

Use Trends of Cholinesterase-Inhibiting Pesticides: Cumulative Acres Treated

Text files of data are available at <<https://files.cdpr.ca.gov/pub/outgoing/pur/data/>>. The reported cumulative acres treated with chemicals that are organophosphorus or carbamate cholinesterase-inhibiting pesticides. Use includes primarily agricultural applications (Most nonagricultural pesticide use reports are not required to report acreage. A zero indicates some nonagricultural use occurred, but acreage was not reported. The word "none" or "N/A" indicates no use at all that year). The grand total for acres treated may be less than the sum of acres treated for all chemicals because some products contain more than one active ingredient.

Chemical	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
3-iodo-2-propynyl butylcarbamate	0	<0.01	<0.01	<0.01	<0.01	3	8	5	<0.01	<0.01
acephate	132,428	183,388	122,703	163,105	172,589	177,380	158,478	155,270	128,232	124,741
aldicarb	1,451	1,882	166	N/A	N/A	N/A	N/A	N/A	N/A	N/A
azinphos-methyl	1,639	25	N/A	1	N/A	<0.01	N/A	N/A	N/A	N/A
bendiocarb	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
bensulide	79,197	84,611	85,657	94,191	79,317	77,374	85,846	85,330	90,307	93,386
butylate	N/A	20	12	N/A	8	N/A	N/A	N/A	N/A	N/A
carbaryl	97,229	96,667	108,805	136,319	116,667	106,736	99,823	98,844	108,678	108,332
carbophenothion	31	N/A	N/A	N/A	N/A	1	N/A	N/A	0	N/A
chlorpyrifos	1,056,329	1,297,547	1,108,167	829,304	641,560	690,841	432,121	6,999	7,179	2,771
coumaphos	<0.01	1	N/A	62	N/A	<0.01	1	N/A	N/A	N/A
crotoxyphos	N/A	N/A	N/A	N/A	<0.01	N/A	N/A	N/A	N/A	N/A
cycloate	17,565	16,045	19,124	21,056	23,173	23,962	20,943	23,472	21,461	20,840
ddvp	6,530	5,593	3,307	6,282	3,317	787	12	829	735	868
ddvp, other related	5,442	5,537	3,301	5,149	3,287	703	10	615	470	569
diazinon	48,594	35,069	32,862	27,004	24,353	24,579	17,936	18,253	20,432	15,986
dicrotophos	N/A	N/A	23	<0.01	N/A	N/A	N/A	N/A	N/A	N/A
dimethoate	422,259	594,688	725,261	626,623	531,217	499,453	436,246	466,178	440,355	292,903
dioxathion	N/A	78	N/A	N/A	N/A	<0.01	N/A	N/A	N/A	<0.01
dioxathion, other related	N/A	78	N/A	N/A	N/A	<0.01	N/A	N/A	N/A	<0.01

Chemical	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
disulfoton	2,595	1,042	1,157	205	16	<0.01	<0.01	<0.01	<0.01	<0.01
epn	<0.01	2	<0.01	<0.01	2	<0.01	<0.01	<0.01	5	62
eptc	56,872	69,989	89,126	91,525	100,883	104,142	91,173	74,693	70,291	52,040
ethephon	533,890	475,399	414,279	363,766	452,937	552,299	495,611	501,534	417,729	381,836
ethion	332	N/A	<0.01	306	N/A	30	N/A	94	N/A	<0.01
ethoprop	541	676	844	591	575	582	1,712	1,682	2,299	2,466
fenamiphos	2,691	1,437	465	<0.01	<0.01	20	<0.01	N/A	N/A	N/A
fenoxycarb	110	37	58	15	33	76	20	6	11	3
fenthion	N/A	N/A	<0.01	N/A	60	N/A	N/A	1	<0.01	N/A
formetanate hydrochloride	21,821	27,894	28,234	31,515	41,115	36,188	38,494	40,361	31,805	50,369
malathion	271,663	289,865	285,266	266,825	218,571	204,397	216,999	200,956	218,097	157,033
methamidophos	<0.01	69	N/A	N/A	N/A	2	<0.01	N/A	N/A	N/A
methidathion	31,741	9,046	3,564	453	198	27	138	6	<0.01	13
methiocarb	2,802	3,378	2,409	2,444	1,771	1,934	1,380	1,133	945	847
methomyl	473,041	439,832	449,913	453,834	431,681	386,649	375,222	339,451	410,977	368,623
methyl parathion	15,551	12,486	<0.01	298	60	<0.01	27	4	75	177
methyl parathion, other related	15,337	12,440	<0.01	36	18	N/A	N/A	<0.01	4	N/A
mevinphos	3	<0.01	51	51	23	N/A	136	123	150	N/A
mevinphos, other related	3	N/A	51	51	23	N/A	136	123	150	N/A
mexacarbate	N/A	<0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
molinate	0	3	0	1	1	N/A	N/A	<0.01	<0.01	N/A
naled	109,008	160,907	139,823	164,587	175,205	175,253	190,237	218,432	144,276	136,832
oxamyl	61,939	83,581	75,324	21,033	3,301	40,943	90,629	108,677	64,480	28,705
oxydemeton-methyl	18,204	12,163	9,096	7,355	7,883	3,555	3,111	17	<0.01	0
parathion	15	<0.01	1	207	82	60	<0.01	304	80	<0.01
parathion, other related	10	N/A	N/A	10	4	N/A	N/A	N/A	N/A	N/A
phorate	47,176	22,469	25,700	14,682	16,300	23,653	20,590	24,751	14,039	8,011
phosacetin	N/A	<0.01	<0.01	<0.01	N/A	1	3	4	N/A	N/A
phosmet	18,923	23,726	21,122	10,336	11,297	7,751	8,407	9,538	16,737	10,495

Chemical	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
phosphamidon	N/A	N/A	N/A	N/A	35	N/A	N/A	4	N/A	N/A
phosphamidon, other related	N/A	N/A	N/A	N/A	35	N/A	N/A	4	N/A	N/A
profenofos	155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
propetamphos	<0.01	<0.01	3,621	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
propoxur	<0.01	4	179	39	19	<0.01	25	<0.01	<0.01	<0.01
ronnel	N/A	11	<0.01	<0.01	<0.01	<0.01	N/A	2	<0.01	<0.01
s,s,s-tributyl phosphorotrithioate	21,894	22,774	15,139	7,582	7,725	10,624	11,007	6,091	5,106	5,449
sodium dimethyl dithio carbamate	<0.01	<0.01	<0.01	<0.01	6	10	1	<0.01	<0.01	<0.01
temephos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
tetrachlorvinphos	8	4	3	1,044	5	3	<0.01	<0.01	0	<0.01
thiobencarb	79,689	84,726	107,636	148,349	197,836	178,307	172,814	190,273	177,061	116,407
thiodicarb	206	247	N/A	N/A	N/A	<0.01	N/A	N/A	N/A	N/A
triallate	2,715	2,998	3,918	3,221	3,665	1,064	2,525	1,023	191	599
trichlorfon	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0
Total	3,636,816	4,060,330	3,882,910	3,492,802	3,263,457	3,328,638	2,971,601	2,574,337	2,391,727	1,979,731