

# Animal Bites and Rabies Exposure Events in Ohio, 2014



Each year since 1990, the Ohio Department of Health (ODH) has distributed a survey to all of Ohio's local health departments (LHDs) to gather information pertaining to potential rabies exposure events reported in the state. A human rabies exposure occurs when a human is bitten by a wild or domestic mammal (i.e., bite exposure) or when there is saliva contact with broken skin or mucous membranes (i.e., non-bite exposure). Non-bite exposures also occur when a bat is found in a room with a young child, with someone who is sleeping, or with someone with a sensory or mental impairment. Non-human rabies exposures occur when a domestic mammal is exposed to a suspected rabid mammal or when a mammal is investigated for showing signs compatible with rabies. There were 121 responses to the survey representing 100% of the LHDs (some health jurisdictions contract with others to report data).

A total of 21,201 potential rabies exposure events were reported to LHDs in 2014 (Table 1). This is essentially unchanged from 2013 (21,458). Of these events, 19,850 (93.6%) involved bites to humans, 1062 (5.0%) involved human non-bite exposures and 289 (1.4%) were non-human exposure events. Dogs accounted for the majority of events (76.5%) followed by cats (17.4%) and bats (3.6%). Domestic animals (i.e., dogs, cats, ferrets, livestock, rodents, rabbits and other domestic mammals) accounted for 20,023 events (94.4%). Wild mammals (i.e., bats, raccoons, skunks, wild rabbits, wild rodents and other wild mammals) were involved in 1,178 events (5.6%). The distribution of events by species in 2014 was very similar to that reported in 2013. A summary of individual reports by jurisdiction and mammal category can be found in Appendix A.

In 2014, LHDs reported 21,507 individuals experienced bite or non-bite rabies exposures. This represents a 1% decrease from 2013 (21,718). In 2014, LHDs reported 407 exposed individuals started rabies post-exposure prophylaxis (PEP). This is a 20% decrease over 2013 when 509 individuals were reported to have received PEP. Rabies PEP is not reportable in Ohio so this total represents only a portion of the true number of individuals receiving treatment after rabies exposure. Dog (40.0%), bat (28.3%), cat (17.7%) and raccoon (9.8%) exposures accounted for the majority of reported instances of rabies PEP administration.

Although the total number of rabies exposure events reported by LHDs for 2014 was very similar to the number reported in 2013, there was a shift in the species involved in the exposure events. From 2013 to 2014, there was a 15.3% decrease in the number of events involving bats and a 44.7% decrease in the number of events involving livestock. Also of note, the number of events involving other domestic animals (not dogs, cats, ferrets, livestock or domestic rabbits/rodents) decreased from 78 in 2013 to 46 in 2014.

In 2014, there were 25 confirmed animal cases of rabies in Ohio. Twenty of these were bats, four were raccoons and one was a skunk. The rabid bats were widely distributed throughout the state. The positive raccoons were from Trumbull and Mahoning Counties in Northeast Ohio and the positive skunk was from Columbiana County. The raccoons and skunk were all infected with raccoon rabies variant. The positive skunk exposed two unvaccinated dogs that were subsequently euthanized.

Table 1: Reported Mammalian Bites for Ohio by Species, 2014.

Species	Bite Exposure Events	Non-Bites Exposure Events	Other Exposure Events	Total Exposure Events	Total Humans Exposed	Total Humans Starting PET
Dog	15,853	293	71	16,217	16,380	163
Cat	3,473	191	20	3,684	3,737	72
Ferret	17	0	1	18	18	0
Livestock	18	2	1	21	19	1
Rodent/Rabbit (Domestic)	36	1	0	37	38	0
Other Domestic	43	2	1	46	45	1
Rodent/Rabbit (Wild)	78	9	8	95	87	5
Raccoon	125	33	70	228	195	40
Skunk	9	2	7	18	14	4
Bat	133	522	99	754	901	115
Other Wild	65	7	11	83	73	6
<b>Grand Total</b>	<b>19,850</b>	<b>1,062</b>	<b>289</b>	<b>21,201</b>	<b>21,507</b>	<b>407</b>

Appendix A: Reported Rabies Exposure Events by Species and Jurisdiction, 2014.

