

**JOSH GREEN, M.D.**  
Governor

**SYLVIA LUKE**  
Lt. Governor



**SHARON HURD**  
Chairperson, Board of Agriculture

**DEXTER KISHIDA**  
Deputy to the Chairperson

State of Hawai'i  
**DEPARTMENT OF AGRICULTURE**  
KA 'OIHANA MAHI'AI  
1428 South King Street  
Honolulu, Hawai'i 96814-2512  
Phone: (808) 973-9600 FAX: (808) 973-9613

**TESTIMONY OF SHARON HURD  
CHAIRPERSON, BOARD OF AGRICULTURE**

**BEFORE THE SENATE COMMITTEE ON  
AGRICULTURE & THE ENVIRONMENT**

**FEBRUARY 7, 2024  
1:00 P.M.  
CONFERENCE ROOM 224 AND VIDEOCONFERENCE**

**SENATE BILL NO. 3315  
RELATING TO AGRICULTURE**

Chairperson Gabbard, Vice-Chair Richards, and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill 3315 relating to pesticides. The bill requires the Department of Agriculture to use consistent units of measurement in its summary to the public on the amounts of restricted use pesticides (RUPs) used, extends the 100 ft. buffer zone for pesticides around schools to one-half mile buffer zone for pesticides around schools, and applies the buffer zone to include state and county public parks. The Department offers comments on this bill.

The Department does not agree with reporting the total quantities used in a consistent unit of measurement. A single consistent unit of measurement is not logical, as pesticide formulations vary and may be solid, liquid, or even gas formulations. The only possible consistent unit of measurement is "pounds of active ingredient", but the public doesn't generally use this unit of measurement and better understand the current reporting of gallons or pounds, which is accurate, achievable, and more relevant.

In response to similar previously proposed bills the Pesticides Branch reduced its reporting units of measures for use from five (5) to two (2) different units of measure for the Annual RUP Use Report Summary; pounds (lbs) and gallons (gals) are now



reported. In the 2022 RUP Use Report Summary 100% of all units are provided in pounds or gallons, up from 96% in 2020.

The Department would also like to offer comments regarding the expansion of the buffer zones. With the passage of Act 45 and the enactment of buffer zones, the Department found unintended consequences. Utility poles were not able to be treated for mold and mildew during school hours using RUP products. Water treatment plants which used chlorine gas, could not operate wells that were within 100 feet of a school during school hours. Chlorine gas is classified as a Restricted Use Pesticide (RUP).

The Department found two (2) drinking water wells which fell into this category. The Department notified the Department of Water Supply in Hawaii County that they were in violation of HRS149A-28. These wells were shut down and others in different parts of the state were switched to different chlorine products at additional costs. With the expansion of buffer zones to include 0.5 miles, the Department has tentatively identified at least 26 more water treatment wells that would need to be shut down or would have to change to a different type of treatment. Expanding the buffer zones would include far more poles and drinking water wells.

Concerningly, there are no time restrictions for the buffer zones around parks, unlike the schools. As such, no RUPs, including these products, would ever be able to be used within a half mile of a park and would produce devastating consequences to our state's infrastructure and potentially to the quality and safety of drinking water in Hawaii County. The restriction of these products, along with many other formulations such as granules and rodent bait blocks, does not serve the purpose of section 149A-28, HRS, as they have little to no potential to drift.

State and county parks are also ill defined in relation to regulatory authority; the Pesticides Branch currently utilizes tax map key boundaries (TMK) for delineation of 100-foot buffer zone maps provided for education and outreach. This delineation uses the best available data but has extensive limitations. TMKs such as Kahana State Park (park), Pearl Harbor (school), Schofield Barracks (school), Marine Corps Base Hawaii (school), and Hanauma Bay (park) are properties which encompass thousands of acres each but are technically one TMK.

According to their respective websites the following are the number of parks in each jurisdiction (excluding DLNR parks):

- City and County of Honolulu: over 400 parks and facilities
- County of Maui: 121 parks
- County of Kauai: 67 parks
- County of Hawaii: 136 parks

As parks are created to provide greenery and natural environmental spaces for the public to enjoy, they are more likely to deal with invasive species or noxious weeds. Some forestry and wildlife parks also accommodate indigenous and endangered species which the State has an interest in protecting. The Department has grave concerns related to the management of invasive species like little fire ant, coconut rhinoceros beetle, and other newly introduced pest species if the State restricted from ever applying RUPs in any state or county park or within any one-half mile of thereof at any time. The Department recommends an exemption or permitting system for invasive species and other pests designated by an appropriate agency.

All new pesticide products go through an environmental impact review by staff to determine whether they should be restricted. The staff are trained in environmental practices and use models to determine potential impacts to groundwater for consideration to add specific active ingredients to the State's RUP list. Toxicity is a consideration on the Federal level and signal words are used to determine the toxicity of a product to human health (caution, warning, danger). Buffer zones would decrease the use of environmentally hazardous products but would not necessarily decrease the human health aspect the bill intends on protecting. Chlorine gas used for water treatment and utility pole fumigation products, along with many other formulations such as granules and rodent bait blocks, have little to no potential to drift.

The Department has provided draft maps with the proposed buffer zones (see attached figures 1-4) to show the impact it will have on our utility poles and water treatment facilities. Should buffer zones be increased, the Department recommends the need to clarify what pesticide formulations and application methods are or are not allowable and exclude the formulations, such as granules, rodent bait blocks, and certain fumigants that have little to no potential to drift.

Finally, the Department is currently involved in conducting the drift monitoring study, as required by Act 45. Since that study is intended to determine whether drift is taking place, and how far the impact of drift is occurring within schools, it would be best to wait for the results of that study to determine the drift potential in Hawaii, rather than using distances provided from mainland counterparts with hugely different geography, ecology, and use patterns.

Thank you for the opportunity to testify on this measure.

**SB-3315**

Submitted on: 2/5/2024 4:36:10 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Walter Ritte	Testifying for HAPA	Support	Remotely Via Zoom

Comments:

My name is Walter Ritte, I live on the Island of Molokai, where international companies are farming large tracks of lands growing GMO crops using large amounts of Restricted use Pesticides. These GMO farms start right "across the street" from one of our largest Elementary School (Kualapu'u School). Right down the road is Molokai's only High School, their track field, baseball field, football field and P.E. classes and Gymnasium.

You MUST address this serious health issue that our future generations are living with here on Molokai. This bill is a small but important step in addressing the problems that come with the use of RUP in a populated high use district. We are obligated to protect our future generations.



**Testimony to Senate Committee on Agriculture and Environment  
Comments in Support of SB 3315**

Dear Chair Gabbard, Vice Chair Richards, and members of the committee,

My name is Autumn Ness, and I am the Director of the Hawai'i Organic Land Management Program of Beyond Pesticides. Beyond Pesticides is a national organization that seeks to protect air, water, land and food for future generations by moving into a future that doesn't depend on toxic synthetic pesticides and fertilizers.

**Beyond Pesticides' Hawai'i Program is a completely locally funded and led program that works** with and on behalf of farmers, hotel/resort landscapers, and policy makers to build systems that support a large-scale decrease, and eventual end to the use of synthetic pesticides and fertilizers on our islands, because organic land management is the solution for a cascade of environmental and human health crises that we face today.

First, thank you for hearing SB 3315 today. While I support the bill, and hope you pass it out of committee today. While it's much better than the protections currently in place, it is my opinion that putting even a half mile between highly toxic RUPs and our keiki is not near enough.

I have been a part of a cadre of advocates across Hawai'i who are staunchly pro-agriculture, while also being firm in their opinion that we can no longer accept that all agriculture is good for our health and our environment. The data is clear. The American Academy of Pediatrics have issued multiple statements declaring that we all have a duty to prevent chronic low-level exposure of children to synthetic pesticides.

On Maui, where I am based, these protections would affect school children in Makawao, Pukalani and Haliimaile, extremely windy rural areas where schools are located in close proximity to agriculture operations that use toxic fumigants, chemicals that by nature are easily carried by wind.

What's more important: protecting an outdated, chemical intensive farming practice that can fairly easily be updated to be regenerative, or the health and cognitive function of our keiki?

Mahalo again for discussing this important topic,

Autumn Ness  
Director, Hawai'i Organic Land Management & Farm Support Program  
Beyond Pesticides

SUGARLAND FARMS, INC.  
PO BOX 27  
KUNIA, HAWAII 96759  
(808) 688-2892

SB3315, Relating to Pesticides  
Sen AEN Hearing – 1:00 PM  
Wednesday, February 7, 2024

Testimony By: Jonathan Jefts

Chair Gabbard, Vice Chair Richards, and Members of the Sen AEN Committee:

I am Jonathan Jefts of Sugarland Farms, Inc. management. Our family farms on Oahu and Molokai grow about 1 million pounds weekly of import replacement produce. These crops include bananas, bell peppers, cabbages, cucumbers, tomatoes and watermelons.

Concerns about pesticide application and the safety of employees and the surrounding neighbors are common concerns of farmers, families, and policymakers. From a farm perspective, we wish to comment on our concerns about SB3315.

- 1) **Requiring the DOA to use consistent units of measurement in the summary to the public on RUPs used.**  
**Position: Indifferent, no comment.**
  
- 2) **Prohibit RUPs from being applied within one-half mile of schools during normal school hours and expands the prohibition to areas around state or county public parks.**  
**Position: Oppose**

Such restrictions should not be one model fits all. Environmental conditions such as current and forecasted wind direction and velocity should be taken into consideration. Vegetative buffers should be considered as well. For example, if a pesticide application is used within 1000 feet of a school or park, downwind of the sensitive area, and blocked by a vegetative buffer, then the risk potential is near zero. On the other hand, if an application were made 2.6 miles upwind of a sensitive area within the line of sight, the potential for drift would be nearly 100%.

Pesticide labels and Worker Protection Standards already govern the safe and responsible use of agricultural pesticides. A standard distance buffer zone does not fit all. The EPA concluded this in its 2014 response to the petition to protect children from pesticide drift and stated that it is not scientifically defensible. <https://archive.epa.gov/epa/sites/production/files/2014-08/documents/spray-drift-petition.pdf>

I am not opposed to a reasonable buffer between schools and pesticides that are consistent with federal guidelines. If we put burdens on Hawaii farmers that are inconsistent with federal guidelines, it makes it very difficult for Hawaii farmers to compete with and displace imported produce.

Thank you for the opportunity to testify on this bill

**SB-3315**

Submitted on: 2/6/2024 1:22:10 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
tanya mailelani naehu	Testifying for Hui o Kuapa	Support	Written Testimony Only

Comments:

Aloha,

I am in strong support of this bill.

Mahalo





# HAWAII CROP IMPROVEMENT ASSOCIATION

SB3315 – In Opposition  
Relating to Pesticides  
Senate Committee on Agriculture and Environment

Date: Wednesday, February 7, 2024  
Time: 1:00 PM  
Place: Conference Room 224

Aloha Chair Gabbard, Vice Chair Richards, and Members of the Committee:

The Hawaii Crop Improvement Association (HCIA) appreciates the opportunity to provide testimony **in opposition to SB3315**, which requires the Department of Agriculture to use consistent units of measurement in its summary to the public on the amounts of restricted use pesticides used and establishes a one-half mile buffer zone for pesticides around schools and state and county public parks.

