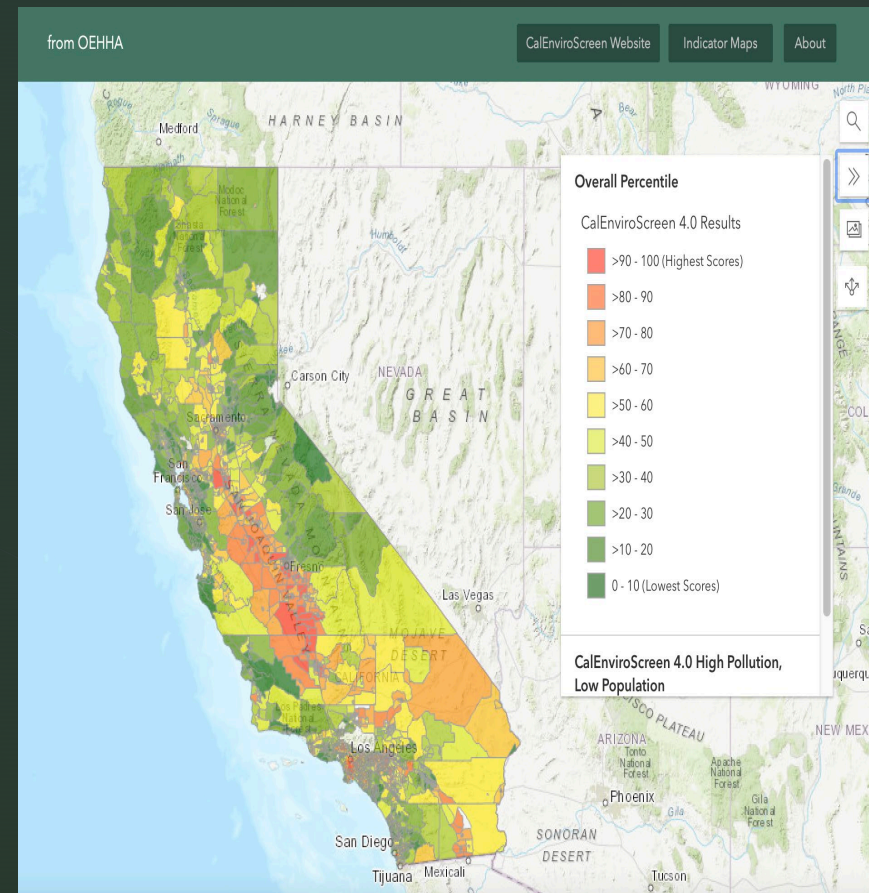
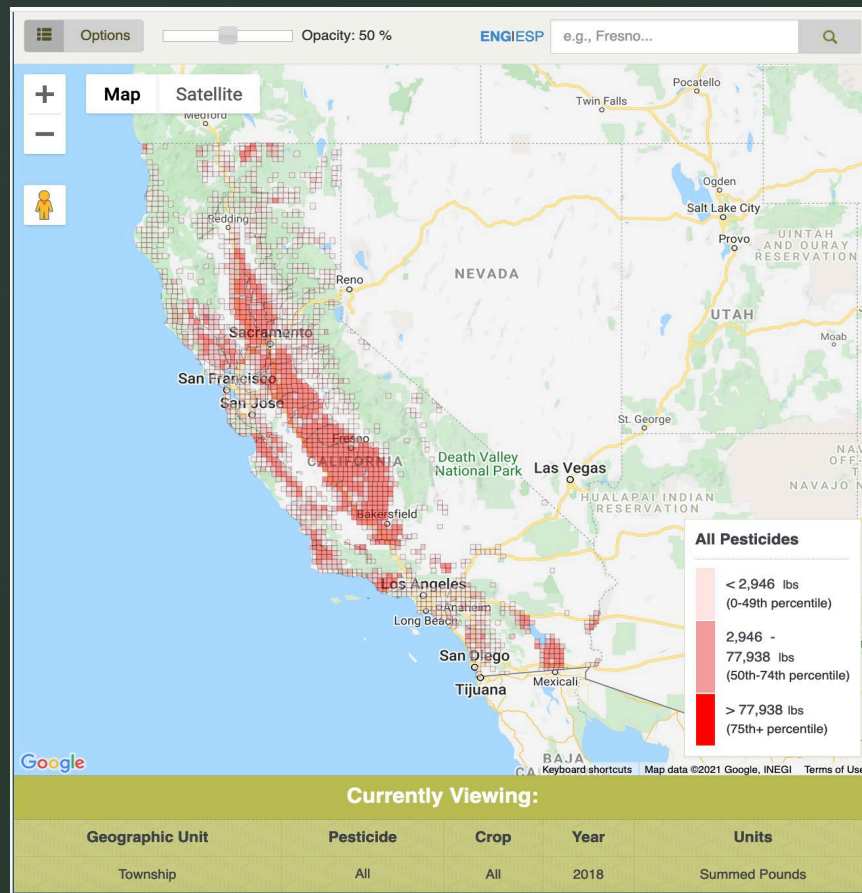


