

# 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" 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	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
3-iodo-2-propynyl butylcarbamate	0	0	0	0	0	0	0	3	8	5
acephate	144,134	150,268	132,428	183,388	122,703	163,104	172,589	177,380	158,478	156,411
aldicarb	66,192	29,363	1,451	1,882	166	None	None	None	None	None
azinphos-methyl	1,724	1,809	1,639	25	None	1	None	0	None	None
bendiocarb	0	0	0	0	0	0	0	0	0	0
bensulide	78,736	84,201	79,197	84,611	85,657	94,185	79,317	77,374	85,843	84,747
butylate	60	None	None	20	12	None	8	None	None	None
carbaryl	81,683	68,469	97,229	96,667	108,805	136,319	116,667	106,736	99,449	97,953
carbofuran	15	30	None	None	None	None	None	None	None	None
carbophenothion	107	12	31	None	None	None	None	1	None	None
chlorpyrifos	1,099,064	1,189,181	1,056,329	1,297,547	1,108,167	829,304	641,561	690,841	431,961	6,957
coumaphos	0	0	0	1	None	62	None	0	1	None
crotoxyphos	None	None	None	None	None	None	0	None	None	None
cycloate	13,799	14,895	17,565	16,045	19,124	21,037	23,173	23,962	20,943	23,472
ddvp	1,880	5,184	6,530	5,593	3,307	6,282	3,317	787	12	829
ddvp, other related	410	1,945	5,442	5,537	3,301	5,149	3,287	703	10	615
diazinon	104,443	71,179	48,594	35,069	32,862	27,004	24,353	24,579	17,936	18,186
dicrotophos	None	None	None	None	23	0	None	None	None	None
dimethoate	436,845	533,330	422,259	594,688	725,261	626,623	531,217	499,453	436,139	463,896
dioxathion	0	None	None	78	None	None	None	0	None	None
dioxathion, other related	0	None	None	78	None	None	None	0	None	None
disulfoton	6,167	1,621	2,595	1,042	1,157	205	16	0	0	0
epn	135	0	0	2	0	0	2	0	0	0
eptc	44,289	47,930	56,872	69,989	89,126	91,512	100,883	104,142	91,173	72,656

Chemical	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
ethephon	455,338	603,012	533,890	475,399	414,279	363,766	452,937	552,727	495,541	501,233
ethion	184	81	332	None	0	306	None	30	None	94
ethoprop	1,378	1,892	541	676	844	591	575	582	1,712	1,682
fenamiphos	5,873	2,127	2,691	1,437	465	0	0	20	0	None
fenoxycarb	100	107	110	37	58	15	33	76	20	6
fenthion	0	0	None	None	0	None	60	None	None	1
fonofos	3	None	None	None	None	None	None	None	None	None
formetanate hydrochloride	30,898	22,038	21,821	27,894	28,234	31,515	41,115	36,188	38,494	40,356
malathion	434,717	281,044	271,654	289,865	285,266	266,825	218,571	204,397	216,999	200,129
merphos	0	None	None	None	None	None	None	None	None	None
merphos, other related	0	None	None	None	None	None	None	None	None	None
methamidophos	10,731	6,465	0	69	None	None	None	2	0	None
methidathion	49,968	34,918	31,741	9,046	3,564	453	198	27	138	6
methiocarb	2,335	2,057	2,802	3,378	2,409	2,444	1,771	1,934	1,380	1,119
methomyl	410,186	396,539	473,041	439,832	450,025	453,825	431,681	386,649	375,222	338,823
methyl parathion	13,046	13,343	15,551	12,486	0	298	60	0	27	5
methyl parathion, other related	13,029	13,327	15,337	12,440	0	36	18	None	None	1
mevinphos	11	108	3	0	51	51	23	None	136	123
mevinphos, other related	11	108	3	None	51	51	23	None	136	123
mexacarbate	None	None	None	0	None	None	None	None	None	None
molinate	6	0	0	3	0	1	1	None	None	0
naled	145,673	163,486	109,008	160,907	139,823	164,576	175,205	175,253	190,237	218,393
oxamyl	138,801	150,265	61,939	83,581	75,324	21,033	3,301	40,943	90,629	108,637
oxydemeton-methyl	86,131	27,447	18,204	12,163	9,096	7,355	7,883	3,555	3,111	17
parathion	56	68	15	0	1	207	82	60	0	299
parathion, other related	54	0	10	None	None	10	4	None	None	None
phorate	8,719	32,863	47,176	22,469	25,700	14,682	16,300	23,653	20,590	24,751
phosacetin	None	None	None	0	0	0	None	1	3	4
phosmet	40,276	33,692	18,923	23,726	21,122	10,336	11,297	7,751	8,407	9,483
phosphamidon	72	None	None	None	None	None	35	None	None	4
phosphamidon, other related	72	None	None	None	None	None	35	None	None	4
pirimicarb	0	0	None	None	None	None	None	None	None	None
profenofos	1,635	None	155	None	None	None	None	None	None	None
propetamphos	0	0	0	0	3,621	0	0	0	0	0
propoxur	0	3	0	4	179	39	19	0	25	0
ronnel	None	110	None	11	0	0	0	0	None	2

Chemical	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
s,s,s-tributyl phosphorotrithioate	15,785	27,139	21,894	22,774	15,139	7,582	7,725	10,624	11,007	6,091
sodium dimethyl dithio carbamate	13	0	0	0	0	0	6	10	1	0
sulfotep	None	1	None	None	None	None	None	None	None	None
temephos	0	0	0	0	0	0	0	0	0	0
tepp	3	None	None	None	None	None	None	None	None	None
tepp, other related	3	None	None	None	None	None	None	None	None	None
tetrachlorvinphos	5	5	8	4	3	1,044	5	3	0	0
thiobencarb	75,172	71,824	79,689	84,726	107,636	148,349	197,836	178,307	172,814	190,275
thiodicarb	192	656	206	247	None	None	None	0	None	None
triallate	867	1,854	2,715	2,998	3,918	3,221	3,665	1,064	2,525	1,023
trichlorfon	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4,007,227</b>	<b>4,070,314</b>	<b>3,636,807</b>	<b>4,060,330</b>	<b>3,883,022</b>	<b>3,492,743</b>	<b>3,263,458</b>	<b>3,329,066</b>	<b>2,970,889</b>	<b>2,567,665</b>