HCIA's opposition is to the provisions of the bill related to the half mile buffer zone. The U.S. Environmental Protection Agency (EPA) already regulates the use of pesticides to protect the environment, applicators, and community. Based on scientific research and data, pesticide labels will require applicators to use buffers when necessary. The half mile buffer zone proposed in this bill is not based on scientific fact.

The negative impacts of a half mile buffer zone would be significant for local agriculture. It would reduce a farmer's ability to maximize their property to grow food. For smaller farms, this could represent a sizable portion of their land. The ongoing pressure that urban development and resulting proposals like half mile buffer zones just create additional hardship and disincentives to enter or grow Hawaii's agriculture industry.

Act 45 already put into a law a 100-foot buffer, and this is something that farmers can work through. We ask the committee not to pass a bill that only makes conditions more difficult for our local agriculture producers, especially when scientific data does not support the proposal.

Mahalo for the opportunity to submit our testimony in opposition.

*The Hawaii Crop Improvement Association is a Hawaii-based non-profit organization that promotes modern agriculture to help farmers and communities succeed. Through education, collaboration, and advocacy, we work to ensure a safe and sustainable food supply, support responsible farming practices, and build a healthy economy.*

**SB-3315**

Submitted on: 2/3/2024 4:25:44 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Jeannette Gurung	Testifying for WOCAN	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Jeannette Gurung

Executive Director, Women Organizing for Change in Agriculture and Natural Resource Management (WOCAN)

Kailua Kona

**SB-3315**

Submitted on: 2/3/2024 9:48:08 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Susan B Roberts Emery	Testifying for Green Party of Hawai'i	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards, and Members of the Committee,

The Green Party of Hawai'i strongly supports SB3315.

The science is in; that pesticides, herbicides, and synthetic fertilizers are not healthy for our soil, water, coral, and our Keiki. A full ban on pesticides would be preferable but SB3315 is a step in the right direction .

We live in a very delicate ecosystem that doesn't have much landmass, therefore it doesn't take much to contaminate large areas where we live. We are very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, all of which are on the rise in our communities.

Strong ,Yes vote, on SB3315 for all of our children.

Mahalo nui,

Susan RobertsEmery

Co chair GPH

**SB-3315**

Submitted on: 2/4/2024 8:29:29 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Joseph Kohn MD	Testifying for We Are One, Inc. - www.WeAreOne.cc - WAO	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please pass SB3316. While Act 45, Session Laws of Hawaii 2018, made steps to provide mandatory disclosure of Restricted Use Pesticide (RUP) use in Hawai'i, it has been difficult to access this information in a way that makes sense and is useful for the public and concerned citizens.

Act 45 established requirements intended to address pesticide abuse in Hawaii, including requiring all users of restricted use pesticides to annually report on their use of restricted use pesticides to the department of agriculture. However, robust and meaningful analysis of environmental and public health impacts of pesticides is contingent on more comprehensive reporting.

RUP data needs to include actual geospatial data that helps to better understand the actual location the pesticide was applied to.

California appears to lead the nation in studies of chronic health effects and/or associations with pesticide use. They are able to reach this level of scientific inquiry because they require careful reporting of pesticide applications that specify what was sprayed, where, when, and in what quantities. Improved reporting in Hawaii can provide policymakers and public health experts with important data with which to make evidence based decisions about pesticide use.

Mahalo for your consideration!

[www.WeAreOne.cc](http://www.WeAreOne.cc)

**SB-3315**

Submitted on: 2/5/2024 4:03:44 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Colehour Bondera	Testifying for Kanalani Ohana Farm	Support	Written Testimony Only

Comments:

Aloha Chair and Committee Members:

Please accept this as strong support for SB315.

We all must be protected from toxic pesticides and this legislation helps ensure that shared information has continuity and consistency, which allows us all to discuss.

Further, a basic border of one-half mile is not that large and will protect those who want to use affected spaces to not have to deal with common levels of drift experienced by such toxic chemicals. Together let's look out for the community.

Since the highways and roads are State or County for the most part, and people use those areas as well, future legislation should seriously consider not allowing restricted use pesticides to be used in those contexts either.

Sincerely,

Colehour Bondera

KANALANI OHANA FARM

colemel2@gmail.com

**SB-3315**

Submitted on: 2/5/2024 6:42:53 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Dr Jana Bogs	Testifying for Beyond Organic Consulting, Inc.	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Jana Bogs, PhD, Naalehu, Hawaii



AMERICANS FOR DEMOCRATIC ACTION

---

OFFICERS	DIRECTORS			MAILING ADDRESS
John Bickel, President	Melodie Aduja	Jan Lubin	Stephen O'Harrow	P.O. Box 23404
Alan Burdick, Vice President	Juliet Begley	Shannon Matson	Maria Glodilet Rallojaj	Honolulu, HI
Dave Nagajji, Treasurer	Stephanie Fitzpatrick	Jenny Nomura	Bill South	96823
Doug Pyle, Secretary	Robert Kinslow			

---

February 5, 2024

TO: Honorable Chair Gabbard & Members of the AEN Committee

RE: SB 3315 Relating to Pesticides

Support for hearing on February 7

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.

We support this bill as it would limit the use of pesticides in the vicinity of schools and parks. Pesticide use is associated with neurological deficits and acute health effects in children. As stated in the bill, Scientific research conducted by academic institutions and the Environmental Protection Agency has demonstrated that pesticides sprayed on agricultural fields can drift off site, causing adverse health effects. Drift can occur through spray, mist, fumes, or odor during application, or through volatilization of previously treated areas.

Thank you for your favorable consideration.

Sincerely,

John Bickel  
President



## TESTIMONY FROM THE DEMOCRATIC PARTY OF HAWAII

### SENATE COMMITTEE ON AGRICULTURE AND ENVIRONMENT

FEBRUARY 7, 2024

### SB 3315, RELATING TO PESTICIDES

### POSITION: SUPPORT

The Democratic Party of Hawai'i **supports** SB 3315, relating to pesticides. Pursuant to the “Agriculture” section of the official Democratic Party of Hawai'i platform, the party supports “regulations that ensure the ethical and safe production and consumption of all agricultural products.”

In the debate about regulating local agriculture, there is one thing that everyone should agree to condemn: causing harm to other people. Unfortunately, Hawai'i's pesticide code allows chemical abuse to go unchecked. Today, the State Department of Agriculture must warn pesticide abusers before investigating potential legal violations. A farm that fails to take caution when using harmful chemicals, then, may suffer no consequences for its actions, since the warning gives owners time to hide evidence of their crimes. Even when caught, chemical lawbreakers face minimal criminal penalties and paltry fines for their reckless behavior.

In the islands, pesticide abuse poses major health risks. According to an investigation conducted by the *Cascadia Times*, pesticide application by four large agrichemical companies on Kaua'i—Syngenta, BASF Plant Science, DuPont Pioneer, and Dow AgroSciences—is ten times the national average. In their report, *Cascadia* found that a number of restricted use pesticides were overused, including chlorpyrifos, atrazine, and paraquat. A study published in the medical



journal *The Lancet Neurology*, in March of 2014, found that the neurotoxin chlorpyrifos led to developmental disabilities in children. Similarly, atrazine and paraquat are banned in the European Union. Atrazine is known to contaminate groundwater supplies, while paraquat has been linked to the onset of Parkinson's disease. Yet, both herbicides remain widely popular in the United States, where the Environmental Protection Agency prematurely declared with “reasonable certainty” that neither carry a significant risk of harm.

To protect against pesticide drift impacting sensitive educational areas and making children ill—as happened in 2007 at Kahuku High and Intermediate, in which a dozen students fell ill when a nearby sod farmer ignored windy weather while applying pesticides, and in 2008 in Waimea on Kaua'i, where dozens of students got sick after farmers applied pesticide on a nearby seed corn plot—it is incumbent upon lawmakers to prevent pesticide abuse, including harmful pesticide drift (a particularly acute concern for Hawai'i's schools, given our frequently gusting trade winds).

Accordingly, it is essential that we strengthen pesticide inspections, regulations, consumer protections, and buffer zones, particularly for pesticides like chlorpyrifos, glyphosate, and paraquat. Recent reports have found that **over 215,000 pounds of restricted use pesticides were released across central O'ahu and the North Shore in 2019**, according to the Hawai'i Alliance for Progressive Action. The research is clear: there is no excuse for failing to fully protect public health from the dangerous effects of chemical carcinogens.

In 2018, elected officials passed SB 3095, banning chlorpyrifos and establishing increased disclosure requirements for pesticide applications. It is imperative that political leaders stand up for safety again, especially given recent court rulings against agrochemical companies that have demonstrated the link between restricted use pesticides and terminal illness. If we wait, our children will breathe in the fallout for generations to come.

Mahalo nui loa,

**Kris Coffield**  
*Co-Chair, Legislative Committee*  
(808) 679-7454  
kriscoffield@gmail.com

**Abby Simmons**  
*Co-Chair, Legislative Committee*  
(808) 352-6818  
abbyalana808@gmail.com



## SENATE BILL 3315, RELATING TO PESTICIDES

FEBRUARY 7, 2024 · AEN HEARING

**POSITION:** Support.

**RATIONALE:** The Democratic Party of Hawai'i Education Caucus **supports** SB 3315, relating to pesticides, which requires the Department of Agriculture to use consistent units of measurement in its summary to the public on the amounts of restricted use pesticides; and establishes a one-half mile buffer zone for pesticides around schools and state and county public parks.

In the debate about regulating local agriculture, there is one thing that everyone should agree to condemn: causing harm to other people. Unfortunately, Hawai'i's pesticide code allows chemical abuse to go unchecked. Today, the State Department of Agriculture must warn pesticide abusers before investigating potential legal violations. A farm that fails to take caution when using harmful chemicals, then, may suffer no consequences for its actions, since the warning gives owners time to hide evidence of their crimes. Even when caught, chemical lawbreakers face minimal criminal penalties and paltry fines for their reckless behavior.

In the islands, pesticide abuse poses major health risks. According to an investigation conducted by the *Cascadia Times*, pesticide application by four large agrichemical companies on Kaua'i—Syngenta, BASF Plant Science, DuPont Pioneer, and Dow AgroSciences—is ten times the national average. In their report, *Cascadia* found that a number of restricted use pesticides were overused, including chlorpyrifos, atrazine, and paraquat. A study published in the medical journal *The Lancet*

*Neurology*, in March of 2014, found that the neurotoxin chlorpyrifos led to developmental disabilities in children. Similarly, atrazine and paraquat are banned in the European Union. Atrazine is known to contaminate groundwater supplies, while paraquat has been linked to the onset of Parkinson's disease. Yet, both herbicides remain widely popular in the United States, where the Environmental Protection Agency prematurely declared with “reasonable certainty” that neither carry a significant risk of harm.

To protect against pesticide drift impacting sensitive educational areas and making children ill—as happened in 2007 at Kahuku High and Intermediate, in which a dozen students fell ill when a nearby sod farmer ignored windy weather while applying pesticides, and in 2008 in Waimea on Kaua'i, where dozens of students got sick after farmers applied pesticide on a nearby seed corn plot—it is incumbent upon lawmakers to prevent pesticide abuse, including harmful pesticide drift (a particularly acute concern for Hawai'i's schools, given our frequently gusting trade winds).

