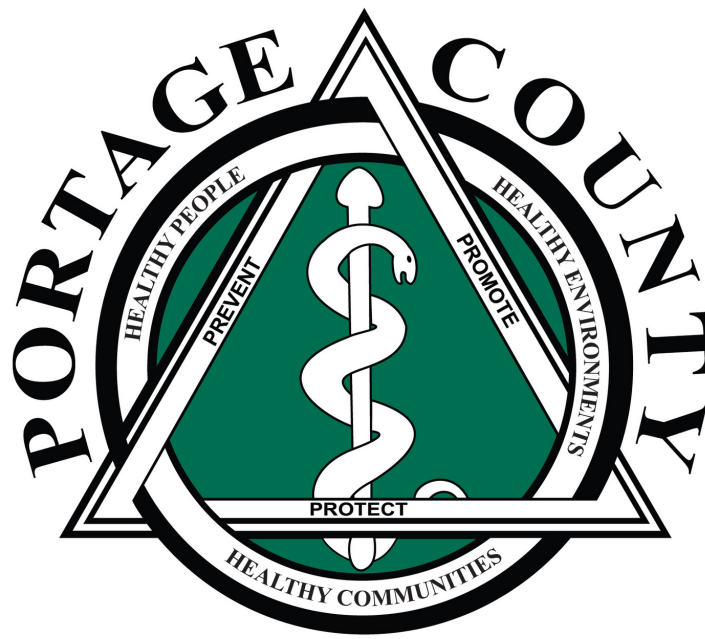


2023 ANIMAL BITE REPORT



HEALTH DISTRICT

Prepared by:
Portage County Combined General Health District
Olivia Card, Epidemiologist
999 East Main Street
Ravenna, Ohio 44266
330-296-9919
www.portagehealth.net

OVERVIEW

Rabies is a virus carried by mammal species including cats, dogs, raccoons, bats, skunks, and foxes. Rabies is often spread when an infected animal bites a healthy animal or human. Symptoms of rabies in both humans and animals include confusion, headache, fever, fatigue, hallucination, and abnormal behavior. A commonly known sign of rabies is “foaming at the mouth,” which results from the illness attacking the nervous system and causing a combination of excessive saliva production, as well as difficulty swallowing.

When left untreated, rabies is a fatal illness. This means it is very important to see a doctor immediately if you believe you may have been exposed to, or bitten by, a rabid animal. The sooner treatment starts, the better the chance of recovery. Additionally, it is safest to ensure all domestic animals that are at risk of developing rabies receive timely rabies vaccinations. Some people who are at risk of being exposed to rabies because of their occupation may be eligible for a rabies vaccination (ex. veterinarians). However, it is not common practice to vaccinate people against rabies.

Reporting of animal bites to your local health department is critical. When a bite is reported, public health agencies can help ensure that you receive proper follow-up care and resources, coordinate rabies testing of the animal that you were bitten by, and/or direct proper quarantine procedure if you were bitten by a domestic animal.

Fortunately, Portage County did not have any animals or humans that tested positive for rabies in 2023. However, the Portage County Health District will continue its rabies monitoring and education efforts to ensure the sustained prevention of cases in the coming years.

