INDIANA LABORATORY SYSTEM MONTHLY PARTNER WEBCAST

Thank you for joining us.
The webcast will begin shortly.

5/15/2025

Indiana Department of Health

INDIANA LABORATORY SYSTEM MONTHLY PARTNER WEBCAST

MARK GLAZIER
DEPUTY LABORATORY DIRECTOR

5/15/2025

Agenda

1. **Welcome and laboratory updates** – Mark Glazier, deputy laboratory director
2. **Measles update** – Brian Pope, Virology and Biological Preparedness Division director; Dr. Lauren Franco, Clinical Microbiology Division director
3. **TB shipping update** – Jessica Gentry, mycobacteriology lab supervisor
4. **Rabies update** – Erik Ohannesian, rabies epidemiologist
5. **Q & A –** IDOHL webcast team

Updates and reminders

Indiana Department of Health

IDOH Laboratory

Four ways to stay in the know:

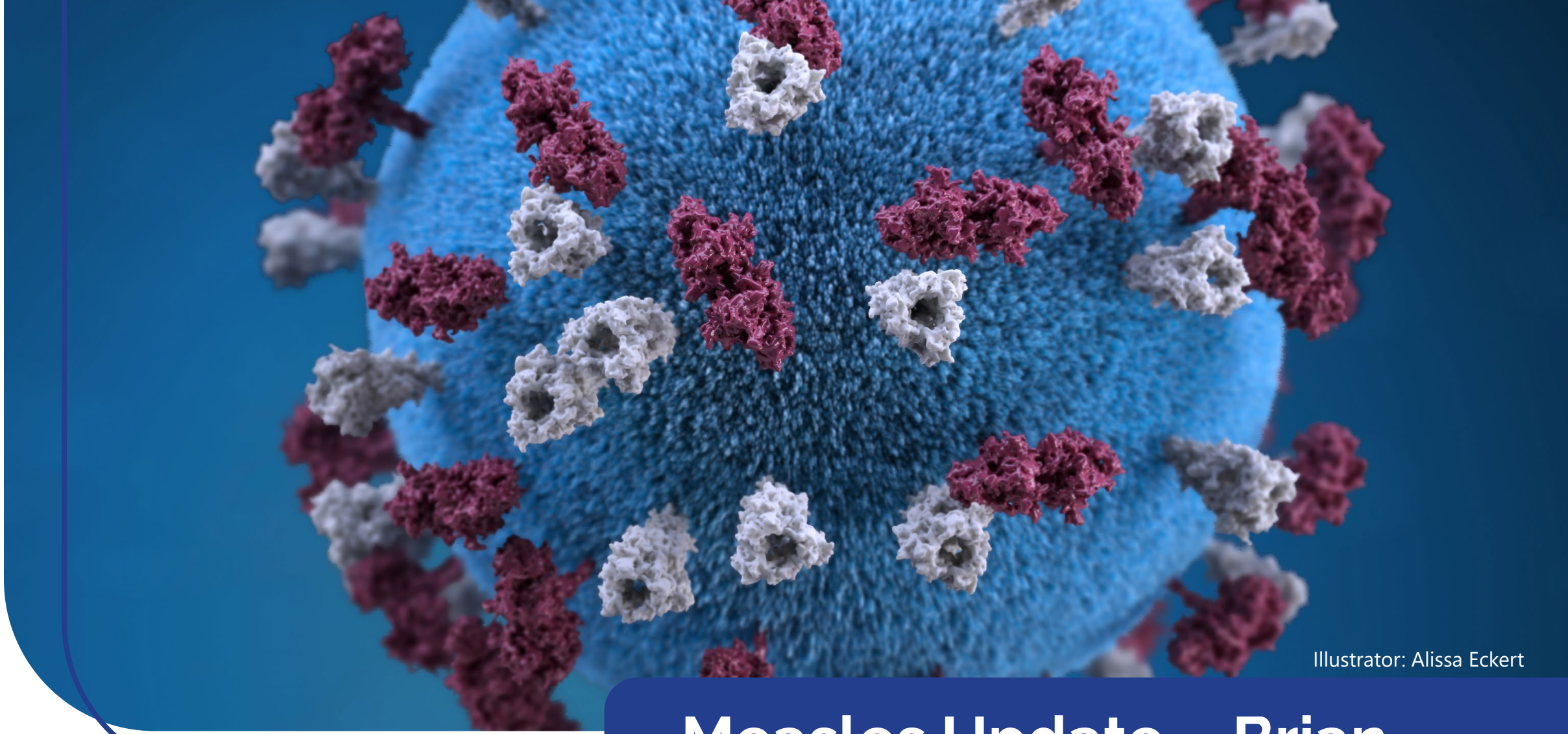
1. Email us at IDOH-Lab-Info@health.in.gov
2. Sign up for IHAN – Indiana Health Alert Network https://ihan-in.org/
3. Sign up for laboratory communications and updates
4. Update your laboratory's contact information here