Accordingly, it is essential that we strengthen pesticide inspections, regulations, consumer protections, and buffer zones, particularly for pesticides like chlorpyrifos, glyphosate, and paraquat. Recent reports have found that **over 215,000 pounds of restricted use pesticides were released across central O'ahu and the North Shore in 2019**, according to the Hawai'i Alliance for Progressive Action. The research is clear: there is no excuse for failing to fully protect public health from the dangerous effects of chemical carcinogens.

In 2018, elected officials passed SB 3095, banning chlorpyrifos and establishing increased disclosure requirements for pesticide applications. It is imperative that political leaders stand up for safety again, especially given recent court rulings against agrochemical companies that have demonstrated the link between restricted use pesticides and terminal illness. If we wait, our children will breathe in the fallout for generations to come.

**Kris Coffield · Chairperson, DPH Education Caucus · (808) 679-7454 · [kriscoffield@gmail.com](mailto:kriscoffield@gmail.com)**



## Senate Committee on Agriculture and Environment

### Hawai'i Alliance for Progressive Action (HAPA) Strong Supports: SB3315

Wednesday, February 7th, 2024 1 p.m. Conference Room 224

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

**HAPA strongly supports SB3315**, which establishes a one-half mile buffer zone for pesticides around schools and state and county public parks and requires the Department of Agriculture to use consistent units of measurement in its summary to the public on the amounts of restricted use pesticides used.

The buffer zone proposed in SB3315 will provide a buffer between children in school and the use of highly toxic Restricted Use Pesticides (RUPs). This measure aims to provide a small layer of protection for Hawai'i's children from the potential impacts of highly toxic RUPs drifting through their schools by increasing RUP buffer zones schools from 100 feet to ½ mile during school hours.

Despite mounting evidence of the dangers even more common general use pesticides, such as RoundUp/Glyphosate, have on children's health<sup>1</sup>; **this measure would not impact any general use pesticide application or provide buffers for use.** This measure only applies to the State listed class of highly hazardous toxic pesticides that are already restricted in Hawai'i (RUPs). This really is a basic and common-sense measure.

### **Background**

HAPA was founded in response to community members living near large agrochemical fields asking for the right to know what pesticides are being used adjacent to their homes, schools, waterways and other sensitive areas. After over a decade-long effort to provide residents with clear information on what they may be exposed to, the implementation of Act 45 still has not provided communities with that information.

We applaud the legislature and the Ige Administration for taking the important first step of establishing 100-foot RUP buffer zones around schools during school hours in 2018 by passing Act 45 and starting to require self reporting along with the ban on Chlorpyrifos. However, an abundance of scientific literature on pesticide drift and the

---

<sup>1</sup> Evslin, Lee MD (2021) Breakfast at Monsanto



unique susceptibility of children to pesticide exposure provide a sound argument for extending these buffer zones to ensure even greater protections for Hawaii’s children as well as school teachers and staff.

It is worth noting that although California has enacted similar legislation requiring ¼ mile pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied. If Hawai’i enacts ½ mile buffer zones we will lead the nation on RUP buffers protecting our children in schools.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure. <sup>2</sup>

We are very concerned about long-term pesticide exposure at school <sup>3</sup>, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions. Public and scientific research is increasingly raising concerns about the combined effects of pesticide “cocktails,” or exposure to mixtures. In the last six years, pesticide companies submitted over 140 patents containing multiple active ingredients, 96 of which “had at least one ... application that claimed or demonstrated synergy between the active ingredients in the product, a total of 69 percent.”<sup>4</sup> Combination effects are the norm not the exception, yet have not been considered in the pesticide regulatory system.

### **What Was Learned from 2019 RUP Use Data**

2019 marked the first year RUP reporting data became publicly available. Analysis of this data has revealed that specific communities in Hawai’i are still heavily exposed to drift prone pesticides in close proximity to schools.<sup>5</sup> Specific communities in Hawai’i are facing large combinations of RUP usage, and likely chronic exposures from frequent applications.

---

<sup>2</sup> American Academy of Pediatrics, Pesticide Exposure in Children, December 2012, vol. 130, issue 6.

<sup>3</sup> Ames, Richard G. “Pesticide Impacts on Communities and Schools.” *International Journal of Toxicology* 21, no. 5 (October 2002): 397–402. doi:10.1080/10915810290096621.

<sup>4</sup> Donley, N. “Toxic Concoctions: How the EPA ignores the dangers of pesticide cocktails.” *Center for Biological Diversity*, July 2016: 3-4.

<sup>5</sup> Jedra, Christina CivilBeat “The Scope Of Heavy Pesticide Use On Oahu Is Finally In The Public Domain” <https://www.civilbeat.org/2023/02/the-scope-of-heavy-pesticide-use-on-oahu-is-finally-in-the-public-domain/>



The data suggests that additional public health and environmental protections are needed to protect our communities. Wide spread protections for communities and sensitive environments are needed, but buffer zones around schools and parks are common sense when addressing children's exposure to such toxic RUPs.

The first round of data in 2019 shows particularly concerning heavy use of fumigants, 1,3-Dichloropropene (1,3-D or trade name Telone) and Metam Sodium. Data suggests approximately 200,000 lbs of these active ingredients are being applied to north central O'ahu, annually. These fumigants are known to be carcinogenic and highly prone to drift and cause respiratory illness. In 2020, 1,3-D was found in the air at high levels that significantly increase cancer risk up to seven and a half miles away from the closest known application sites.<sup>6</sup> These fumigants are capable of increasing cancer risk for adjacent communities.<sup>7</sup> They are used as fumigants to sterilize the soil, killing beneficial organisms and the life of the soil.

100 foot buffer zones are simply not supported by scientific research, which widely demonstrates pesticides are known to drift over a mile and cause health impacts.<sup>8</sup>

Data obtained in 2019 was mapped (via TMK parcel) and the reporting data suggests that these buffer zones will only apply to a handful of rural communities, and schools / parks throughout Hawai'i. These areas are west side Kaua'i (Kekaha to 'Ele'ele), Central O'ahu, Central Mokoka'i, Makawao and a handful of other schools upon very close inspection. These few areas are where kids are the most at risk in close proximity to RUP use and need buffers the most.

The 2019 data shows approximately 99% of all the RUP use reported in all of Hawai'i for agriculture, landscape, conservation etc was reportedly used by only 10 entities (5 of which grow food) and 97% of all the use reported in Hawai'i was only 5 entities. This data clearly shows that farmers are not widely using RUPs and therefore not many areas throughout Hawai'i would see buffers generated by this measure. This measure seeks to protect our most vulnerable children from exposure to known highly hazardous toxic pesticides.

---

<sup>6</sup> Nathan Donley and Sarah Aird, October 2021, OP ED: California Needs to quit ignoring the public health and climate cost of pesticides

<sup>7</sup> Sharon Lerner, (2021) The Intercept: Environmental Group Charges EPA with Ignoring Evidence of Cancer

<sup>8</sup> EWG: Schools Near Pesticide Spray Zones Could Lose Health Protections, Nov 2 2022



## **Childhood Cancer Threat**

Children who live in areas of high agricultural activity in the US from birth to age 15 experience a significantly increased risk of childhood cancers.<sup>9</sup> A 2007 meta-analysis of studies linking pesticide exposure concluded:

A number of epidemiological studies consistently reported increased risks between pesticide exposures and childhood leukemia, brain cancer, neuroblastoma, non-Hodgkin's lymphoma, Wilms' tumor, and Ewing's sarcoma. An extensive review of these studies was published in 1998 (Zahm & Ward, 1998 Zahm, S. H. and Ward, M. H. 1998. Pesticides and childhood cancer. *Environ. Health. Perspect.*, 106(suppl. 3): 893–908. ). Fifteen case-control studies, 4 cohort studies, and 2 ecological studies have been published since this review, and 15 of these 21 studies reported statistically significant increased risks between either childhood pesticide exposure or parental occupational exposure and childhood cancer. Therefore, one can confidently state that there is at least some association between pesticide exposure and childhood cancer.<sup>10</sup>

Research continues to confirm the pesticide-cancer link with a 2016 Spanish population-based case-control study finding: “[O]ur result points to the same conclusion as many previous studies and suggests that living in the proximity of cultivated land could be associated with many types of cancer in children.”<sup>11</sup>

## **Harm to Children’s Brains**

The most recent study of the UC Berkeley research team, CHAMACOS, indicates that combined organophosphate (OP) applications near pregnant women have a negative effect on the IQ of their children, where some individual OPs may not. Every 522 pounds of OPs applied within a 1 kilometer (0.62 mile) radius of a pregnant Salinas Valley woman’s home correlated with a 2 point drop in her children’s IQ compared to a

---

<sup>9</sup> Carozza L et al. “Risk of Childhood Cancers Associated with Residence in Agriculturally Intensive Areas in the US.” *Environmental Health Perspectives*. Jan 2008; 116(4): 559-565.

<sup>10</sup> Infante-Rivard C and Weichenthal S. “Pesticides and Childhood Cancer: An Update of Zahm and Ward's 1998 Review.” *Journal of Toxicology and Environmental Health, Part B* Vol. 10 , Iss. 1-2,2007.

<sup>11</sup> Gómez Barroso et al. “Agricultural crop exposure and risk of childhood cancer: new findings from a case–control study in Spain.” *Int J Health Geogr* (2016) 15:18.



control group.<sup>12</sup> Recent evidence also suggests that social adversity exacerbates the adverse effects of prenatal OP exposure on IQ.<sup>13</sup>

The science connecting pesticide exposure to neurological impairment is not limited to prenatal studies. Out of the womb, children with higher levels of OP pesticide breakdown products in their urine are more likely to have ADHD.<sup>14 15</sup>

A study of pre- and postnatal pesticide exposure and neurodevelopmental impairment, concluded that “postnatal and, to a lesser extent, prenatal exposure to pesticides, are negatively associated with children’s neuropsychological development, regardless of the way of measuring exposure.” In the same study, greater urinary levels of OP breakdown products were associated with poorer performance on IQ and verbal comprehension tests. Increased agricultural acreage around the child’s residence postnatally was used as a proxy for cumulative exposure to pesticides-- and was found to be associated with decreased IQ, processing speed, and verbal comprehension scores.<sup>16</sup>

Epidemiological studies have mainly linked prenatal pesticide exposure to effects on children’s neurodevelopment, but we also know that school-age children’s brains are still developing. It should be noted that there is scant data on postnatal exposures of children to pesticides, due in part to research challenges that are separate from our concerns.

### **Harm to Children’s Lungs**

Exposure of children to OP pesticides can also exacerbate asthma symptoms. A UC Berkeley CHAMACOS Study found that higher levels of OP metabolites in urine were associated with respiratory symptoms and coughing at 5 and 7 years of age.<sup>17</sup>

---

<sup>12</sup> Gunier RB et al. “Prenatal Residential Proximity to Agricultural Pesticide Use and IQ in 7-Year-Old Children.” *Environ Health Perspect* June 2016

<sup>13</sup> Stein LJ et al. “Early childhood adversity potentiates the adverse association between prenatal organophosphate pesticide exposure and child IQ: the CHAMACOS cohort.” Accepted manuscript in *Neurotoxicology* (2016). doi: 10.1016/j.neuro.2016.07.010.

<sup>14</sup> Bouchard M et al. “ADHD and urinary metabolites of organophosphate pesticides.” *Pediatrics* 2010 125(6): 1270-1277.