ANIMALS TESTED FOR RABIES

Figure 1a

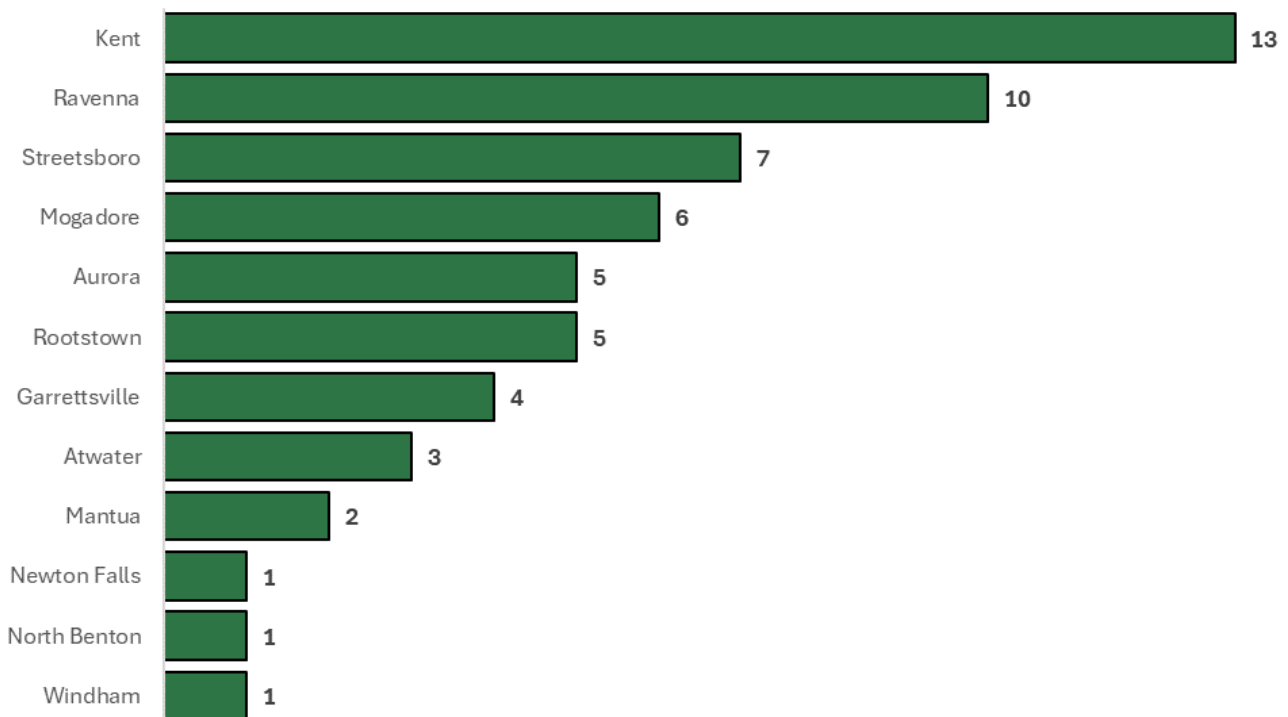


Figure 1a

If there is concern that an animal may be suffering from rabies, the animal may be euthanized and sent to the Ohio Department of Health for rabies testing. Submissions from Portage County to the Ohio Department of Health for rabies testing may come from Kent City Health Department, Portage County Health District, or veterinarian offices. Locations in this chart reflect the city where the animal was encountered rather than the actual submission location.

As shown in the chart, Kent City animal bites resulted in 13 specimens being sent to the Ohio Department of Health for testing in 2023, which was more than any other Portage County location. In total, agencies from Portage County submitted 58 animals for rabies testing in 2023. 55 of the animals tested negative for rabies and three had indeterminate test results. Indeterminate tests can be the result of damage to the animal's brain, which is the part of the animal's body that is tested for rabies.

ANIMALS TESTED FOR RABIES

Figure 1b

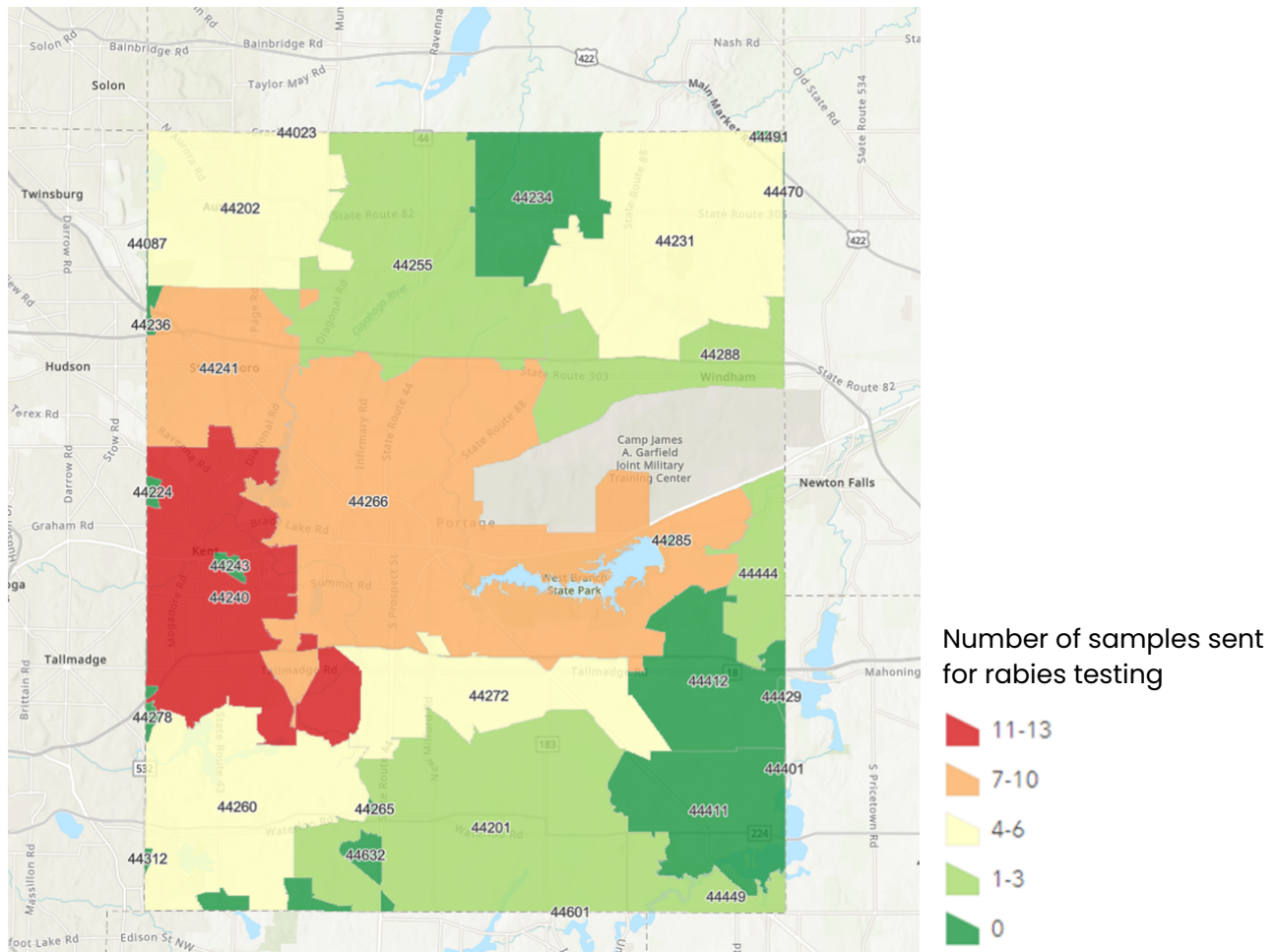


Figure 1b

The map above shows the number of animals sent to the Ohio Department of Health for rabies testing following encounters in each zip code in 2023. In total, Portage County agencies submitted 58 animals for rabies testing in 2023.