Agricultural Pesticide Use in California: An Environmental Injustice

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December 14, 2021

Disproportionate Impact of Ag Pesticide Use in California

- Approximately 200 million pounds of agricultural pesticides are applied to California fields each year, primarily in the Central Valley, Central and South Coast, Imperial County and Eastern Coachella Valley.



What if we looked at pesticide data for the *most* Latinx counties in California?

The 11 counties with more than 50% Latinx populations – about 6 million people.

County	% Latinx	Total Population, All Races	Cancer-Causing Ag Pesticides (lbs. in 2017)	Reproductive & Developmental Toxicant Ag pesticides (lbs. in 2017)	Acute pesticide-related illnesses (all pesticides, 2017)
Imperial	84.6	181,215	799,122	290,834	12
Tulare	65.2	466,195	1,736,895	319,271	29
San Benito	60.6	62,808	179,065	145,316	0
Colusa	60.3	21,547	364,063	36,716	1
Merced	60.2	277,680	3,437,136	1,349,383	22
Monterey	59.1	464,061	152,9871	219,649	116
Madera	58.3	157,327	1,505,649	274,586	50
Kings	55.0	152,940	1,719,690	776,511	5
Kern	54.0	900,202	7,181,411	4,364,528	179
San Bernardino	54.0	2,180,085	27,426	216	48
Fresno	53.5	999,101	6,147,852	2,356,929	42
11 Counties	> 50% Latinx	5,863,161	24,628,180	10,133,939	504

And compared these data with the *least* Latinx counties ...

The 25 counties with less than 24% Latinx populations – about 6 million people (but takes 2 slides).

County	% Latinx	Total Population, All Races	Cancer-Causing Ag Pesticides (lbs in 2017)	Reproductive & Developmental Toxicant Ag pesticides (lbs in 2017)	Acute pesticide-related illnesses (all pesticides, 2017)
Sacramento	23.4	1,552,058	197,576	24,537	34
San Luis Obispo	22.8	283,111	585,089	108,981	15
Inyo	22.7	18,039	1,442	1,656	0
Alameda	22.4	1,671,329	5,301	347	18
Lake	21.3	64,386	33,516	5,017	7
Del Norte	20.0	27,812	209,439	100,308	1
Lassen	19.2	30,573	12,674	14,058	2
Butte	16.7	219,186	654,383	16,980	7
Marin	16.1	258,826	397	10	1
San Francisco	15.2	881,549	0	0	12
Amador	14.4	39,752	5,264	392	0
Placer	14.3	398,329	2,2007	22, 418	5
Modoc	14.2	8,841	14,985	3,540	0

The totals for Carcinogenic, Reproductive & Developmental Toxicant Ag Pesticides, as well as Acute Pesticide Illnesses are far higher in the Most Latinx counties

County	% Latinx	Total Population, All Races	Cancer-Causing Ag Pesticides (lbs in 2017)	Reproductive & Developmental Toxicant Ag pesticides (lbs in 2017)	Acute pesticide-related illnesses (all pesticides, 2017)
El Dorado	12.9	192,843	21,489	362	5
Siskiyou	12.9	43,539	70,999	652,850	0
Tuolumne	12.7	54,478	26,246	1	3
Calaveras	12.4	45,905	6,612	561	1
Sierra	12.1	3,005	224	0	0
Humboldt	11.8	135,558	1,927	53	7
Mariposa	11.6	17,203	213	143	1
Alpine	11.4	1,129	17	0	0
Shasta	10.3	180,080	46,258	32,483	2
Nevada	9.7	99,755	1,628	246	2
Plumas	9.2	18,807	5,681	22,418	2
Trinity	7.5	12,285	6,268	0	0
25 Counties	< 24% Latinx	6,258,378	1,929,635	1,007,361	125