<sup>15</sup> Kuehn B. “Increased Risk of ADHD Associated with Early Exposure to Pesticides, PCBs.” *JAMA* July 2010, 304(1):27-28.

<sup>16</sup> B. González-Alzaga et al. “Pre- and postnatal exposures to pesticides and neurodevelopmental effects in children living in agricultural communities from South-Eastern Spain.” *Environment International* 85 (2015) 229–237

<sup>17</sup> Raanan R et al. “Early life Exposure to OP pesticides and pediatric respiratory symptoms in the CHAMACOS Cohort.” *Environmental Health Perspectives*, 123:2 179-182. 2015.





A wealth of data shows that pesticides drift much further than ½ mile beyond their target application due to wide, dust migration and volatilization.

For example, one national report<sup>18</sup> on drift-related pesticide poisonings found that in eleven states, 85 percent of people impacted would have been protected by a one-mile buffer zone, and 76 percent of the cases occurred at distances more than one-quarter mile from the application site.

A UC Berkeley CHAMACOS study<sup>19</sup> documented chlorpyrifos, (now banned in Hawaii, California and New York) in homes up to 1.8 miles from treated fields. Another UC Davis MIND Institute<sup>20</sup> study documented significantly increased rates of autism in children of mothers who lived up to one mile from treated fields during pregnancy. The California Childhood Leukemia study<sup>21</sup> found elevated concentrations of several pesticides in dust of homes up to three-quarters of a mile from treated fields.

## Conclusion

Despite an abundance of evidence documenting the migration of pesticides well beyond the ½ mile buffer zones proposed in SB3315 we recognize that ½ mile still will provide a significant improvement on the current 100 feet.

The threats are real and well established and then most at risk are our children in a handful of specific communities throughout Hawai'i. Please don't wait any longer to protect our children in schools from pesticide drift.

Please support SB3315.

Thank you for your consideration.

Respectfully,

A handwritten signature in black ink, appearing to be 'Carol', written in a cursive style.

---

<sup>18</sup> Soo-Jeong Lee et al. "Acute Pesticide Illnesses Associated with Off-Target Pesticide Drift from Agricultural Applications: 11 States, 1998–2006" Environmental Health Perspectives [2011]

<sup>19</sup> Harney et al. "Pesticides in Dust from Homes in an Agricultural Area" American Chemical Society, Oct 2006

<sup>20</sup> Shelton et al. "Neurodevelopmental Disorders and Prenatal Residential Proximity to Agricultural Pesticides: The CHARGE Study" Environmental Health Perspectives, Oct. 2014

<sup>21</sup> Gunier et al. "Determinants of Agricultural Pesticide Concentrations in Carpet Dust" Environmental Health Perspectives, July 2011



Anne Frederick - Executive Director

The Hawai'i Alliance for Progressive Action (HAPA) is a public non-profit organization under Section 501(c)(3) of the Internal Revenue Code. HAPA's mission is to catalyze community empowerment and systemic change towards valuing 'aina (environment) and people ahead of corporate profit.

**SB-3315**

Submitted on: 2/5/2024 4:32:24 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Ted Bohlen	Testifying for Hawaii Reef and Ocean Coalition	Support	Written Testimony Only

Comments:

Given pesticide drift, our keiki should be protected with a half-mile buffer. The public has a right to know about use of restricted use pesticides, with clear summaries using consistent units. Please pass a strong bill to protect the public!

I am testifying in strong support of SB3315.

I am Dr. Lee Evslin. I am a board-certified pediatrician and a fellow of the American Academy of Pediatrics, and I served for 14 months on the state-sponsored JFF, studying pesticides on Kauai. I have lived and worked on Kaua`i since 1979 and served as CEO of Kauai Medical Clinic and Wilcox Hospital.

In 2012, the American Academy of Pediatrics published a landmark policy statement that changed dramatically the way pediatricians view the dangers of pesticides. Prior to this publication, we were all trained to look for and treat acute poisoning, that is, the symptoms and ill-health stemming from a child who might have swallowed a pesticide or been inadvertently sprayed. In 2012, the American Academy convinced us that even low-level pesticide exposure over time is very dangerous. They began their landmark publications with the statement that:

**“pesticides are inherently toxic chemicals designed to kill or harm living organisms, and there is growing concern about the adverse health consequences of low-level exposures.”**

These well-referenced publications went on to discuss potential side effects from low-level exposures, which ranged from cancer to behavioral problems, developmental delay, reproductive disorders, endocrine disorders, and more. They suggested that pediatricians should become increasingly involved in pesticide issues, Buffer zones around schools and places people congregate, and proper reporting of what was being sprayed and where were important topics. They also discussed how children, particularly unborn children, are particularly vulnerable because

of rapidly developing brains, smaller surface areas, faster breathing rates, and hand-to-mouth activities.

This potential for low level chronic exposure was made very obvious when visiting Waimea Canyon Middle School as an investigator for the JFF. A large bank of open windows ran parallel to a field that had been sprayed for years. They showed us videos of a large pesticide spraying boom truck moving along the fence line just 60 feet from the banks of open windows. Thankfully, by the time our JFF visited the school, the courts had prevailed in moving these fields away from the school because of teacher union activity. It is of note that air testing done at the school several years after the fields moved some distance from the classrooms still showed pesticides in the air.

If one thinks of our Hawaii schools, the conditions at this school are probably similar to most schools with large banks of open windows, gusty trades, potentially dry dusty conditions, and children and teachers mandated to be in these rooms for many hours, five days per week, it is unfortunately obvious that the potential for chronic exposure is great.

Recent studies that point to the dangers of drift include:

- A UC Berkeley study documented that mothers living within 0.6 miles of applications of certain pesticides while pregnant had children with lower IQs and verbal comprehension skills. (1)
- A UC Davis study documented significantly increased rates of autism in children of mothers who lived up to one mile from treated fields during pregnancy. (2)
- The California study found elevated concentrations of several pesticides in the dust of homes up to three-quarters of a mile from treated fields. (3)
- A recent study of pregnant women in Idaho showed that those who live within 1/3 of a mile from fields sprayed with Roundup-like herbicides had increased amounts in their blood during spraying episodes. This is very

concerning as Roundup-like herbicides were not thought to travel much by drifting. (4)

Our children need to attend school, and they deserve to be studying far from toxic substances, and teachers, particularly pregnant teachers, deserve no less.

A very important initiative in our state is to increase local food production. Let's set the proper groundwork. The American Academy of Pediatrics calls for pediatricians to become involved in initiatives calling for buffer zones and disclosure of what is being sprayed where. These steps are necessary to keep our populations safe, and the time to start is now.

**I am asking our legislatures to join the doctors. Please vote to pass this bill.**

1. Gunier RB, Bradman A, Harley KG, Kogut K, Eskenazi B. Prenatal Residential Proximity to Agricultural Pesticide Use and IQ in 7-Year-Old Children. *Environ Health Perspect*. 2017 May 25;125(5):057002. doi: 10.1289/EHP504. PMID: 28557711; PMCID: PMC5644974.
2. Shelton J et al. Neurodevelopmental Disorders and Prenatal Residential Proximity to Agricultural Pesticides: The CHARGE Study. *Environ Health Perspect*. 2014 122(10) 1103-1109. <http://ehp.niehs.nih.gov/1307044/>
3. Simcox NJ Pesticides in household dust and soil: exposure pathways for children of agricultural families. *Environ Health Perspect*. 1995. 103:1126-1134. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1519258/>
4. Curl CL, Hyland C, Spivak M, Sheppard L, Lanphear B, Antoniou MN, Ospina M, Calafat AM. The Effect of Pesticide Spray Season and Residential Proximity to Agriculture on Glyphosate Exposure among Pregnant People in Southern Idaho, 2021. *Environ Health Perspect*. 2023 Dec;131(12):127001. doi: 10.1289/EHP12768. Epub 2023 Dec 6. PMID: 38054699; PMCID: PMC10699167.

**SB-3315**

Submitted on: 2/3/2024 2:23:45 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Dennis O'Shea	Individual	Oppose	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards, and Members of the Committee,

We really need to stop poisoning ourselves, and learn to grow food naturally as has been done for all human history before chemical pesticides, herbicides, and fertilizers.

Please support SB 3315.

Mahalo

**SB-3315**

Submitted on: 2/6/2024 6:51:51 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
John R. Gordines	Individual	Oppose	Written Testimony Only

Comments:

The current distance is efficient!



**SB-3315**

Submitted on: 2/3/2024 2:30:21 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
B.A. McClintock	Individual	Support	Written Testimony Only

Comments:

This is a common sense bill in order to protect everyone's health. It also provides those of us disabled with MCS better access to our community as granted by the Americans with Disabilities Act. Please support this important bill. Mahalo.

**SB-3315**

Submitted on: 2/3/2024 11:59:04 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Ezgi Green	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards, and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provides a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, the elderly, and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, farmworkers, and communities near agricultural areas. The measure had initially been advocated for 1-mile buffer zones due to abundant research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Ezgi Green, Waialua

**SB-3315**

Submitted on: 2/4/2024 1:37:20 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Mark	Testifying for Mohala Farms	Support	Written Testimony Only

Comments:

Dear Senators,

I am writing to ask that you please support SB3315. What happened to our school keiki in Waimea, Kauai, and to the families who have suffered babies with severe birth defects, should never be allowed to happen again. What is more valuable than keeping our children safe when they are at school? Please pass this bill to send a clear message that our children are worth protecting.

Mahalo,

Mark Hamamoto

Waialua, Hawaii

**SB-3315**

Submitted on: 2/3/2024 12:01:42 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Susan Douglas	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

**SB-3315**

Submitted on: 2/3/2024 12:12:20 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Leanne Kami	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please pass SB3316. While Act 45, Session Laws of Hawaii 2018, made steps to provide mandatory disclosure of Restricted Use Pesticide (RUP) use in Hawai‘i, it has been difficult to access this information in a way that makes sense and is useful for the public and concerned citizens.

Act 45 established requirements intended to address pesticide abuse in Hawaii, including requiring all users of restricted use pesticides to annually report on their use of restricted use pesticides to the department of agriculture. However, robust and meaningful analysis of environmental and public health impacts of pesticides is contingent on more comprehensive reporting.

RUP data needs to include actual geospatial data that helps to better understand the actual location the pesticide was applied to.

California appears to lead the nation in studies of chronic health effects and/or associations with pesticide use. They are able to reach this level of scientific inquiry because they require careful reporting of pesticide applications that specify what was sprayed, where, when, and in what quantities. Improved reporting in Hawaii can provide policymakers and public health experts with important data with which to make evidence based decisions about pesticide use.

Mahalo for your consideration!

Leanne Kami, Hilo

**SB-3315**

Submitted on: 2/3/2024 12:16:35 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Barbara Barry	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Barbara Barry

Organic Farmer and Tutu

**SB-3315**

Submitted on: 2/3/2024 12:18:01 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Nanea Lo	Individual	Support	Written Testimony Only

Comments:

Hello

Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

me ke aloha ‘āina,

Nanea Lo

**SB-3315**

Submitted on: 2/3/2024 12:48:07 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Valerie Weiss	Individual	Support	Written Testimony Only

Comments:

I am in strong support of HB3315 requiring Pesticide Drift zones increased to 1/2 mile for schools and parks.

But I do think it should be 1/2 mile for everything everywhere, including houses, shops, etc., anywhere humans or livestock are.