TYPES OF SPECIES TESTED

Figure 2

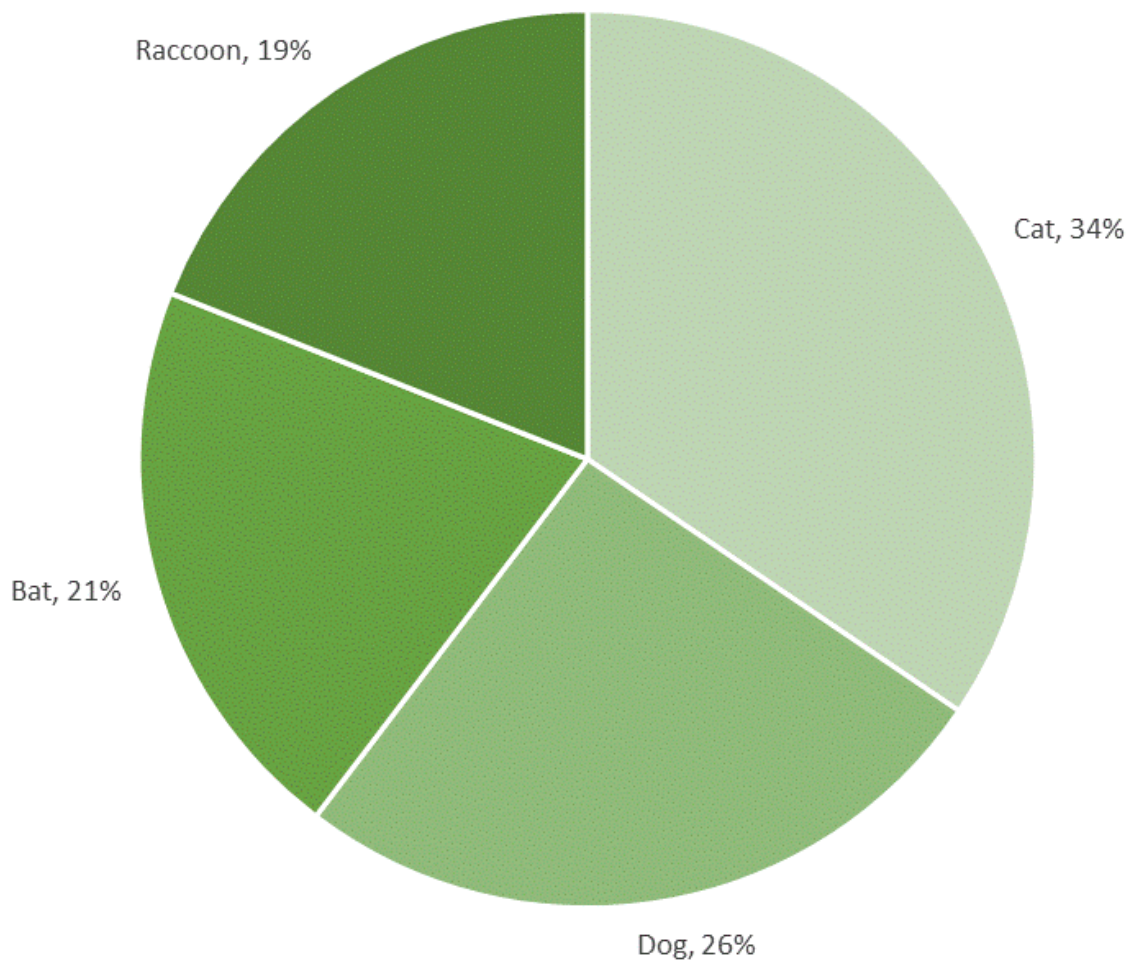


Figure 2

58 animals were submitted to the Ohio Department of Health by Portage County agencies for rabies testing in 2023. As shown in the pie chart, most of the animals submitted were cats (34%), followed by dogs (26%). Together, cats and dogs make up more than half of the animals submitted for testing by Portage County agencies in 2023. This may be surprising; however, cats and dogs are the most common animals with which most people come into contact. The result is that people can develop rabies concerns about these species more readily than about wildlife.