2025 ILS webcast updates

- ILS webcasts will be held from 10:30-11 a.m. ET on the second **Thursday** each month
- Webcasts will require registration via the links provided:
  - June 19 – June ILS Webcast Registration Link
  - July 10 – July ILS Webcast Registration Link
- Recordings will be sent to the email provided during registration following the conclusion of the webcast

New hands-on workshop

- IDOHL is planning an Antimicrobial Resistant Organism workshop for later this year
  - Would your lab be interested in this type of workshop?
- Marketing Cloud message to clinical lab partners in the next several weeks to provide more information and gauge interest



Illustrator: Alissa Eckert

Measles Update – Brian Pope and Dr. Lauren Franco

Indiana Department of Health

Measles Update – 5/14/25

- Several large outbreaks of Measles in the United States
  - 717 cases identified in Texas
    - https://www.dshs.texas.gov/news-alerts/measles-outbreak-2025
  - 71 cases identified in New Mexico
    - https://www.nmhealth.org/about/erd/ideb/mog/
  - 56 cases identified in Kansas
    - https://www.kdhe.ks.gov/2314/Measles-Data
  - 36 cases identified in Ohio
    - https://data.ohio.gov/wps/portal/gov/data/view/summary-of-infectious-diseases-in-ohio
  - 9 cases identified in Michigan
    - https://www.michigan.gov/mdhhs/adult-child-serv/childrenfamilies/immunizations/measlesupdates

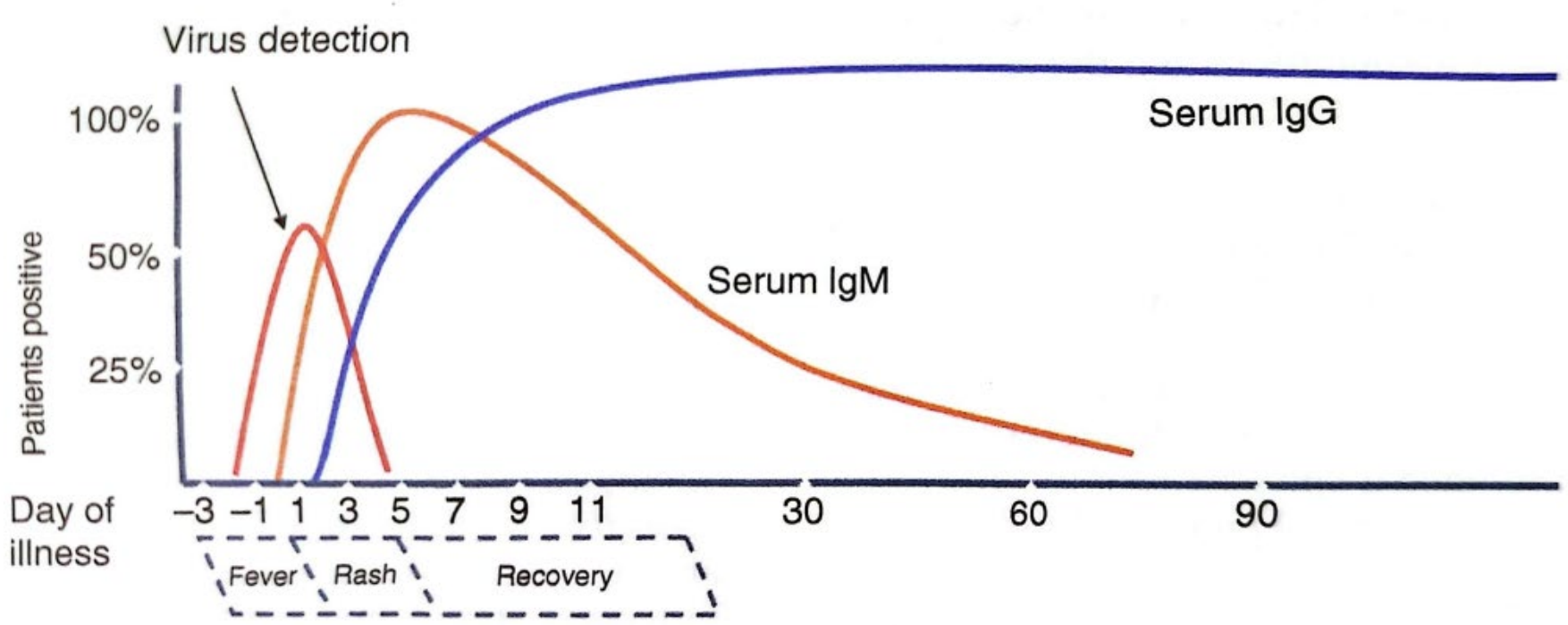
- 8 cases have been identified in Indiana
  - https://www.in.gov/health/idepd/diseases-and-conditions-resource-page/measles/

