? The US projected melanoma rates for Hawaii & Maine are tied at 520. The only States with lower melanoma rates are noted below – none of them are known for sun bathing, beaches or major tourism ... another way to look at it is that 41 States have higher rates of melanoma than Hawaii, something which Hawaii should be highly recognized for!

State with Lower Melanoma Rates than Hawaii	Projected Melanomas
District of Columbia	90
Alaska	120
Wyoming	220
North Dakota	230
Vermont	270
Rhode Island	340
Delaware	420
Montana	450

Please continue to support the banning of toxic sunscreen chemicals for both human health and environmental pollution!

Most Respectfully,

Joe DiNardo (retired personal care products toxicologist with 44+ years of experience)



**SB-2778**

Submitted on: 2/18/2020 11:22:35 AM

Testimony for CPH on 2/19/2020 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
janice palma-glennie	Individual	Support	No

Comments:

aloha,

i strongly support this bill to limit unnecessary toxins hitting and damaging our reefs.

For all of the sensible, science-based reasons you will have and will continue to hear about protecting our reefs from dangerous sunscreens, you must vote in support of this bill.

mahalo and sincerely,

janice palma-glennie

kailua-kona

**SB-2778**

Submitted on: 2/18/2020 4:28:17 PM

Testimony for CPH on 2/19/2020 10:00:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Jackie Moore-Andresen, PHR	Individual	Support	No

Comments:

I'm in support of sunscreen that will safely protect ourselves and the marine life. Win. Win. It's currently confusing to go in and make every effort to make a conscience effort to do the right thing and buy what is marked as "reef safe" only to find out later that it really is not. Both for residents and tourists. With laws already passed and soon to be in place, to only allow reef safe sunscreen in the state, it makes sense to me, to have what is determined safe to use be sold in the state.