EXPOSURE PATHWAY

Figure 3

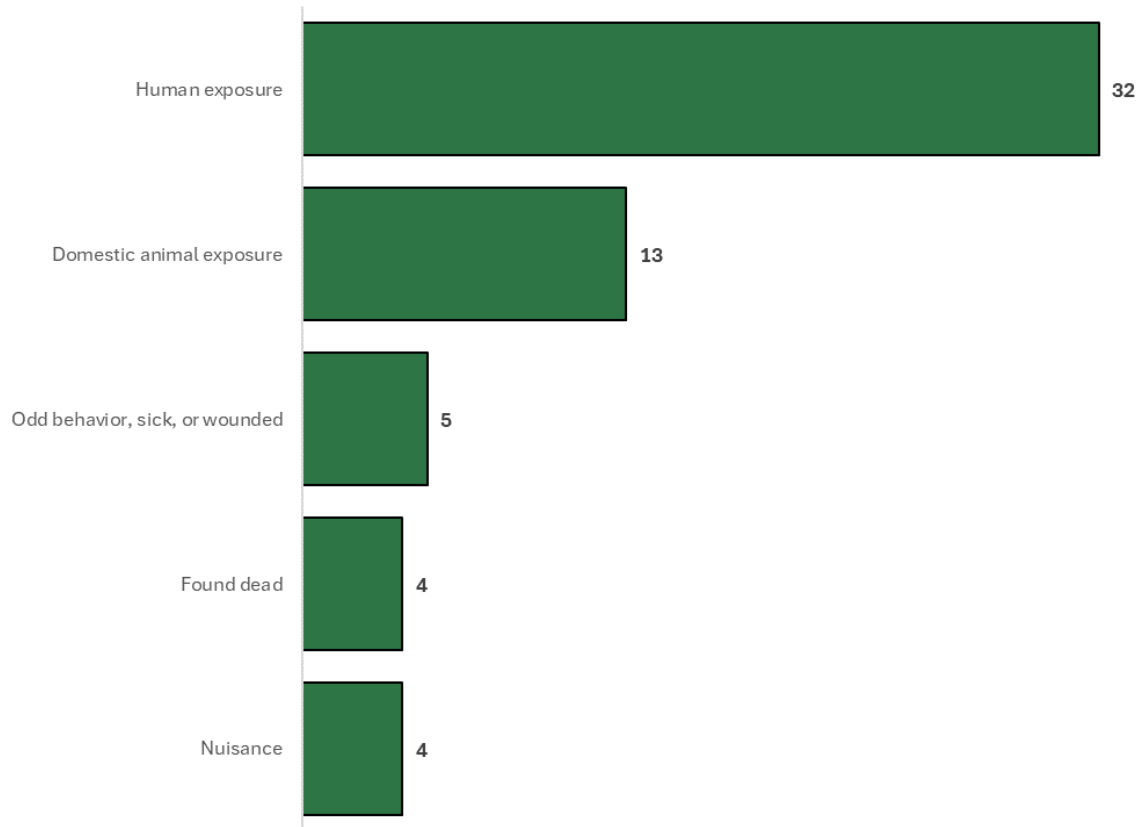


Figure 3

There are various reasons that may be provided by an agency for the submission of an animal to the Ohio Department of Health for rabies testing. Human and domestic animal exposures were the most commonly reported reasons animals were submitted for testing by Portage County agencies in 2023. An “exposure” may be a bite, however there are a broad range of circumstances that may be considered exposures. For example, a suspected but unconfirmed bite, touching an animal, picking up an animal, being scratched by an animal, an animal entering a home, etc. However, all human exposures reported here are bites.

The “odd behavior, sick or wounded” category addresses animals that are displaying possible behavioral characteristics of rabies infections such as foaming at the mouth, reduced fear of threats/people, lack of coordination when walking, and unpredictability/aggression. The nuisance category addresses animals that were in a human-inhabited area but did not interact with any pets or humans (ex. raccoon living under a deck or going through a trash can).