**SB-3315**

Submitted on: 2/3/2024 12:55:35 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
David Hubbard	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please pass SB3316. While we have made progress in limiting the poison our keiki are exposed to, we need to do more. We need better information management to move towards a safer Hawai`i for existing and future generations.

Improved reporting in Hawaii can provide policymakers and public health experts with important data with which to make evidence based decisions about pesticide use.

Thank you for your time and for your consideration.

David Hubbard, Puhi

**SB-3315**

Submitted on: 2/3/2024 1:23:08 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Jeannine Johnson	Individual	Support	Written Testimony Only

Comments:

Please protect our keiki and pass HB3315.

**SB-3315**

Submitted on: 2/3/2024 1:23:03 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
L. Osterer	Individual	Support	Written Testimony Only

Comments:

Winds in Hawaii are stronger than other places with similar measures, causing more drift. California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied. Expanding RUP buffer zones from 100' to ½ mile around schools, state and county parks, is supported by scientific research.

Thank you for your consideration, Concerned long-time Kauai resident, L. Osterer

**SB-3315**

Submitted on: 2/3/2024 1:49:54 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Jodi Robinson	Individual	Support	Written Testimony Only

Comments:

I support increasing bufferzones for pesticide use around schools to a minimum of 1/2 mile.  
Please protect our keiki from exposure to these neurotoxins and cancer-causing chemicals.

**SB-3315**

Submitted on: 2/3/2024 2:04:02 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
denise woods	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Denise Woods, Kauai

**SB-3315**

Submitted on: 2/3/2024 2:36:29 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Lisa Hennessy	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please pass SB3316. While Act 45, Session Laws of Hawaii 2018, made steps to provide mandatory disclosure of Restricted Use Pesticide (RUP) use in Hawai‘i, it has been difficult to access this information in a way that makes sense and is useful for the public and concerned citizens.

Act 45 established requirements intended to address pesticide abuse in Hawaii, including requiring all users of restricted-use pesticides to annually report on their use of restricted-use pesticides to the Department of Agriculture. However, robust and meaningful analysis of environmental and public health impacts of pesticides is contingent on more comprehensive reporting.

RUP data needs to include actual geospatial data that helps to better understand the actual location where the pesticide was applied.

California appears to lead the nation in studies of chronic health effects and/or associations with pesticide use. They can reach this level of scientific inquiry because they require careful reporting of pesticide applications that specify what was sprayed, where, when, and in what quantities. Improved reporting in Hawaii can provide policymakers and public health experts with important data to make evidence-based decisions about pesticide use.

Mahalo for your consideration!

Lisa Hennessy, Princeville

**SB-3315**

Submitted on: 2/3/2024 4:38:51 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Colleen Rost-Banik	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Colleen Rost-Banik, Honolulu

**SB-3315**

Submitted on: 2/3/2024 5:21:14 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
M. Llanes	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

MeleLani Llanes



**SB-3315**

Submitted on: 2/3/2024 7:36:25 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Elizabeth Hansen	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Elizabeth Hansen / Hakalau HI 96710

**SB-3315**

Submitted on: 2/3/2024 8:49:04 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Kencho Gurung	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Kencho, Kapa‘au, Hawai‘i Island

**SB-3315**

Submitted on: 2/3/2024 7:48:06 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Rodger Hansen	Individual	Support	Written Testimony Only

Comments:

ALOHA//

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Rodger Hansen, Hakalau HI 96710

**SB-3315**

Submitted on: 2/3/2024 11:51:21 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
KEALA FUNG	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Keala Fung

Honolulu Hawai'i

**Chair Mike Gabbard**  
**Vice Chair Herbert “Tim” Richards, III**

**Senate Committee on Agriculture & Environment**

**Wednesday, February 7, 2024**  
**1:00 PM**

**TESTIMONY IN STRONG SUPPORT OF SENATE BILL 3315 RELATING TO  
PESTICIDES**

Aloha Chair Gabbard, Vice Chair Richards, Members of the Senate Committee on Agriculture & Environment,

My name is Jun Shin. I am a labor and social justice activist, testifying as an individual in **STRONG SUPPORT** of **SB3315**, Relating to Pesticides.

I am very, very concerned about the effect that long term pesticide exposure will have on keiki, school staff, park staff, and the broader community. There are potential long term health impacts, including cancer, neurological, and respiratory damage. We need larger buffer zones!

The Department of Agriculture and the legislature itself also needs to make sure that field workers and others who work directly with pesticides are working in safe conditions with good pay and benefits (especially healthcare!), as well as receiving proper compensation and/or the ability to seek legal recourse if affected by pesticides on the job.

Please **PASS Senate Bill 3315** out of your committee, and protect our keiki and the broader community!

Mahalo for the opportunity to testify,

Jun Shin,  
State House District 23 | State Senate District 12  
Cell: 808-255-6663  
Email: junshinbusiness729@gmail.com

**SB-3315**

Submitted on: 2/4/2024 6:29:30 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Heidi Jantz	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Heidi Jantz, Spokane, WA

**SB-3315**

Submitted on: 2/4/2024 7:01:07 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Monica L Catalano	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Monica, Richmond CA

**SB-3315**

Submitted on: 2/4/2024 7:39:17 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Sven Sorge	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Sven Sorge



**SB-3315**

Submitted on: 2/4/2024 8:52:04 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
cheryl burghardt	Individual	Support	Written Testimony Only

Comments:

I SUPPORT this bill SB 3315 that requires the Department of Agriculture to use consistent units of measurement in its summary to the public on the amounts of restricted use pesticides used. Establishes a one-half mile buffer zone for pesticides around schools and state and county public parks.

The question is why are we still using pesticides that have restricted used? IF it must be used in those areas, then the person (s) using them should be cognizant of the weather conditions and times of use for those buffer zones.

Again, I SUPPORT this bill.

**SB-3315**

Submitted on: 2/4/2024 10:01:22 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Georgia L Hoopes	Individual	Support	Written Testimony Only

Comments:

I support SB3315

Mahalo

Georgia Hoopes, Kalaheo

**SB-3315**

Submitted on: 2/4/2024 10:14:35 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Regina Gregory	Individual	Support	Written Testimony Only

Comments:

support

**SB-3315**

Submitted on: 2/4/2024 1:29:17 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Jacqueline S. Ambrose	Individual	Support	Written Testimony Only

Comments:

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

**SB-3315**

Submitted on: 2/4/2024 3:43:47 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Barbara Best	Individual	Support	Written Testimony Only

Comments:

Pesticides and children don't mix please.

Mahalo

**SB-3315**

Submitted on: 2/4/2024 5:01:40 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Kiley Adolpho	Individual	Support	Written Testimony Only

Comments:

support

**SB-3315**

Submitted on: 2/4/2024 6:29:15 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Shannon Rudolph	Individual	Support	Written Testimony Only

Comments:

I Strongly Support expanded buffer zones for pesticides.

**SB-3315**

Submitted on: 2/4/2024 9:05:18 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Stacey Alapai	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!  
Stacey Alapai

Makawao, HI 96768



**SB-3315**

Submitted on: 2/4/2024 9:06:40 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Anna Camacho	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please pass SB3316. While Act 45, Session Laws of Hawaii 2018, made steps to provide mandatory disclosure of Restricted Use Pesticide (RUP) use in Hawai‘i, it has been difficult to access this information in a way that makes sense and is useful for the public and concerned citizens.

Act 45 established requirements intended to address pesticide abuse in Hawaii, including requiring all users of restricted use pesticides to annually report on their use of restricted use pesticides to the department of agriculture. However, robust and meaningful analysis of environmental and public health impacts of pesticides is contingent on more comprehensive reporting.

RUP data needs to include actual geospatial data that helps to better understand the actual location the pesticide was applied to.

California appears to lead the nation in studies of chronic health effects and/or associations with pesticide use. They are able to reach this level of scientific inquiry because they require careful reporting of pesticide applications that specify what was sprayed, where, when, and in what quantities. Improved reporting in Hawaii can provide policymakers and public health experts with important data with which to make evidence based decisions about pesticide use.

Mahalo piha,

Anna Camacho, Kaimukī

**SB-3315**

Submitted on: 2/4/2024 10:30:21 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Kathy Shimata	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

**SB-3315**

Submitted on: 2/4/2024 10:36:57 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
j Williams	Individual	Support	Written Testimony Only

Comments:

Dear Committe,

Sirs if we are honest we know CHEMICALS are out of control in Hawaii and used far to often a lot of times when better ways exist they might take a little more time and work. But our kids are worth it. This bill at least makes an effort at protecting our kids and school personnel with a little protection! Please get this passed its the right thing to do.

.Joe Williams -Kauai

**SB-3315**

Submitted on: 2/4/2024 11:06:16 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Celle Galarza	Individual	Support	Written Testimony Only

Comments:

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions. Please protect our keiki and pass HB3315.

Sincerely,

Celle Galarza

Maui mom

**SB-3315**

Submitted on: 2/5/2024 1:06:21 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Irena Bliss	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions. Overall, we have seen the pervasive persistent negative impacts of pesticide and other fossil fuel derived chemicals on human health, and ecological health (on 'āina, waters and animal life), and it's time to restore living Aloha 'Āina, Mālama 'Āina, and to protect our keiki.

Please protect our keiki and pass HB3315.  
Mahalo piha for your consideration.

Me ke aloha,  
Irena Bliss  
Ha'ikū, Maui 96708

**SB-3315**

Submitted on: 2/5/2024 6:09:57 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Michele Nihipali	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Michele Nihipali

54-074 A Kam Hwy.

Hauula, HI 96717

**SB-3315**

Submitted on: 2/5/2024 9:02:33 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Lisa Parker	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Lisa Parker, Kapaa, HI

**SB-3315**

Submitted on: 2/5/2024 9:07:18 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Marilyn Mick	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Marilyn Mick, Honolulu



**SB-3315**

Submitted on: 2/5/2024 9:17:53 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Cynthia Hathaway	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315, widening the buffer zone between schools and areas being sprayed by pesticides known to be dangerous, especially to children. They drift. In a perfect world we would not be putting toxic chemical on our food ever. The least we can do is widen their buffer zones to give some protection to communities.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions. And I am concerned for my aging self, for you and your family, and for the health of our planet

Pass HB3315. Thank you.

Cynthia Hathaway, Kea'au, HI

**SB-3315**

Submitted on: 2/5/2024 9:40:42 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Michelle Pillen	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please **support SB3315**. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass SB3315.

Mahalo for your consideration!

Michelle Pillen, Kailua, Oahu

**SB-3315**

Submitted on: 2/5/2024 10:33:13 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
brandi corpuz	Individual	Support	Written Testimony Only

Comments:

Aloha,

I strongly support SB3315 to protect our children and communities from the deadly affects of Restricted Use Pesticides. We have been asking for decades to put an end to this deadly practice of contaminating our food with these pesticides and the drift that causes unintended health affects on anyone living close to these corporations who use tons of the RUP.

In 1998 I moved to Maui to get away from the deadly pesticides being used all around us on Molokai. Sadly since then many of our family and friends have died of cancer. Some have fought and survived but life is never the same after cancer. These chemicals kill pest and humans. We need to put a stop to this right now and increasing bufferzones is a start.