Local Health Department (County/City)	Dog	Cat	Ferret	Livestock	Rodent / Rabbit (Domestic)	Other Domestic	Rodent / Rabbit (Wild)	Raccoon	Skunk	Bat	Other Wild	Total
Adams	50	13	0	0	0	0	0	0	0	1	0	64
Allen	196	27	0	1	0	2	0	2	1	2	0	231
Ashland	76	23	0	0	0	0	2	1	0	4	0	106
Ashtabula	153	44	0	0	1	3	0	5	1	4	3	214
Ashtabula City	56	11	0	0	0	0	0	0	0	1	0	68
Conneaut City	26	6	0	0	0	0	0	2	1	0	2	37
Athens	83	30	0	0	0	0	2	1	0	4	0	120
Auglaize	75	9	0	0	0	0	0	0	0	2	0	86
Belmont	148	49	0	1	2	0	1	3	1	2	0	207
Brown	85	15	0	0	0	0	2	1	0	0	0	103
Butler	226	50	0	0	0	1	0	6	0	10	1	294
Middletown City	72	2	0	0	0	0	0	0	0	0	0	74
Hamilton City	120	32	0	1	1	0	0	1	0	2	0	157
Carroll	47	20	0	0	0	0	0	1	0	2	0	70
Champaign	65	16	0	1	0	0	0	0	0	11	1	94
Clark	219	40	0	0	0	0	0	1	0	30	2	292

Local Health Department (County/City)	Dog	Cat	Ferret	Livestock	Rodent / Rabbit (Domestic)	Other Domestic	Rodent / Rabbit (Wild)	Raccoon	Skunk	Bat	Other Wild	Total
Clermont	288	54	1	0	0	1	4	3	0	4	0	355
Clinton	80	21	0	1	0	0	0	0	0	1	0	103
Columbiana	115	37	0	0	0	0	1	4	1	6	0	164
East Liverpool City	24	6	0	0	0	0	0	1	0	0	0	31
Salem City	24	14	0	0	1	0	0	0	0	1	0	40
Coshocton	53	10	0	1	0	0	0	0	0	0	1	65
Coshocton City	28	3	0	0	0	0	1	5	0	3	0	40
Crawford	92	11	0	0	0	0	0	0	0	4	1	108
Galion City	23	11	0	0	0	0	0	0	0	1	1	36
Cuyahoga	721	248	0	0	1	2	1	17	2	56	1	1049
Cleveland City	598	70	0	0	0	0	0	1	0	3	0	672
Shaker Heights City	16	2	0	0	0	0	0	0	0	9	0	27
Darke	93	18	0	0	0	0	0	2	0	0	1	114
Defiance	47	24	1	0	0	0	0	0	0	6	0	78
Delaware	190	56	0	0	0	0	1	4	1	23	7	282
Erie	153	20	1	1	0	1	1	3	0	5	2	187
Fairfield	170	40	0	0	0	0	4	2	0	3	0	219
Fayette	51	9	0	0	0	0	0	1	0	3	0	64
Franklin	524	124	5	1	3	3	0	12	1	31	3	707
Columbus City	1045	155	2	0	0	0	1	7	0	27	2	1239
Fulton	52	19	0	0	1	0	0	1	0	8	0	81
Gallia	93	9	0	0	0	0	0	1	0	0	0	103
Geauga	104	43	0	0	0	1	0	3	0	4	2	157
Greene	173	50	0	0	0	0	0	7	1	26	1	258
Guernsey	107	17	0	0	0	0	1	3	0	8	0	136
Hamilton	548	88	0	0	0	0	8	7	0	54	2	707
Cincinnati City	355	44	0	0	1	0	4	1	0	71	0	476
Norwood City	37	2	0	0	0	0	0	0	0	3	0	42
Springdale City	6	0	0	0	0	0	0	0	0	1	0	7
Hancock	43	24	0	0	0	0	0	0	0	0	0	67
Findlay City	87	28	1	0	0	1	0	0	0	0	1	118
Hardin	32	9	0	0	0	0	0	2	1	2	1	47
Harrison	35	5	0	0	0	0	0	0	0	0	0	40
Henry	50	11	0	0	0	0	0	0	0	2	0	63