ANIMAL EXPOSURES

Figure 4a

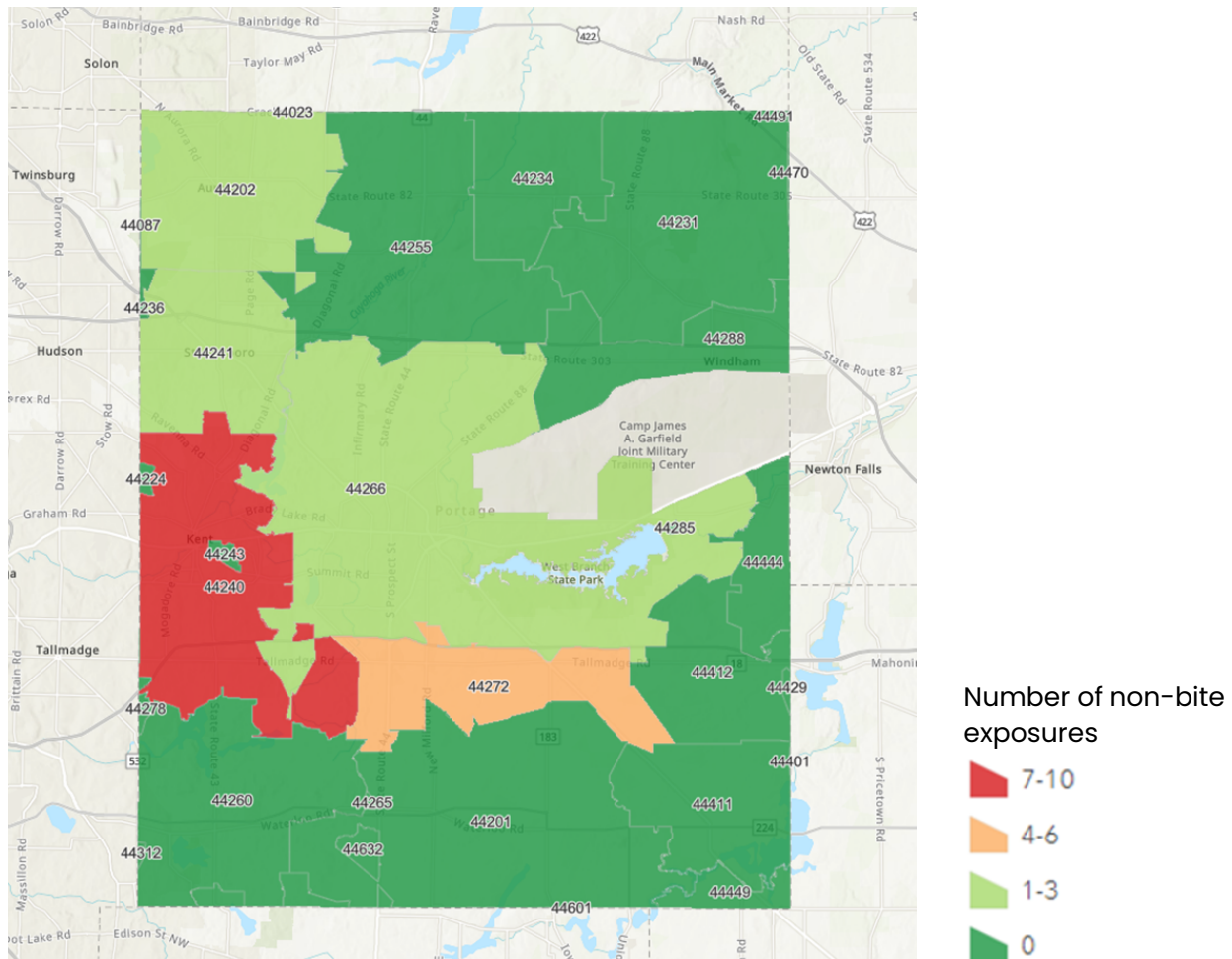


Figure 4a

The map above shows the number of non-bite exposures to animals that were sent to the Ohio Department of Health for rabies testing by Portage County agencies in 2023. As stated in figure 3, a non-bite exposure might include such circumstances as touching an animal, picking up an animal, being scratched by an animal, an animal entering a home, etc.

22 total non-bite exposures were reported for animals submitted to the Ohio Department of Health for rabies testing by Portage County agencies in 2023. One animal may be responsible for more than one exposure, so the number of non-bite exposures in Portage County during 2023 may be greater than the number of animals tested due to non-bite exposures.