Recently we found out that Wahiawa, Whitmore Village and surrounding areas of Oahu are the most RUP sprayed areas in all of Hawaii. This area is where we started our nonprofit Rooted Kekahi Me Ka Aina, a 501c3 that grows food and family together. We are working towards food security and sustainability without deadly pesticides but the constant spraying by surrounding corporations makes it impossible to stay away from deadly drift. One of our ohana members from central Oahu was recently diagnosed with a form of canceer that could be caused by RUP and she is only 13! We need to protect our community members by increasing buffer zones and banning some of the worse chemicals ever created being used in our communities and on our food!

Sincerely, Brandi Corpuz

**SB-3315**

Submitted on: 2/5/2024 11:11:16 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Julia Marrack	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Julia Marrack, Kamuela

**SB-3315**

Submitted on: 2/5/2024 3:23:34 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Tamara Paltin	Individual	Support	Written Testimony Only

Comments:

Full support SB3315

**Date:** February 5, 2024

**Subject:** ½ Mile Pesticide Buffer Zones Are Needed Near Schools and Day Care Centers

**From:** J. Milton Clark, Ph.D.  
Former Senior Health and Science Advisor  
U.S. Environmental Protection Agency, Region 5, Chicago  
Former Associate Professor of Environmental and Occupational Health Sciences  
University of Illinois School of Public Health  
clarkenviro.com

I served as a pro bono expert to the Joint Fact Finding on Pesticide Use and GMOs in Kauai. While with U.S. EPA and the University of Illinois School of Public Health, I conducted and published over one hundred human health risk assessments dealing with exposure to pesticides and toxic chemicals. These risk assessments were the basis for cleaning up and decontaminating numerous sites which protected thousands of people.

To prevent autism and other neurological impacts to children the use of restricted pesticides in Hawaii needs to be prohibited within ½ mile of schools and day care centers. *Leading academic institutions have published peer reviewed research, some funded by EPA, that clearly demonstrates that a ½ mile buffer zone is required to provide adequate health protection for children.*

Several studies have shown that proximity to agricultural fields at distances up to 0.9 mile results in maternal exposure to pesticides that is associated with neurological deficits in children, including autism, autism spectrum disorders, and cognitive impairments (1-6, 31-36). *The science is especially strong that children living within ½ mile of agricultural fields show neurological impacts.* A University of California Berkeley study, partially funded by U.S. EPA, demonstrated that proximity to agricultural fields was associated with a reduction in child IQ and verbal comprehension at distances up to 0.6 mile (31,32,34,36). This science is based upon a statistical relationship between the amounts of pesticides in maternal umbilical cord blood or urine and the severity of adverse neurological health effects in their children.

Hawaii has a very limited data base on pesticide health incidents as compared to California and other much larger states. In 2018, California passed regulations to restrict the application of *all* agriculturally applied pesticides within ¼ mile of schools and day care centers during the hours of 6 am to 6 pm and when schools are open. While an important step forward, California's regulation is not fully protective. California's decision was primarily based on pesticide incidences of airborne drift causing *acute* health effects, not *chronic* health effects that have been clearly documented at distances greater than ¼ mile.

## **Agricultural Pesticide Drift Occurs at Distances of Nearly a Mile**

While EPA defines spray drift as pesticides that are carried off target as mists, droplets or powders, it been well documented that pesticides in agricultural soils and dusts are transported from fields at distances greater than ¼ mile, including as documented (by photographs) in numerous homes in Waimea, Hawaii (7,8,9,34-37). Pesticides are also transported by their volatilization from soils. Homes within 0.8 mile of agricultural fields have higher concentrations of pesticides than homes at greater distances (34).

An analysis of several household pesticide dust studies revealed detectable residues of chlorpyrifos and other pesticides at distances up to 0.7 mile from fields and a statistically significant increase in pesticide levels within homes based upon proximity to agricultural fields (35). As previously discussed, adverse health effects have been reported in children at distances up to 0.9 mile.

### **California's ¼ Mile Regulation**

Lee et al., evaluated 2,945 acute cases of pesticide illnesses associated with 643 drift events in eleven states (37). California used the work of Lee to develop regulations for schools and day care centers (38). 1,565 (53%) of the acute cases were non-occupational and approximately 400 cases involved were children. Drift was defined as “pesticide exposures outside there intended area of application by: (1) spray, mist, fumes, or odor during application; (2) volatilization, odor from a previously treated field, or migration of contaminated dust; and (3) residue left by offsite movement. *Soil fumigation was responsible for the largest number of cases (738) with 606 (82%) occurring greater than 0.25 miles from the application site.* In 2012 EPA implemented new regulations for soil fumigants (size of field, distance, and 36 hour time for re-entry) that may reduce cases of acute exposure.

California's Department of Pesticide Regulation (DPR) considered (1) pesticide drift episodes causing *acute* cases near schools (2) greater neurological sensitivity of children to pesticides (3) pesticide air monitoring data to implement the ¼ mile pesticide application restriction (between the hours of 6 am and 6 pm or when schools are in session) (38). The basis for passing the regulations are as follows:

- From 2005-2014, California documented 34 cases of pesticide caused acute illnesses at schools related to five episodes of pesticide drift.
- DPR concluded that if the ¼ mile regulation had been in effect these 34 acute pesticide related illnesses at schools would not have occurred. However, this conclusion was not supported by the much larger data set of Lee from eleven

- states that found that *the majority of acute poisoning cases (primarily from soil fumigation) occurred at distances greater than 1/4 mile.*
- DPR concluded that a margin of safety for school children was required to reduce the chances of unintended pesticide drift.
  - DPR found that the costs of the ¼ mile regulation (with 3,500 schools possibly impacted) to each agricultural grower were low, ranging from \$1,300-\$3,500 per year. No significant impacts were found on jobs or small businesses.

### **A ¼ Mile Part Time Restriction Is Not Strong Enough**

*While an important step forward, the California ¼ mile regulation is not based upon known chronic pesticide health effects, such as autism and reduction in IQ, and therefore does not adequately protect the developing child, infants, and young children.* The California regulation only applies part time (while teachers and children are at school) and does not fully address pesticide exposures caused by volatilization and the transport of pesticides from agricultural soils and dusts into residential properties. In homes, studies have shown that infants and children are exposed to pesticides in dusts and soils by hand to mouth contact.

To protect Hawaiian women and children, restricted use pesticides should not be applied within ½ mile of any occupied structures, including residential structures. The ½ mile buffer distance is based upon University of California Berkeley study, that strongly documented neurological health impacts in children living at distances up to 0.6 mile from agricultural fields and findings of agriculturally used pesticides in household dusts at similar distances (7-9, 31-36).

There has often been discussion of a 100 foot spray buffer for Hawaii schools and day care centers. *A 100 foot buffer zone is scientifically insupportable and grossly inadequate.*

In addition to buffer zones, Hawaii should adopt a strategy to regulate the types and amounts of restricted pesticides that can be used in agricultural and residential areas. Hawaii's, California's and New York's (and now U.S. EPA's) recent bans and phase-outs on chlorpyrifos is an excellent example of appropriate regulatory action to protect the public from a neurologically damaging pesticide that drifts over large distances.

### **A Hawaii Pesticide Buffer Regulation is Needed**

In conclusion, the Hawaii legislature needs to provide children and women teachers protection from potentially harmful exposure to restricted use pesticides by prohibiting the application of restricted use pesticides within ½ mile of schools and day care centers.



## References

1. Shelton J et al. Neurodevelopmental Disorders and Prenatal Residential Proximity to Agricultural Pesticides: The CHARGE Study. *Environ Health Perspect.* 2014 122(10) 1103-1109. <http://ehp.niehs.nih.gov/1307044/>
2. Shelton J and I Hertz-Picciotto. Neurodevelopmental Disorders and Agricultural Pesticide Exposures: Shelton and Hertz-Picciotto Respond. *Environ Health Perspect.* 2015. 123(4): A79–A80. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4384207/>
3. Eskenazi B et al. Organophosphate Pesticide Exposure and Neurodevelopment in Young Mexican-American Children. *Environ Health Perspect.* 2007. 115(5): 792–798. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1867968/>
4. Marks AR et al. Organophosphate pesticide exposure and attention in young Mexican-American children: the CHAMACOS Study. *Environ Health Perspect.* 2010. 18:1768–1774. <http://www.ncbi.nlm.nih.gov/pubmed/21126939>
5. Gonzalez-ALzaga B. A systematic review of neurodevelopmental effects of prenatal and postnatal organophosphate pesticide exposure. *Toxicol Lett.* 2014. 230(2):104-21 <http://www.ncbi.nlm.nih.gov/pubmed/24291036>
6. Roberts EM, et al. Maternal residence near agricultural pesticide applications and autism spectrum disorders among children in the California Central Valley. *Environ Health Perspect.* 2007. 115(10):1482-9. <http://www.ncbi.nlm.nih.gov/pubmed/17938740>
7. Deziel NC et al. A Review of Nonoccupational Pathways for Pesticide Exposure in Women Living in Agricultural Areas. *Environ Health Perspect.* 2015. 123 (6) 515-524. <http://ehp.niehs.nih.gov/1408273/>
8. Simcox NJ Pesticides in household dust and soil: exposure pathways for children of agricultural families. *Environ Health Perspect.* 1995. 103:1126–1134. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1519258/>
9. Waimea Community Dust Impacts, Preliminary Evaluation Report, Knox Hoversland Architechs LTD. Jim A’Ana et al. v. Pioneer HiBred International, Inc. Feb 24, 2014.
10. Stemp-Morlock G. Reproductive Health: Pesticides and Anencephaly *Environ Health Perspect.* 2007 Feb; 115(2): A78. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1817703/>
11. Lacasaña M. Maternal and paternal occupational exposure to agricultural work

- and the risk of anencephaly. *Occup Environ Med.* 2006 Oct; 63(10): 649–656.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2078046/>
12. Brender JD et al. Maternal Pesticide Exposure and Neural Tube Defects in Mexican Americans. *Annals of Epidemiology*, Dec 2009, 20(1):16-22  
<http://europepmc.org/article/med/20006272>
13. Yang W et al. Residential Agricultural Pesticide Exposures and Risk of Neural Tube Defects and Orofacial Clefts Among Offspring in the San Joaquin Valley of California. *American J of Epi.* 2014. 179 (6) Pp. 740-747.  
<http://aje.oxfordjournals.org/content/early/2014/02/18/aje.kwt324.full>
14. California Department of Pesticide Regulation Air Monitoring  
[http://www.cdpr.ca.gov/docs/emon/airinit/air\\_network.htm](http://www.cdpr.ca.gov/docs/emon/airinit/air_network.htm).
15. California Department of Pesticide Regulation Air Monitoring  
<http://www.cdpr.ca.gov/docs/emon/airinit/comspec.htm>
16. California Department of Pesticide Regulation Air Monitoring  
[http://www.cdpr.ca.gov/docs/emon/airinit/amn\\_2013\\_report\\_final.pdf](http://www.cdpr.ca.gov/docs/emon/airinit/amn_2013_report_final.pdf)
17. Chlorpyrifos: Evaluation of Potential Risks From Spray Drift and the Impact of Potential Risk Reduction Measures, EPA, July 13, 2012.
18. Chlorpyrifos: Preliminary Evaluation of the Risks From Volatilization, EPA, January 31, 2013.
19. EPA Proposes to Revoke Chlorpyrifos Food Residue Tolerances, October 30, 2015.
20. Re-evaluation of the Potential Risks from Volatilization in Consideration of Chlorpyrifos Parent and Oxon Vapor Inhalation Toxicity Studies, EPA, 2014.
21. Chlorpyrifos Revised Human Health Risk Assessment, EPA, 2014.
22. Rauh V, Arunajadai S, Horton M et al. Seven- year neurodevelopmental scores and prenatal exposure to chlorpyrifos, a common agricultural pesticide. *Environ Health Perspect* 2011. 119(8), 1196-1201.
23. Rauh V, Garfinkel R et al. Impact of prenatal chlorpyrifos exposure on neurodevelopment in the first 3 years of life among inner-city children. 2006. *Pediatrics*, 118(6), 1845-1859.
24. Rauh V, Perera FP et al. Brain anomalies in children exposed prenatally to a common organophosphate pesticide. *Proc. Natl. Acad. Sci. USA.* 2012. 109(20), 7871-7876.
25. Whyatt, R, & Rauh V. [Chlorpyrifos Correspondence with Columbia Researchers:

