

Use Trends of Cholinesterase-Inhibiting Pesticides: Pounds Applied

Text files of data are available at <<https://files.cdpr.ca.gov/pub/outgoing/pur/data/>>. The reported pounds of chemicals used that are organophosphorus or carbamate cholinesterase-inhibiting pesticides. Use includes both agricultural and reportable nonagricultural applications. The word "none" or "N/A" indicates no use at all that year. Values > 1 are rounded.

Chemical	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
3-iodo-2-propynyl butylcarbamate	102	<1	19	<1	28	2,980	3,002	2,636	1,303	1,415
acephate	152,610	130,472	185,274	144,640	170,760	159,353	192,134	171,300	158,577	123,669
aldicarb	24,167	1,489	1,487	126	N/A	N/A	N/A	N/A	N/A	N/A
azinphos-methyl	1,582	1,232	32	N/A	1	N/A	1	N/A	N/A	N/A
bendiocarb	3	3	2	4	1	4	3	2	2	1
bensulide	288,435	267,067	285,697	319,400	346,174	293,204	285,284	312,131	312,589	336,437
butylate	N/A	N/A	88	53	N/A	10	N/A	N/A	N/A	N/A
carbaryl	74,946	113,845	117,272	131,744	155,525	221,095	107,453	128,818	113,531	110,231
carbofuran	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
carbophenothion	4	1,204	N/A	N/A	N/A	N/A	<1	N/A	N/A	<1
chlorpyrifos	1,301,135	1,107,027	1,469,645	1,312,209	1,107,417	903,262	948,004	602,946	12,817	14,120
coumaphos	3	3	14	N/A	1	N/A	<1	5	N/A	N/A
crotoxyphos	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	N/A	N/A
cycloate	31,037	33,562	30,619	36,566	39,691	45,150	49,844	41,749	43,662	41,520
ddvp	5,480	4,890	4,630	4,034	4,084	3,868	3,456	3,515	3,309	4,477
ddvp, other related	268	276	278	162	165	123	113	109	84	153
diazinon	86,648	78,523	61,224	61,126	52,665	48,991	72,612	33,497	40,113	45,569
dicrotophos	N/A	N/A	N/A	5	<1	N/A	N/A	N/A	N/A	N/A
dimethoate	226,676	183,239	276,329	334,563	288,769	243,736	223,336	167,955	161,499	149,524
dioxathion	N/A	N/A	9	N/A	N/A	N/A	<1	N/A	N/A	N/A
dioxathion, other related	N/A	N/A	4	N/A	N/A	N/A	<1	N/A	N/A	N/A

Chemical	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
disulfoton	4,351	5,479	1,924	2,219	415	10	12	16	20	4
epn	13	8	20	425	1	2	<1	1	4	16
eptc	126,397	168,665	187,349	235,271	238,014	255,431	259,751	218,451	187,053	172,987
ethephon	548,799	484,406	397,060	348,653	319,356	399,909	485,226	433,744	444,993	348,473
ethion	1	44	N/A	<1	1	N/A	<1	N/A	2	N/A
ethoprop	7,475	2,077	2,502	3,076	1,820	2,023	2,134	5,848	5,950	7,792
fenamiphos	2,964	5,254	2,244	865	97	143	131	<1	N/A	N/A
fenoxycarb	3	2	1	1	9	2	3	1	<1	<1
fenthion	<1	N/A	N/A	<1	N/A	<1	N/A	N/A	<1	<1
formetanate hydrochloride	20,952	20,446	26,912	28,333	31,172	42,037	36,709	40,183	42,670	33,658
malathion	512,004	405,415	446,890	502,997	443,128	355,223	334,893	361,816	324,989	355,049
methamidophos	6,037	<1	55	N/A	N/A	N/A	1	<1	N/A	N/A
methidathion	29,545	23,396	6,375	3,614	245	146	11	140	2	<1
methiocarb	2,708	3,790	3,679	3,722	3,371	2,810	2,803	2,485	1,848	1,327
methomyl	220,085	273,338	260,662	278,690	282,507	260,627	234,580	224,670	204,228	258,100
methyl parathion	22,970	25,408	21,520	481	182	24	5	10	4	74
methyl parathion, other related	1,195	1,334	1,131	<1	5	<1	N/A	N/A	<1	<1
mevinphos	118	3	<1	8	9	4	N/A	7	150	19
mevinphos, other related	79	2	N/A	5	6	3	N/A	5	100	12
mexacarbate	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
molinate	<1	3	<1	<1	<1	5	N/A	N/A	<1	4
naled	199,203	153,116	218,690	225,285	288,485	316,868	283,944	330,866	317,840	203,316
oxamyl	136,967	52,987	73,003	65,785	17,236	2,466	38,302	78,741	103,801	63,301
oxydemeton-methyl	26,017	17,562	10,656	8,407	6,610	3,764	1,533	1,460	9	1
parathion	196	25	<1	1	836	41	3	3	49	11
parathion, other related	<1	<1	N/A	N/A	1	<1	N/A	N/A	N/A	N/A
phorate	46,430	61,545	30,909	32,683	19,519	20,378	29,897	25,477	30,815	17,841
phosacetin	N/A	N/A	<1	<1	<1	N/A	<1	<1	<1	N/A
phosmet	95,781	53,587	60,903	44,344	19,278	28,971	16,869	22,596	24,856	32,075
phosphamidon	N/A	N/A	N/A	N/A	N/A	6	N/A	N/A	1	N/A

Chemical	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
phosphamidon, other related	N/A	N/A	N/A	N/A	N/A	<1	N/A	N/A	<1	N/A
pirimicarb	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
profenofos	N/A	58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
propetamphos	139	170	127	3,047	5	2	<1	<1	1	1
propoxur	808	359	373	251	100	49	43	29	15	5
ronnel	2	N/A	1	1	112	16	12	N/A	<1	2
s,s,s-tributyl phosphorotrithioate	30,328	21,820	19,077	11,683	6,472	6,882	8,151	8,911	8,104	6,546
sodium dimethyl dithio carbamate	13,358	13,485	22,187	16,535	9,357	18,414	18,854	11,257	4,797	1,082
sulfotep	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
temephos	34	17	8	10	5	3	4	2	2	3
tetrachlorvinphos	912	665	2,660	629	173	66	55	109	63	31
thiobencarb	246,927	280,678	289,946	373,930	523,582	698,888	603,226	592,804	654,018	595,147
thiodicarb	472	145	156	N/A	N/A	N/A	1	N/A	N/A	N/A
triallate	2,671	3,752	4,530	5,886	4,830	5,217	1,568	3,796	1,422	287
trichlorfon	40	29	25	11	<1	<1	<1	4	7	2
Total	4,499,080	4,001,902	4,524,200	4,541,479	4,382,221	4,342,205	4,243,962	3,828,095	3,205,298	2,924,282