HUMAN EXPOSURES

Figure 4b

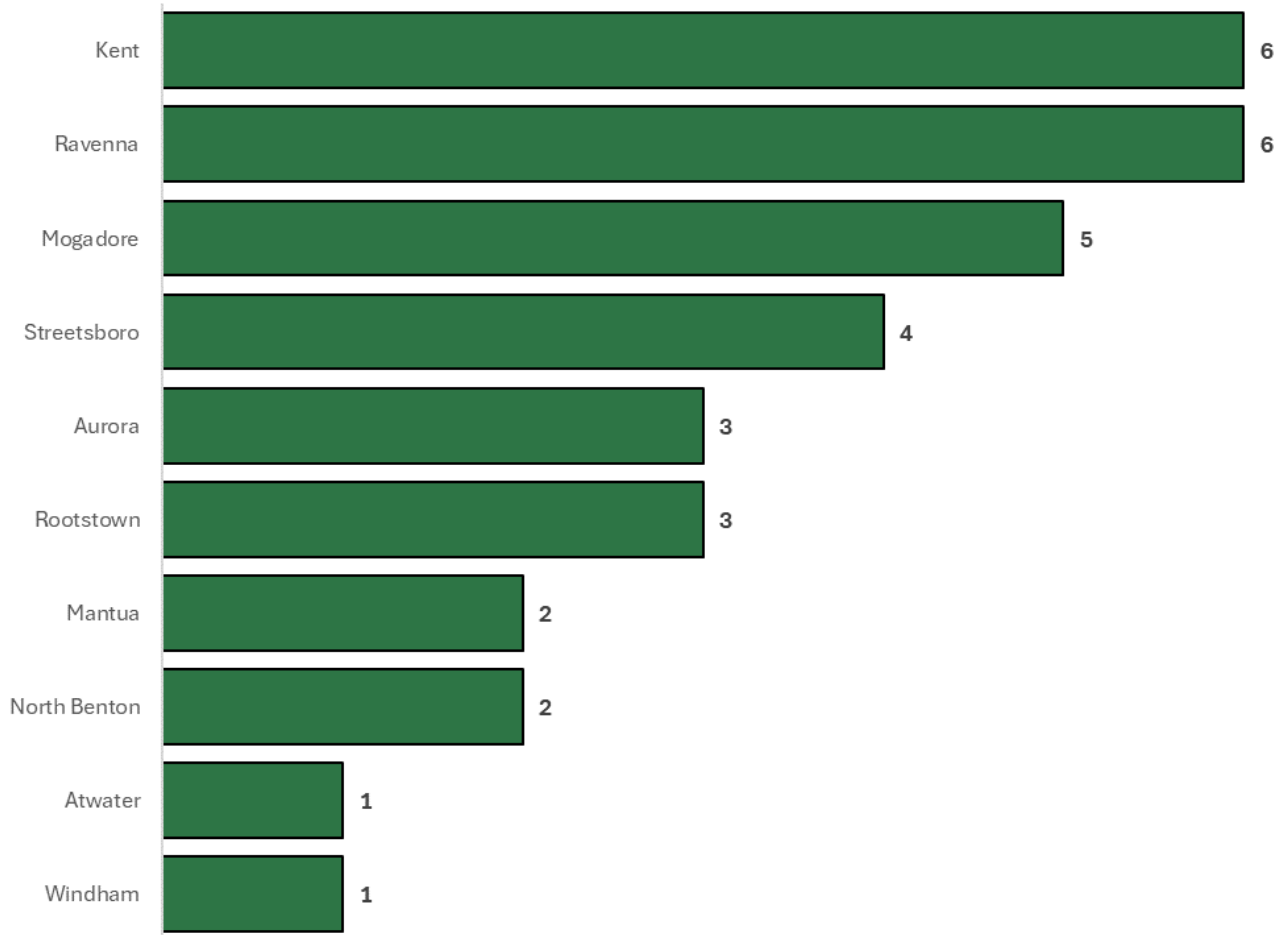


Figure 4b

As stated in figure 2, 32 animals submitted to the Ohio Department of Health for rabies testing by Portage County agencies in 2023 were sent because they bit a person. This chart summarizes the number of people bit by those 32 animals in each Portage County city. One animal may be responsible for biting more than one person, so the number of people bitten in a city in 2023 may be greater than the number of animals sent by that city for testing (ex. North Benton).

