

MICHIGAN RABIES DATA

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Abstract

The Michigan Environmental Public Health Tracking Program (MiTracking) worked with the Michigan Department of Health and Human Services Emerging and Zoonotic Infectious Diseases (MDHHS EZID) Section to create a dataset that includes the number of reported animal rabies tests and their result (positive or negative) for Michigan from 2011 through the most recent year available. Data are aggregated by submission year, county*, animal species, and rabies testing result.

This dataset is updated annually.

All users are recommended to read and fully comprehend the metadata prior to data use. To access these data, please visit the [MiTracking Data Portal](#).¹

*County of exposure is used if known and available. Otherwise, county of the submitter is used. County of exposure is double-checked for animals that test positive.

Purpose

This dataset allows for a better understanding of the occurrence, geographic distribution and species of animals that are submitted for rabies testing across Michigan. The public Data Portal provides public health professionals, veterinarians, researchers, and the public with data and information about the number and types of animals that are sent in for rabies testing and that test positive for rabies.

Rabies is a fatal but preventable disease that can potentially infect any mammal. Rabies is caused by a virus that infects the brain and is most commonly spread from the bite of an infected animal. In Michigan, most of the reported cases of rabies occur in bats, but other wild and domestic animals such as skunks, cats, dogs, and livestock have also been infected. People can be exposed to rabies through contact with an infected animal, but rabies illness in people is 100% preventable through prompt medical treatment after an exposure.

Rabies exposures should be reported to the local health department. Depending on the animal species, the animal may be confined and observed or euthanized and tested for rabies to determine if an exposed person needs to receive rabies post-exposure treatment.

Supplemental Information

In Michigan, bats are the primary wildlife reservoir of rabies virus. Bats can carry rabies without showing any symptoms. If a bat bites a person or is found in a room with a sleeping, impaired or very young person, the bat should be captured and tested for rabies.

In southeast Michigan, there is a strain of rabies that is spread among skunks. This means that there is a higher risk of rabies among terrestrial (non-flying) mammals in that part of the state.

Keywords

Rabies, bat(s), rabid, skunk(s), bite(s), animals, mammals, EZID, zoonotic

Bounding Coordinates

Geographically, all cases in this dataset occurred for animals reported in the State of Michigan. This means that all cases were within the latitude/longitude coordinates listed below.

- West Bounding Coordinate: -90.41813399999995
- East Bounding Coordinate: -82.418394000000006
- North Bounding Coordinate: 48.189534000000002
- South Bounding Coordinate: 41.696088000000003

Other Information on Data

Level of Geographic Detail: County

Currentness Reference (when data were last updated): Nov. 3, 2023

Frequency at which the data are updated: Annually

Data Status: Complete

Completeness Report

These data are complete for all reports as of Nov. 3, 2023. For more information, please contact the MDHHS EZID Section at 517-335-8165.

Data Processing Description

Data source: This dataset was created from the MDHHS Bureau of Laboratories (MDHHS BOL) StarLIMS system, which tracks animals submitted to MDHHS for rabies testing. MDHHS BOL is the only laboratory in Michigan that tests animals suspected to have exposed humans or unvaccinated domestic pets to rabies. This testing is performed free of charge when approved by MDHHS or a local health department.

Inclusion Criteria: MDHHS BOL collects data on the species of animal and date and location of rabies exposure when animals are submitted for testing. The results of rabies testing are also recorded in the StarLIMS system.

Access Constraints

There are no access constraints for data available through the MiTracking program public Data Portal.

Use Constraints

It is recommended that all users read and fully comprehend the metadata prior to data use. Efforts have been made to assure the accuracy of the data. These data are supplied by the MDHHS EZID Section for the MiTracking program for the purposes of compiling, integrating, and disseminating environmental hazard, exposure, and health effects data. MDHHS specifically disclaims responsibility for any analyses, interpretations or conclusions made by those who access this information.

These data remain the property of the MDHHS EZID Section. They cannot be used for commercial purposes and shall not be used to engage in any method, act, or practice to conduct the solicitation or advertisement of goods, services, or real estate to Michigan consumers.

Data users are prohibited from attempting to learn the identity of any person included in the data, and from linking these data with any other data for the purpose of matching records to identify individuals.

The MiTracking Program has released these data in collaboration with the MDHHS EZID Section, abiding by their suppression rules and quality controls.

Data Limitations: Animals are only accepted for rabies testing at BOL if they are suspected to have exposed humans or unvaccinated domestic pets to rabies. Thus, it does not capture all the potential rabid animals in Michigan.

Animals can only be submitted for rabies testing if they can be captured or recovered, and the brain matter is in sufficiently good condition. Some specimens that are submitted for rabies testing are deemed too damaged or decayed for rabies testing. These are not included in the data presented here.

Animals are assigned to a county based on the information on the submission form. While rabies-positive animals are thoroughly investigated, animals that test negative are not. There is a possibility that some rabies-negative animals are assigned to the wrong county due to incomplete or inaccurate submission forms.

Security Handling Description

If data are distributed, the use constraints specified in this metadata apply to all recipients of the data.

Distribution Liability

The MiTracking Program is maintained, managed and operated by the Environmental Health Bureau (EHB) within MDHHS. In preparation of these data, every effort has been made to offer the most current, correct, complete, and clearly expressed information possible. Nevertheless, some errors in the data may exist. In particular, MDHHS disclaims any responsibility for source data, compilation and typographical errors and accuracy of the information that may be contained in these data.

These data do not represent the official legal version of source documents or data used to compile these data. MDHHS further reserves the right to make changes to this data at any time without notice.

It is strongly recommended that careful attention be paid to the contents of the metadata file associated with these data to evaluate dataset limitations, restrictions or intended uses. MDHHS shall not be held liable for improper or incorrect use of the data described and/or contained herein.

MDHHS makes no warranties or representations whatsoever regarding the quality, content, condition, functionality, performance, completeness, accuracy, compilation, fitness, or adequacy of the data. By using the data, you assume all risk associated with the acquisition, use, management, and disposition of data in your information system, including any risks to your computers, software or data being damaged by any virus, software or any other file that might be transmitted or activated during the data exchange of this data.

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The sale or resale of the data, or any portions thereof, is prohibited unless with the express written permission from the MDHHS EZID Section. All rights reserved. These data may not be used for commercial purposes without first obtaining written permission from MDHHS.

If errors or otherwise inappropriate information is brought to our attention, a reasonable effort will be made to fix or remove it. Such concerns should be addressed to the MiTracking Program.

Custom Order Process

For access to unrestricted or public use Michigan-specific data, please contact the MDHHS EZID Section at 517-335-8165.

Contact Information

Michigan Department of Health and Human Services
Environmental Health Bureau – MiTracking
P.O. Box 30195
Lansing, MI 48913
Contact us via phone at 1-800-648-6942
Contact us via email at MDHHS-MiTracking@michigan.gov

References

1. Emerging and Zoonotic Infectious Disease (EZID). Emerging disease issues: rabies. Michigan Department of Health and Human Services website. Accessed January 5, 2024. www.michigan.gov/rabies.