Disproportionate Impact of Pesticides by Race/Ethnicity

Most Latinx (>50%) Counties

County	% Latinx	Total Population, All Races	Cancer-Causing Ag Pesticides (lbs. in 2017)	Reproductive & Developmental Toxicant Ag pesticides (lbs. in 2017)	Acute pesticide-related illnesses (all pesticides, 2017)
11 Counties	> 50% Latinx	5,863,161	24,628,180	10,133,939	504
Per person	57% Latinx		4.20	1.73	.000086

Least Latinx (<24%) Counties

County	% Latinx	Total Population, All Races	Cancer-Causing Ag Pesticides (lbs in 2017)	Reproductive & Developmental Toxicant Ag pesticides (lbs. in 2017)	Acute pesticide-related illnesses (all pesticides, 2017)
25 Counties	< 24% Latinx	6,258,378	1,929,635	1,007,361	125
Per person	19% Latinx		0.31	0.16	.000020

Most (>50%) Latinx vs. Least (<24%) Latinx

Carcinogens: 13.62 (1,362%)

Reproductive & Developmental Toxicants: 10.74 (1,074%)

Acute pesticide illnesses: 4.30 (430%)

Disproportionate Impact of Hazardous Pesticides on Latinx Communities in California

- According to the most recent US and California government data, an average person who lives in the 11 California counties with a majority Latinx population as compared to the 25 counties with the smallest Latinx proportions
 - Is more than four times (430%) as likely to suffer from an acute pesticide-related illness
 - Lives where there are fourteen times (1,362%) more Carcinogenic agricultural pesticides applied per person
 - Lives where there are eleven times (1,074%) more agricultural pesticides listed as Reproductive and Developmental Toxicants applied per person.

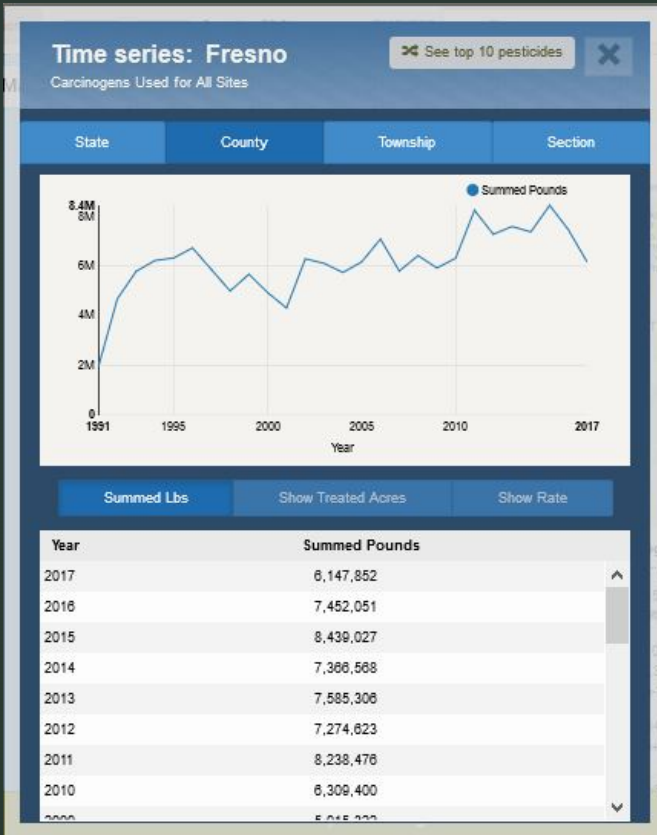
▶ “The most stringent pesticide regulations in the nation” – not good enough!

- California uses more pesticides than any other state, so it SHOULD be best at regulating them, as the public health risks from pesticides are greatest here
- “Most stringent” in *this* nation is a very low standard--in many California counties, many of the pesticides used are banned in other countries of the world
- And pesticides can travel far