CITY AND RURAL ANIMAL BITES

Figure 5

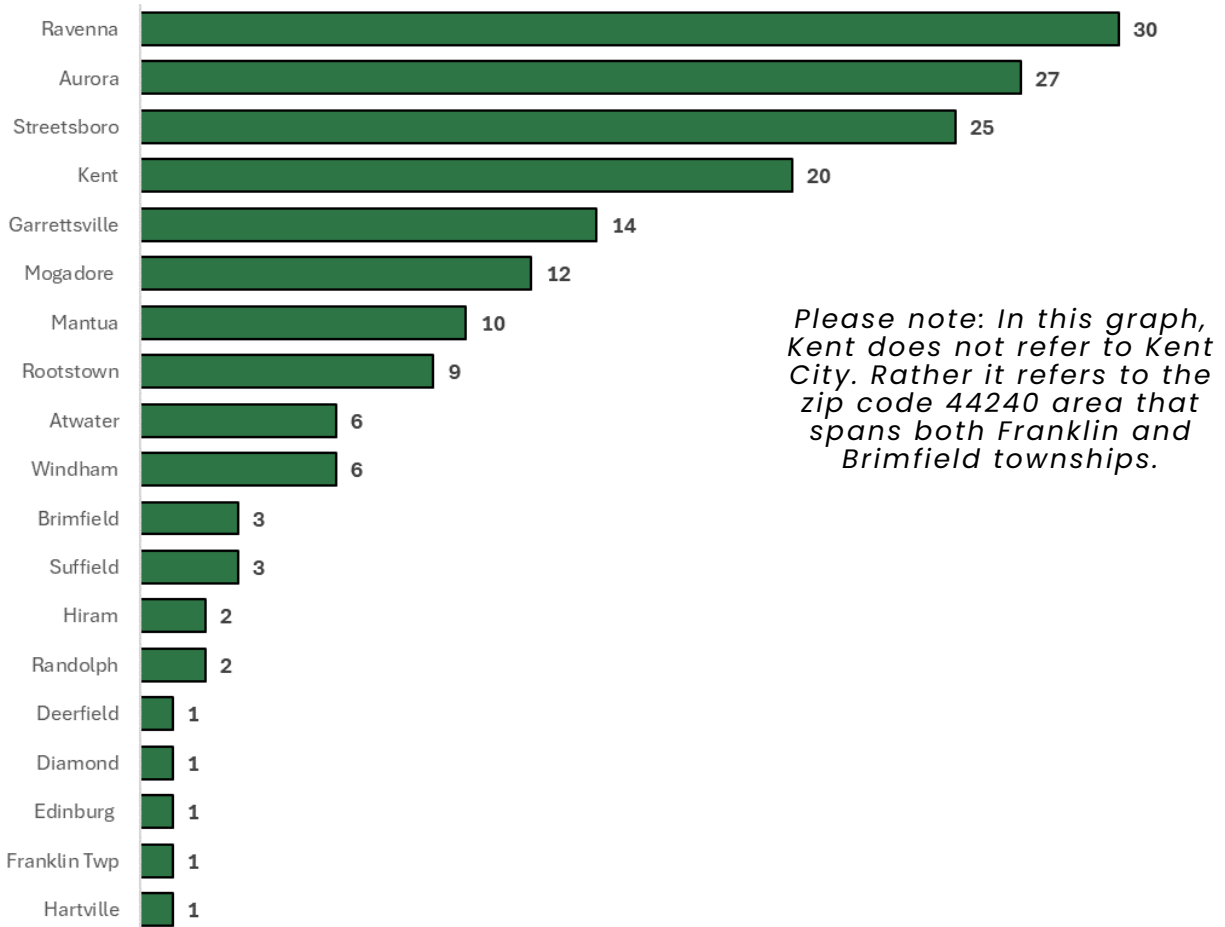


Figure 5

Per the Ohio Administrative Code rule 3701-3-28, “whenever an individual is bitten by a dog or other non-human mammal, report of such bite shall be made within twenty-four hours to the health commissioner of the district in which such bite occurred.” Not every animal bite results in rabies testing because the test requires euthanasia of the animal. When euthanasia is not an option, an animal is typically quarantined for 10 days and observed for signs of rabies. However, all animal bites MUST be reported to the Portage County Health District if they occur somewhere within the county, apart from bites that occur within the boundaries of Kent City. Any animal bites that happen within Kent City limits should be reported to the Kent City Health Department. In total, Portage County Health District received 175 reports of animal bites during 2023. This chart displays the number of bite reports from each Portage County city/township.

ANIMAL BITE BY SPECIES

Figure 6

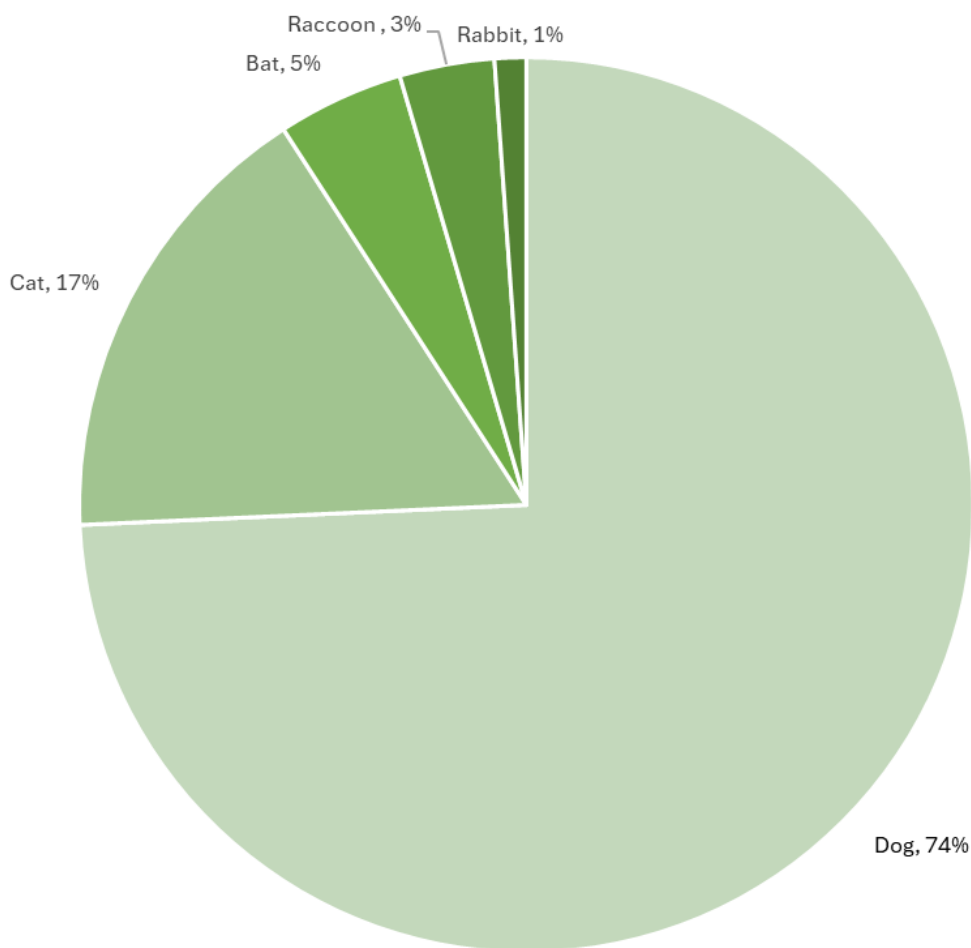


Figure 6

By far, the most commonly reported animal bites during 2023 were perpetrated by dogs. Dog bites made up nearly three-quarters of 2023 bite reports. Together, dog and cat bites accounted for just over 90% of the animal bites reported to the Portage County Health District in 2023. Two essential conclusions this information points to are as follows:

1. All pets should be kept up to date on vaccinations deemed necessary by their veterinarian, especially rabies vaccinations.
2. Do not pet an animal you do not know without permission from the owner and ensure that you are practicing appropriate animal safety (e.g. keep adequate space between yourself and strange animals, keep dogs on leashes when in public areas, do not approach stray animals, etc.).