- (1) Responses to Scientific Advisory Panel (SAP) comments (Whyatt and Rauh 2010), and (2) Responses to Dow AgroSciences inquiries (Whyatt 2010)].
26. Whyatt, R et al. Contemporary-use pesticides in personal air samples during pregnancy and blood samples at delivery among urban minority mothers and newborns. *Environ. Health. Perspect.* 2003. 111(5), 749- 756.
27. Whyatt, R et al. Residential pesticide use during pregnancy among a cohort of urban minority women. *Environ Health Perspect* 2002. 111(5), 507-514.
28. Whyatt, R et al. A biomarker validation study of prenatal chlorpyrifos exposure within an inner-city cohort during pregnancy. *Environ Health Perspect.* 2009. 117(4), 559-567.
29. Whyatt, R et al. Within and between home variability in indoor-air insecticide levels during pregnancy among an inner-city cohort from New York City. *Environ Health Perspect.* 2007. 115(3), 383-389.
30. Whyatt, R et al. Prenatal insecticide exposures and birth weight and length among an urban minority cohort. *Environ Health Perspect.* 2004. 112(10), 1125-1132.
31. Bouchard, MR et al. Prenatal Exposure to Organophosphate Pesticides and IQ in 7-Year-Old Children. *Environ. Health Perspect.* 2011. 119(8): 1189–1195.  
<https://www.ncbi.nlm.nih.gov/pubmed/21507776>
32. Marks, A, et al. Organophosphate Pesticide Exposure and Attention in Young Mexican-American Children: The CHAMACOS Study. *Environ Health Perspect.* 2010. 118(12): 1768–1774.  
<https://www.ncbi.nlm.nih.gov/pubmed/21126939>
33. Eskenazi B et al. Exposures of children to organophosphate pesticides and their potential adverse health effects. *Environ Health Perspect.* 107 Supplement 3, June 1999.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1566222/pdf/envhper00520-0027.pdf>
34. Gunier RB et al. “Determinants of Agricultural Pesticide Concentrations in Carpet Dust” *Environ Health Perspect.*, July, 2011.
35. Deziel, NC *et al.* “Relative contributions of agricultural drift, para-occupational, and residential use exposure pathways to house dust pesticide concentrations: meta-regression of published data” *Environ. Health Perspect.*, March, 2017.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5332194/>
36. Gunier RB et al., “Prenatal Residential Proximity to Agricultural Pesticide Use

and IQ in 7-Year-Old Children.” Environ Health Perspect., June,2016.  
<https://ehp.niehs.nih.gov/doi/full/10.1289/EHP504>

37. Lee, et al., “Acute Pesticide Illnesses Associated with Off-Target Pesticide Drift from Agricultural Applications: 11 States, 1998–2006, August 2011.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3237344/>

38. Initial Statement of Reasons of Public Support, Department of Pesticide Regulation (DPR), State of California, 2018.  
[https://www.cdpr.ca.gov/docs/legbills/rulepkgs/16-004/16-004\\_initial\\_statement.pdf](https://www.cdpr.ca.gov/docs/legbills/rulepkgs/16-004/16-004_initial_statement.pdf).

**SB-3315**

Submitted on: 2/5/2024 6:28:59 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Patricia Blair	Individual	Support	Written Testimony Only

Comments:

Protect our children from pesticides please.

## **Support for SB3315 - Improved Reporting of Restricted Use Pesticides (RUP) in Hawai'i**

Aloha Members of the Committee,

I am writing to express my strong support for Senate Bill 3315 (SB3315), which aims to enhance the reporting requirements for Restricted Use Pesticides (RUP) in Hawai'i. I believe that the proposed amendments will address critical gaps in public health protections and reporting systems.

While Act 45, Session Laws of Hawai'i 2018, marked a significant step forward by mandating the disclosure of RUP usage, it does not include limitations that address the full extent of pesticide drift (up to 4,224 feet from site of application) or the lack of pesticide geospatial data. SB3315 is a crucial next step toward improving the transparency and comprehensiveness of RUP reporting. The proposed bill rightly emphasizes the need for consistent units of measurement in RUP reporting as well as supports expanding RUP buffer zones from 100 feet to ½ mile (2640 feet) around schools and public parks.

This adjustment is essential in safeguarding the lāhui from the potential health impacts of pesticide drift, particularly on our vulnerable keiki. I wholeheartedly support the changes SB3315 proposes for RUP reporting, as it will provide a more accurate understanding to community members of where pesticides are being applied. This information can then be used by policymakers and public health experts to make evidence-based decisions to better protect our lāhui.

I urge you to pass SB3315 to strengthen Hawai'i's commitment to environmental and public health through responsible pesticide management.

Mahalo for your consideration,  
Paisley Richards (Wai'anae)

**SB-3315**

Submitted on: 2/5/2024 6:56:20 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Jodie	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Jodie Thayer, Wainiha

**SB-3315**

Submitted on: 2/5/2024 7:25:34 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
bonnie Delgado	Individual	Support	Written Testimony Only

Comments:

I can't believe that we have to create a bill for this!!!



**SB-3315**

Submitted on: 2/5/2024 7:52:11 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Jessica dos Santos	Individual	Support	Written Testimony Only

Comments:

Aloha Legislators,

My name is Jessica dos Santos, and I'm a resident of Kahuku deeply concerned about the potential risks associated with restricted use pesticides (RUPs). Like many others, I believe it's crucial to balance the use of these chemicals for agriculture with safeguarding public health and the environment.

While I understand the importance of responsible pest management, I'm concerned about the inconsistent reporting and buffer zone regulations surrounding RUPs. SB3315 offers a common-sense approach to addressing these concerns.

Firstly, requiring consistent units of measurement in RUP reporting would make it easier for the public and health officials to understand and analyze data. This transparency is vital for identifying potential risks and ensuring responsible use of these powerful chemicals.

Secondly, expanding RUP buffer zones from 100 feet to ½ mile around schools, state, and county parks aligns with scientific research on drift and potential health impacts. Protecting our most vulnerable populations, like children playing in parks, is paramount. This increase in buffer zones would provide an added layer of safety without unduly burdening agricultural practices.

SB3315 is not about hindering agriculture, but about ensuring responsible use of RUPs to protect public health and the environment. By implementing clear reporting standards and science-backed buffer zones, we can achieve a balance that benefits everyone.

I urge you to carefully consider the positive implications of SB3315 and vote in favor of this important legislation. Mahalo nui loa for your time and consideration.

Jessica dos Santos

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support SB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass SB3315.

Mahalo for your consideration!

Robert H. Pahia  
Maui, Hawaii

**SB-3315**

Submitted on: 2/5/2024 8:11:46 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
jenelle higgins	Individual	Support	Written Testimony Only

Comments:

Please pass this bill for the future of our children; they're being poisoned by Monsanto/pioneer at Waialua High School for years now. They spray behind the high school during school hours and kids constntly go home feeling sick. This is not right, please pass this bill to discontinue this dispecable practice.

February 5, 2024

Malia Chun

Kekaha, Hawai'i

Testimony Re: SUPPORT for SB3315 and SB3316

Aloha Senate Committee on Agriculture and Environment,

I am writing as a concerned mother from a small, rural community on the west side of Kaua'i, that is surrounded by "test seed" or "ag" companies who regularly use restricted use pesticides. My family has been directly impacted by exposure to such RUP's and understands first hand the effects such exposure can have on one's health and well being. We also understand that with our regular tradewinds and being in such close proximity to these ag.fields that drift is inevitable and leaves our communities and most vulnerable, keiki and kupuna, exposed to such pesticides.

It is for these reasons that I strongly support SB3315 and SB 3316, which will address the current gaps in public health protection and reporting. I urge you to please consider the health of your own keiki, kupuna and 'ohana and vote in support of these bills.

Mahalo nui for your time and consideration,

Malia Chun

Mother, Educator

**SB-3315**

Submitted on: 2/5/2024 10:29:16 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Kapulei Flores	Individual	Support	Written Testimony Only

Comments:

Aloha,

I am writing in support of SB3315 that prohibits restricted use pesticides from being applied within 1/2 mile of schools and state/county parks. We must be cautious and protect our communities from harmful effects of pesticides.

Mahalo

**SB-3315**

Submitted on: 2/5/2024 10:52:40 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Kimeona Kane	Individual	Support	Written Testimony Only

Comments:

Aloha,

Kimeona Kane of Waimānalo in strong support of this bill which puts our communities and environment first. There is more than enough concern that highlight a need to address things like pesticides and the dangers they create and some which are yet to be discovered. This is a necessary step in the protection of our communities and hopefully this becomes a larger conversation targeting pesticides, insecticides, fungicides and others in specific spaces.

Mahalo for your support.

Kimeona Kane

**SB-3315**

Submitted on: 2/5/2024 11:00:09 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Lauren Blickley	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315.

As a mom of two young children (ages 4 and 2), I am extremely concerned about how our actions on the land impact children across Hawai‘i. Our children should be able to go to schools, play on the playground, and enjoy parks without the threat of being exposed to harmful pesticides.

An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our children and pass HB3315.

Mahalo for your consideration!

Lauren Blickley

**SB-3315**

Submitted on: 2/6/2024 12:12:53 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Sherry Pollack	Individual	Support	Written Testimony Only

Comments:

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass SB3315.



**SB-3315**

Submitted on: 2/6/2024 6:55:33 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Melissa Barker	Individual	Support	Written Testimony Only

Comments:

Honorable Chair Gabbard, Vice Chair Richards and Members of the Committee,

I am writing to respectfully ask that you support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

Please support this bill.

Thank you for your attention and consideration.

Melissa Barker

Kapaa, HI

**SB-3315**

Submitted on: 2/6/2024 8:33:05 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Susan Stayton	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

I am writing as a concerned citizen of this state for over 35 years and a senior citizen. Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and all our citizens and pass HB3315.

Mahalo for your consideration!

Susan Stayton, Lawai, Kauai, HI

**SB-3315**

Submitted on: 2/6/2024 7:35:55 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Nick Croft	Individual	Support	Written Testimony Only

Comments:

Aloha Chair, Vice Chair, & Committee Members,

My name is Nick Croft and I support SB3315. A 1/2 mile buffer zone around schools and parks should be the bare minimum. A growing child should never be susceptible to poisons that can cause difficulties to their bodies. This is a no brainer, for the children!