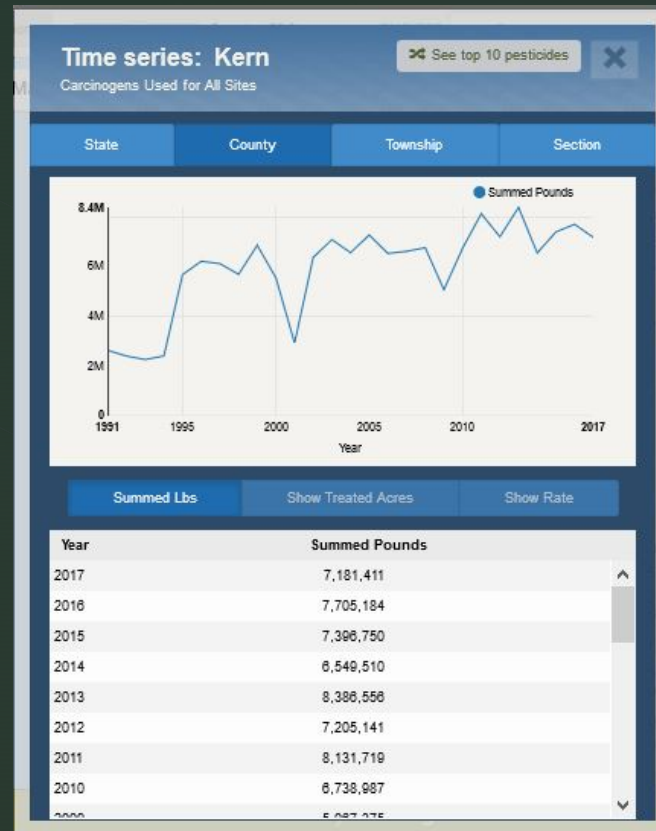
One example: *Partial* list of agricultural pesticides used in Fresno County that are banned in at least two dozen other countries of the world (number of bans in parentheses)

- 
- 1,3-dichloropropene (29)
 - Acephate (32)
 - Atrazine (37)
 - Bensulide (29)
 - Carbaryl (35)
 - Chloropicrin (34)
 - Dinotefuran (28)
 - Iprodione (29)
 - Linuron (31)
 - Maneb (29)
 - Naled (28)
 - Propargite (29)
 - Simazine (31)
 - Trifluralin (28)

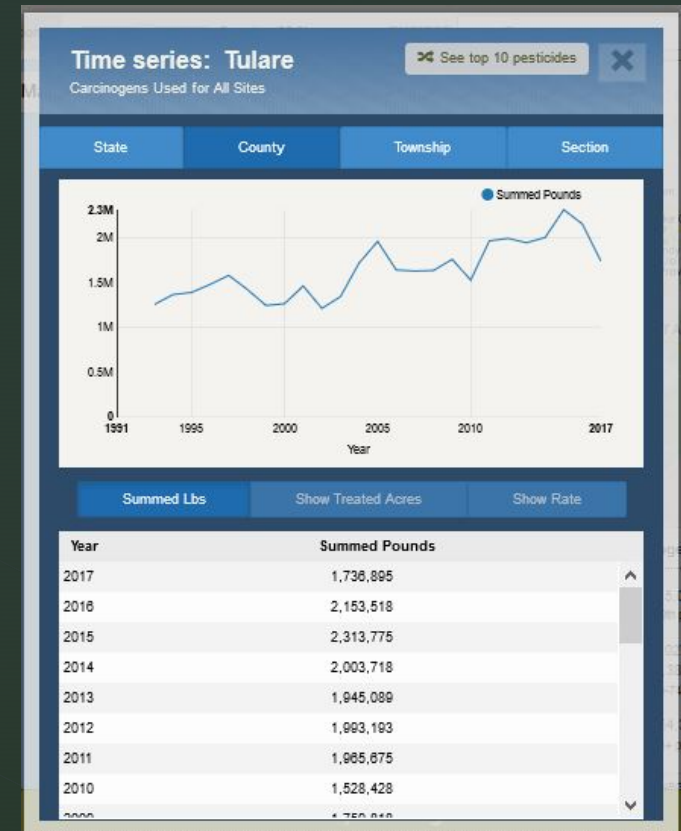
Cancer-Causing Pesticides are Increasing



1991-2010: 5,659,780 lbs./yr.
2011-2017: 7,500,558 lbs./yr.



1991-2010: 5,384,692 lbs./yr.
2011-2017: 7,508,039 lbs./yr.



1991-2010: 1,458,560 lbs./yr.
2011-2017: 2,015,980 lbs./yr.

Especially Concerning: Climate & Health Impacts from Heavily-Used Fumigant Pesticides

- Fumigants are among the most dangerous pesticides on the market
- Approximately 40 million pounds of fumigants are applied each year in CA
- All fumigants are Toxic Air Contaminants and contribute to Volatile Organic Compound (VOC) emissions and unhealthy air (smog)
- Research shows fumigants contribute to the development of the potent greenhouse gases tropospheric ozone and nitrous oxide





“Society’s canaries”

“In the old days, miners would carry birds with them to warn against poison gas. Hopefully, the birds would die before the miners.

Farm workers are society's canaries.

Farm workers--and their children--demonstrate the effects of pesticide poisoning before anyone else.”

—Cesar Chavez