REPORTED ANIMAL BITES

Figure 7a

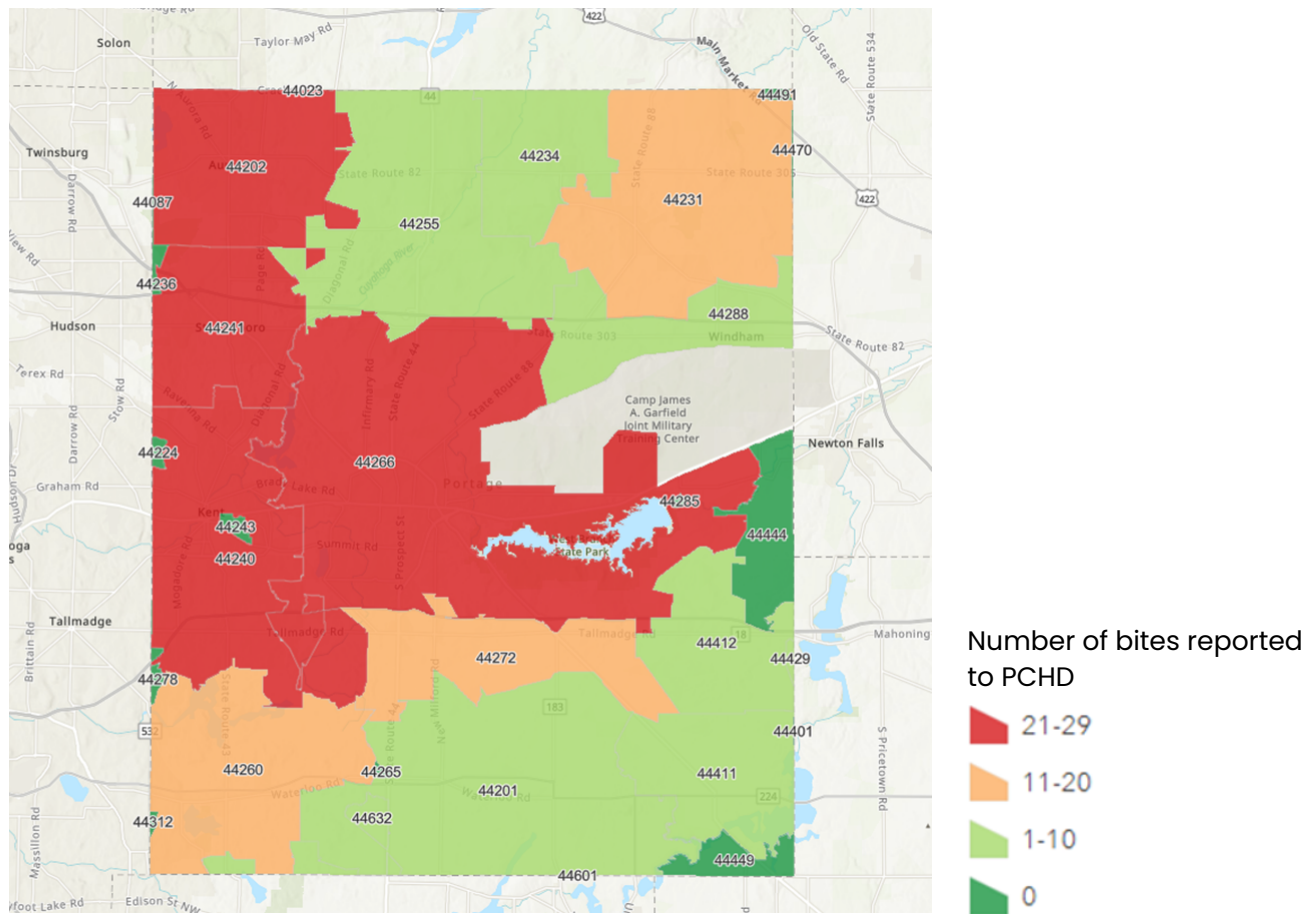


Figure 7a

This map shows the number of bites reported to the Portage County Health District that occurred in each zip code in 2023. Unsurprisingly, the number of bites was highest in the most populous zip codes. In other words, more people get bitten where there are more people to get bitten.

REPORTED RATES OF ANIMAL BITES

Figure 7b

Zip code	Number of bites reported to PCHD	Adjusted bites rate per 100,000 people
44272	12	224.4669
44288	6	182.3708
44231	14	162.1496
44241	25	139.657
44255	10	129.7185
44201	8	123.5521
44260	16	122.9729
44202	25	111.3883
44266	29	88.44699
44240	24	60.60912
44411	1	42.88165
44412	1	40.83299
44234	1	27.44237
44429	1	Population estimate unavailable
44632	1	Population estimate unavailable
44238	1	Population estimate unavailable

Figure 7b

A table summarizing the bite rate per 100,000 people for each zip code. The rate was adjusted to account for differences in population size in each zip code. However, zip codes that have only small portions inside of Portage County had no population estimate available. As shown in the table, the areas of Portage County with the five highest rates of animal bites are Rootstown, Windham, Nelson, Streetsboro and Mantua. These areas can be targeted for animal safety education campaigns, which may be effective to reduce the rate of animal bites. Additionally, veterinarians may consider holding rabies vaccine clinics for pets in these townships to ensure high rabies vaccination rates among domestic animals, thus decreasing the threat of rabies transmission via an animal bite.

DATA SOURCES

1. Centers for Disease Control and Prevention Rabies website
2. Ohio Disease Reporting System
3. Portage County Health District Animal Bite Report Log
4. Healthy NEO
5. Ohio Administrative Code