

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	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
3-iodo-2-propynyl butylcarbamate	<0.01	<0.01	<0.01	<0.01	3	8	5	<0.01	<0.01	<0.01
Acephate	183,388	122,703	163,105	172,589	177,380	158,478	155,270	128,232	122,180	113,543
Aldicarb	1,882	166	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Azinphos-methyl	25	N/A	1	N/A	<0.01	N/A	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	84,611	85,657	94,191	79,317	77,374	85,846	85,330	90,366	93,678	90,408
Butylate	20	12	N/A	8	N/A	N/A	N/A	N/A	N/A	N/A
Carbaryl	96,667	108,805	136,319	116,667	106,736	99,823	98,844	108,678	108,335	106,089
Carbophenothion	N/A	N/A	N/A	N/A	1	N/A	N/A	0	N/A	N/A
Chlorpyrifos	1,297,547	1,108,167	829,304	641,560	690,841	432,121	6,999	7,489	2,882	374
Coumaphos	1	N/A	62	N/A	<0.01	1	N/A	N/A	N/A	N/A
Crotoxyphos	N/A	N/A	N/A	<0.01	N/A	N/A	N/A	N/A	N/A	N/A
Cycloate	16,045	19,124	21,056	23,173	23,962	20,943	23,472	21,461	20,866	20,296
Ddvp	5,593	3,307	6,282	3,317	787	12	829	735	868	2,192
Ddvp, other related	5,537	3,301	5,149	3,287	703	10	615	470	569	1,794
Diazinon	35,069	32,862	27,004	24,353	24,579	17,936	18,253	20,432	15,990	17,131
Dicrotophos	N/A	23	<0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Chemical	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dimethoate	594,688	725,261	626,623	531,217	499,453	436,246	466,488	443,898	293,703	272,559
Dioxathion	78	N/A	N/A	N/A	<0.01	N/A	N/A	N/A	<0.01	N/A
Dioxathion, other related	78	N/A	N/A	N/A	<0.01	N/A	N/A	N/A	<0.01	N/A
Disulfoton	1,042	1,157	205	16	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Epn	2	<0.01	<0.01	2	<0.01	<0.01	<0.01	5	62	<0.01
Eptc	69,989	89,126	91,525	100,883	104,142	91,173	74,693	72,473	52,168	57,362
Ethephon	475,399	414,279	363,766	452,937	552,299	495,611	501,534	417,729	382,365	381,928
Ethion	N/A	<0.01	306	N/A	30	N/A	94	N/A	<0.01	1
Ethoprop	676	844	591	575	582	1,712	1,682	2,299	2,466	3,428
Fenamiphos	1,437	465	<0.01	<0.01	20	<0.01	N/A	N/A	N/A	N/A
Fenoxycarb	37	58	15	33	76	20	6	11	3	54
Fenthion	N/A	<0.01	N/A	60	N/A	N/A	1	<0.01	N/A	<0.01
Formetanate hydrochloride	27,894	28,234	31,515	41,115	36,188	38,494	40,361	32,178	51,006	50,777
Malathion	289,865	285,266	266,825	218,571	204,397	216,999	200,956	218,917	157,273	173,905
Methamidophos	69	N/A	N/A	N/A	2	<0.01	N/A	N/A	N/A	N/A
Methidathion	9,046	3,564	453	198	27	138	6	<0.01	13	N/A
Methiocarb	3,378	2,409	2,444	1,771	1,934	1,380	1,133	945	847	303
Methomyl	439,832	449,913	453,834	431,681	386,649	375,205	339,451	411,967	369,054	384,233
Methyl parathion	12,486	<0.01	298	60	<0.01	27	4	75	177	7
Methyl parathion, other related	12,440	<0.01	36	18	N/A	N/A	<0.01	4	N/A	N/A
Mevinphos	<0.01	51	51	23	N/A	136	123	150	N/A	N/A
Mevinphos, other related	N/A	51	51	23	N/A	136	123	150	N/A	N/A
Mexacarbate	<0.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Molinate	3	0	1	1	N/A	N/A	<0.01	<0.01	N/A	N/A
Naled	160,907	139,823	164,587	175,205	175,253	190,237	218,432	145,264	137,628	142,397
Oxamyl	83,581	75,324	21,033	3,301	40,943	90,629	108,677	64,609	28,745	41,639

Chemical	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Oxydemeton-methyl	12,163	9,096	7,355	7,883	3,555	3,111	17	<0.01	0	0
Parathion	<0.01	1	207	82	60	<0.01	304	80	<0.01	50
Parathion, other related	N/A	N/A	10	4	N/A	N/A	N/A	N/A	N/A	50
Phorate	22,469	25,700	14,682	16,300	23,653	20,590	24,751	14,039	8,011	8,246
Phosacetin	<0.01	<0.01	<0.01	N/A	1	3	4	N/A	N/A	N/A
Phosmet	23,726	21,122	10,336	11,297	7,751	8,407	9,538	16,737	10,488	6,529
Phosphamidon	N/A	N/A	N/A	35	N/A	N/A	4	N/A	N/A	13
Phosphamidon, other related	N/A	N/A	N/A	35	N/A	N/A	4	N/A	N/A	13
Profenofos	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Propetamphos	<0.01	3,621	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Propoxur	4	179	39	19	<0.01	25	<0.01	<0.01	<0.01	<0.01
Ronnel	11	<0.01	<0.01	<0.01	<0.01	N/A	2	<0.01	<0.01	N/A
S,s,s-tributyl phosphorotrithioate	22,774	15,139	7,582	7,725	10,624	11,007	6,091	5,106	5,449	3,505
Sodium dimethyl dithio carbamate	<0.01	<0.01	<0.01	6	10	1	<0.01	<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	4	3	1,044	5	3	<0.01	<0.01	0	<0.01	10
Thiobencarb	84,726	107,636	148,349	197,836	178,307	172,814	190,273	177,061	116,302	70,111
Thiodicarb	247	N/A	N/A	N/A	<0.01	N/A	N/A	N/A	N/A	N/A
Triallate	2,998	3,918	3,221	3,665	1,064	2,525	1,023	191	599	286
Trichlorfon	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0	0
Total	4,060,330	3,882,910	3,492,802	3,263,457	3,328,638	2,971,584	2,574,647	2,401,124	1,981,093	1,947,306