Local Health Department (County/City)	Dog	Cat	Ferret	Livestock	Rodent / Rabbit (Domestic)	Other Domestic	Rodent / Rabbit (Wild)	Raccoon	Skunk	Bat	Other Wild	Total
Highland	90	15	0	0	0	1	0	0	0	1	0	107
Hocking	51	19	0	0	0	0	0	2	0	2	1	75
Holmes	26	4	0	0	0	0	0	2	0	5	1	38
Huron	106	21	0	1	1	0	1	0	0	7	0	137
Jackson	64	9	0	0	0	1	0	0	0	0	1	75
Jefferson	90	15	0	0	1	0	0	0	0	0	2	108
Steubenville City	38	14	1	0	0	0	0	0	0	0	0	53
Knox	102	41	0	0	2	0	3	2	1	13	1	165
Lake	346	183	0	0	1	0	6	21	1	20	5	583
Lawrence	52	12	0	0	1	0	0	3	0	0	0	68
Ironton City	26	6	0	0	0	0	0	1	0	1	0	34
Licking	247	84	1	2	1	9	1	1	0	1	2	349
Logan	123	20	0	1	0	0	2	2	0	0	1	149
Lorain	151	42	0	0	1	0	0	3	0	9	3	209
Elyria City	85	14	0	0	0	0	0	1	0	0	0	100
Lorain City	151	25	0	0	1	0	3	2	0	2	1	185
Lucas	555	75	0	0	2	0	1	2	0	1	2	638
Madison	68	2	0	0	0	1	0	0	0	6	0	77
Mahoning	200	47	0	0	0	2	3	9	0	5	2	268
Youngstown City	111	7	0	0	0	0	0	1	0	0	0	119
Marion	105	14	0	0	0	0	2	1	0	3	0	125
Medina	246	96	1	0	4	0	6	6	0	63	1	423
Meigs	56	10	0	0	0	0	0	1	0	0	0	67
Mercer	58	11	0	1	0	0	0	0	0	1	0	71
Miami	133	22	1	0	0	1	0	3	0	1	0	161
Piqua City	39	5	0	0	0	0	0	0	0	4	0	48
Monroe	17	2	0	0	0	0	0	0	0	0	0	19
Montgomery - Dayton	695	121	0	0	0	0	1	3	1	24	1	846
Morgan	11	1	0	0	0	0	0	0	0	2	0	14
Morrow	74	16	0	0	0	0	0	2	0	0	0	92
Muskingum	199	44	0	0	0	1	0	2	0	7	1	254
Noble	15	4	0	0	0	0	1	0	0	3	0	23
Ottawa	80	22	0	1	0	0	1	2	0	0	1	107
Paulding	42	6	0	0	0	0	1	0	0	0	0	49

Local Health Department (County/City)	Dog	Cat	Ferret	Livestock	Rodent / Rabbit (Domestic)	Other Domestic	Rodent / Rabbit (Wild)	Raccoon	Skunk	Bat	Other Wild	Total
Perry	64	3	0	0	0	0	0	0	0	0	0	67
Pickaway	49	10	0	0	0	0	0	2	0	2	1	64
Pike	38	4	0	0	1	0	0	1	0	0	2	46
Portage	214	72	0	1	0	0	1	7	0	10	1	306
Kent City	22	11	0	0	0	0	0	0	0	2	0	35
Preble	29	4	0	0	1	1	0	4	0	3	0	42
Putnam	38	5	0	0	0	0	1	0	0	1	0	45
Richland	245	61	0	0	0	2	1	3	0	5	2	319
Shelby City	16	7	0	1	0	0	0	0	0	1	0	25
Ross	172	27	0	0	0	3	1	3	0	20	0	226
Sandusky	111	23	1	0	0	0	1	1	0	1	0	138
Scioto	96	39	0	1	1	0	1	2	0	1	0	141
Portsmouth City	52	24	0	0	0	0	0	0	0	0	0	76
Seneca	100	10	0	0	0	0	0	0	0	0	1	111
Shelby	86	9	0	0	0	0	0	1	0	2	0	98
Stark	405	149	1	0	1	0	12	7	2	13	2	592
Alliance City	55	10	0	0	1	0	0	0	0	3	0	69
Canton City	293	45	0	0	0	0	4	0	0	1	1	344
Massillon City	85	26	0	0	1	0	1	0	0	2	1	116
Summit	659	135	0	1	0	6	0	4	1	9	6	821
Trumbull	124	41	0	0	0	1	0	4	0	11	1	182
Girard City	7	5	0	0	0	0	0	0	0	0	0	12
Niles City	29	6	0	0	0	0	0	0	0	0	0	35
Warren City	53	9	0	0	0	0	0	0	0	0	0	62
Tuscarawas	87	30	0	2	1	0	0	1	0	2	0	123
New Philadelphia City	21	12	0	0	0	0	1	0	0	2	0	36
Union	94	34	1	1	0	0	1	0	0	9	1	141
Van Wert	26	5	0	0	0	0	0	1	0	1	0	33
Vinton	23	6	0	0	0	0	0	0	0	1	0	30
Warren	243	50	0	0	2	1	2	1	1	2	2	304
Washington	55	15	0	0	1	0	0	0	0	0	0	71
Belpre City	9	2	0	0	0	0	0	0	0	0	0	11
Marietta City	16	3	0	0	0	0	0	0	0	2	0	21
Wayne	130	39	0	0	0	0	0	2	0	3	0	174

Local Health Department (County/City)	Dog	Cat	Ferret	Livestock	Rodent / Rabbit (Domestic)	Other Domestic	Rodent / Rabbit (Wild)	Raccoon	Skunk	Bat	Other Wild	Total
Williams	54	18	0	0	0	0	1	0	0	8	1	82
Wood	177	24	0	0	0	0	0	1	0	13	0	215
Wyandot	34	13	0	0	1	1	1	0	0	3	0	53
<b>Total</b>	<b>16217</b>	<b>3684</b>	<b>18</b>	<b>21</b>	<b>37</b>	<b>46</b>	<b>95</b>	<b>228</b>	<b>18</b>	<b>754</b>	<b>83</b>	<b>21,201</b>