Mahalo Nui Loa,

Nick Croft

**SB-3315**

Submitted on: 2/6/2024 9:52:52 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Lela Kalama	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support HB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Lela Kalama, Keaau, HI

**SB-3315**

Submitted on: 2/6/2024 8:57:33 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Vanessa Ruderman	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support SB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, the elderly and sensitive areas. Keiki are particularly vulnerable to pesticide exposure when they play outdoors, roll around in the grass, kick up dirt, and then stop for a snack. They are unaware that they are ingesting the harmful pesticides that have been applied to their environments.

The lack of detailed pesticide data makes it difficult for researchers and policymakers to accurately assess the extent of pesticide drift and its impact on communities. Without this information, it is challenging to develop effective strategies to protect public health and the environment. To address this issue, it is crucial to improve the reporting and monitoring of pesticide use. A more comprehensive system should be implemented, one that includes not only the types and amounts of pesticides used but also the exact locations and timing of their application. This level of specificity would allow researchers to analyze the data and identify patterns of drift, hotspots, and potential health risks. Furthermore, it is essential to involve communities in the decision-making process when it comes to pesticide use. Local residents should have the right to know what chemicals are being applied in their surroundings and how it may affect their health. Existing guidelines for pesticide application need to be strengthened to minimize drift and protect vulnerable populations like children. Implementing buffer zones around schools, parks, and residential areas can help reduce the exposure of keiki and other community members to harmful chemicals. In conclusion, urgent action is needed to protect communities from pesticide drift and its detrimental effects on public health and the environment. By improving data reporting, involving communities, strengthening regulations, and promoting alternative pest management strategies, we can ensure a safer and healthier future for all. It is our responsibility to prioritize the well-being of keiki and safeguard the places they play, learn, and grow.

Mahalo for your consideration,

Vanessa Ruderman, Waimea



**SB-3315**

Submitted on: 2/6/2024 10:48:09 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Jessica Kuzmier	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please support SB3315. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please support this bill. Mahalo for your time.

**SB-3315**

Submitted on: 2/6/2024 10:57:44 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Jonathan Simonds	Individual	Support	Written Testimony Only

Comments:

Dear Chair Gabbard, Vice Chair Richards and Members of the Committee,

Although I don't believe that SB3315 goes far enough to protect our children from pesticide drift, it is an encouraging start and I strongly support its passage.

In the future, I think that the legislature should consider temporal effects of pesticide drift, not just the spatial effects.

For example, I believe that this bill, as written, is likely to shift pesticide application to immediately before and immediately after "normal school hours." Both times are concerning because children are outside walking to school at these times. That said, I think that morning applications are especially concerning because plumes take time to move, disperse, and settle, and much of this may still occur during the school day. Further scientific evidence is called for on the possible arrival times and dispersal times of pesticide plumes as a function of application times.

Further, the act preamble refers to volatilization of chemicals off of previously treated areas. This is clearly a time-dependant process. As the scientific understanding of these processes deepen, legislation should be updated to reflect the new understanding.

On this issue, I would prefer a more conservative legislative approach: ban the offending chemicals within a 0.8 mile radius of schools, compensate farmers if necessary for lost productivity, and only create exceptions to reallow applications of these chemicals as robust scientific evidence demonstrates safe **distances** and **times**. In my opinion, no good evidence for the latter has yet been presented.

Alternatively, since there are so many remaining routes of exposure for our children, I would also support the creation of an agency with more specific technical knowledge with the mandate to protect the citizenry from pesticides and agricultural contaminants. This agency could be more targeted and effective.

Until these such bills are introduced, I support SB3315 and recommend it for passage. Thank you for your consideration!



Best,  
Jonathan Simonds

Kapa'au, Hawai'i Island

**SB-3315**

Submitted on: 2/6/2024 11:13:39 AM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Dylan Pilger	Individual	Support	Written Testimony Only

Comments:

Aloha Senate Committee on Agriculture and Environment,

My name is Dylan Pilger, and I am writing testimony in strong support of SB3315.

I am a life-long resident of Oahu and currently pursuing a Master of Public Health. Through my studies I familiarized myself with the issue of Restricted Use-Pesticides (RUPs) and assisted in research on the impacts to the health of surrounding communities. The research is clear that RUPs are associated with increased health risks to surrounding communities, however, the specifics of how it is impacting communities in Hawaii is unclear due to insufficient reporting requirements. The research I conducted consisted of using the available data on RUP usage and GIS mapping tools to better understand potential impacts to surrounding communities. However, the current regulations do not require reporting to be in a single unit. This makes handling data unnecessarily difficult. If reporting were required to be in a single unit it would be much easier to compare RUP usage in different geographic areas to understand the health implications to surrounding communities.

Furthermore, wider buffer zones of 1/2 mile are consistent with regulations in other states and are necessary to keep our keiki safe.

SB3315 would address these two issues by requiring reporting be in a single unit and extending buffer zones to 1/2 mile.

For these reasons I strongly support SB3315 and I ask that you all do the same to keep our communities safe.

Mahalo nui,  
Dylan Pilger

**SB-3315**

Submitted on: 2/6/2024 1:00:50 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Danielle Lee	Individual	Support	Written Testimony Only

Comments:

Aloha Chair Gabbard, Vice Chair Richards and Members of the Committee,

Please protect our keiki and pass SB3315. We need to take care of our future generations.

An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Mahalo for your consideration!

Danielle, Waialua

## Testimony in support of SB3315

My name is Rosana Hernandez Weldon and I am writing in support of SB3315 to improve Restricted Use Pesticide (RUP) reporting by requiring: 1) use of consistent units of measurements in its summary to the public, and 2) to increase buffer zones such that RUPs may not be used within one-half mile from schools and public parks.

I am an Environmental Health Scientist and I currently hold the position of Associate Specialist Research Faculty at the University of Hawaii (UH) at Manoa in the Office of Public Health Studies. Prior to my employment at UH, I worked with researchers at the University of California (UC), Berkeley on a longitudinal birth cohort study of women exposed to pesticides in the Salinas Valley of California called the CHAMACOS (Center for the Health Assessment of Mothers and Children of Salinas) Study. This study has now followed mothers and children for approximately 20 years. The studies of this cohort and others have concluded that pesticide exposure is associated with adverse health outcomes for children including poorer neurodevelopment. For the past 30 years California has had extremely comprehensive and detailed pesticide use reporting (PUR) requirements that include the date and time of application, geographic location, field location, commodity/crop/site treated, acres or units treated, EPA pesticide registration number of the product applied, and the amount of product applied. In 2003 California launched the web-based California Pesticide Information Portal (CalPIP) database which made access to the pesticide use data easier for the public and researchers to utilize. This database contains pesticide use location information to a 1 square-mile area.

California's PUR data have been used as an exposure assessment tool to estimate human health effects of pesticides for decades and have helped support legislation that limits or bans some pesticide use. These PUR data have been validated by two exposure assessment studies that show high correlations between nearby ambient air concentrations and location of pesticide use as reported in the database. (Harnly et al, 2005 & Wofford et al, 2014)

The California PUR data have been instrumental to the CHAMACOS study and other studies in California. In combination with data on residential proximity to fields, used as a proxy for pesticide exposure, several associations between pesticides and health effects have been determined. A brief summary of the findings of a sample of the literature, as reported by the original authors, as well as the citations are below:

- Gunier, Robert B., et al. "Prenatal residential proximity to agricultural pesticide use and IQ in 7-year-old children." *Environmental health perspectives* 125.5 (2017): 057002.
  - This study identified potential relationships between maternal residential proximity to agricultural use of neurotoxic pesticides (organophosphates, pyrethroids, neonicotinoids, and manganese fungicides) and poorer neurodevelopment in children. <https://doi.org/10.1289/EHP504>
- Rull, Rudolph P., et al. "Residential proximity to agricultural pesticide applications and childhood acute lymphoblastic leukemia." *Environmental research* 109.7 (2009): 891-899.
  - Specific pesticides may play a role in the etiology of childhood leukemia.
- Rowe, Christopher, et al. "Residential proximity to organophosphate and carbamate pesticide use during pregnancy, poverty during childhood, and cognitive functioning in 10-year-old children." *Environmental research* 150 (2016): 128-137.

- Residential proximity to OP and carbamate pesticide use during pregnancy and both household- and neighborhood-level poverty during childhood were independently associated with poorer cognitive functioning in children at 10 years of age.
- Sagiv, Sharon K., et al. "Prenatal exposure to organophosphate pesticides and functional neuroimaging in adolescents living in proximity to pesticide application." *Proceedings of the National Academy of Sciences* 116.37 (2019): 18347-18356.
  - This first functional neuroimaging study of prenatal OP exposure suggests that pesticides may impact cortical brain activation, which could underlie previously reported OP-related associations with cognitive and behavioral function.
- Gemmill, Alison, et al. "Residential proximity to methyl bromide use and birth outcomes in an agricultural population in California." *Environmental health perspectives* 121.6 (2013): 737-743.
  - Residential proximity to methyl bromide use during the second trimester was associated with markers of restricted fetal growth in our study.

Thus, there is a large body of epidemiological evidence that proximity to fields is associated with adverse health effects in children. Children are a vulnerable population and are particularly susceptible to health effects of chemical exposures for several reasons: 1) they eat, drink and breathe more per unit of body weight than adults; 2) their systems are developing; 3) they may not have as much ability to detoxify chemicals as adults; 4) they have behaviors such as crawling and putting objects in their mouths that increase potential exposures. Thus, children need to be protected from hazards. Buffer zones are one tool that can be used to help protect our children. In addition, the public should be able to assess their risk from pesticide exposure by having reports that are intelligible and reported consistently.

In conclusion, I fully support SB3315 because our children need to be protected from exposure to the most toxic of the pesticides that are available, RUPs. Not allowing RUP use within one-half mile of the locations where children are likely to be present is one tool to protect child health.

Sincerely,

Rosana Weldon, Ph.D., M.P.H.  
Associate Specialist  
Office of Public Health Studies  
University of Hawaii at Manoa

**SB-3315**

Submitted on: 2/6/2024 1:30:56 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Kaiakahinalii Kaopua-Canonigo	Individual	Support	Written Testimony Only

Comments:

Gabbard, Vice Chair Richards and Members of the Committee,

Please **support HB3315**. An abundance of scientific literature on pesticide drift and the unique susceptibility of children to pesticide exposure provide a sound argument for establishing meaningful buffer zones to ensure even protections for communities, children, elderly and sensitive areas.

California has enacted similar legislation requiring pesticide buffer zones around schools, the farmworkers and communities living near agricultural areas. The measure had originally advocated for 1 mile buffer zones due to the abundance of research documenting pesticide drift and related health impacts up to a mile or further from the fields where they were applied.

The American Academy of Pediatrics (AAP) finds there to be a significantly increased health risk for children exposed to pesticides, and additional precautions must be taken to protect them from unintended exposure.

I am very concerned about long-term pesticide exposure of keiki while they are at school or at play in our parks, which constitutes a health threat that can lead to cancer, neurological, and respiratory damage, among other medical conditions.

Please protect our keiki and pass HB3315.

Mahalo for your consideration!

Kaiakahinali'i Ka'ōpua

**SB-3315**

Submitted on: 2/6/2024 3:22:52 PM

Testimony for AEN on 2/7/2024 1:00:00 PM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Testify</b>
Ruta Jordans	Individual	Support	Written Testimony Only

Comments:

Please support