Measles Update

- Measles PCR Testing is offered through the IDOH Laboratory https://www.in.gov/health/laboratories/testing/measles-pcr/
- Specimens must be pre-approved by IDOH epidemiologists prior to testing
- **Important Change:** Call 317-233-1325 for preauthorization to send to IDOHL
  - IDOH must be consulted on cases where an MMR vaccination was provided within the previous 45 days. Consultations must happen prior to specimen collection.

Measles Serology

- CDC recommends that a specimen for PCR as well as a blood specimen for serology be collected from all patients with clinical features compatible with measles.
- Measles IgM is most sensitive 3+ days after rash onset and may be negative days 0–3 after rash onset. IgM can be detected for 6–8 weeks after acute measles.



Source: Karen C. Carroll and Michael A. Pfaller (Eds.). 2023. *Manual of Clinical Microbiology* (13th Ed.). ASM Press.

Measles Serology

- IDOH lab has capability to test for measles **IgG only**
- IDOH lab can forward specimens to CDC for measles IgM and IgG
  - Specimens must be authorized prior to testing by IDOH Infectious Disease Epidemiology and Prevention Division (317-233-1325)
- **Specimen collection:**
  - Collect 5 ml blood in serum separator tube (SST, gold top or tiger top)
  - Allow blood to sit at room temperature for 30 minutes (no longer than 60 minutes) to clot
  - Centrifuge specimen at 3000 RPM and 20°C for 10 minutes to separate the serum

Measles Serology

- **Specimen storage and transport**
  - Store and ship serum refrigerated/on ice packs (2-8°C) using a method that ensures delivery to IDOHL within 48 hours from collection
  - If stored longer than 48 hours after collection, remove serum from SST and transfer to a sterile cryovial. Freeze serum at -20°C or colder and ship on dry ice
- Enter test order on LimsNet under "Outbreak serology" and ensure that entry matches information on the specimen exactly
- **TAT**: 24 hours - five business days for measles IgG performed at IDOHL
- **TAT**: Seven days for measles IgM and IgG performed at CDC

Collecting and Shipping Serum Specimens to IDOH for Outbreak Testing

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1 Collecting and Preparing the Serum Specimen

- Label tube with at least 2 of the 3 patient identifiers: patient's first and last name, date of birth, or patient ID.
- Collect 5 mL of blood from patient in approved (tiger top or gold top) serum separator tube.
- Allow blood to sit at room temperature for 30 minutes before moving on to step two.
  - DO NOT let blood sit for longer than 60 minutes or freeze whole blood. This will result in hemolyzation.

2 Separating the Serum Specimen

- Centrifuge the specimen at 3000 RPM and 20°C for 10 minutes prior to shipping or storing the serum.
- If not immediately shipping to IDOH, please store serum appropriately according to transit times for the requested test.
- Specimen may be frozen at -20°C or lower - please contact IDOH Serology Receiving for requirements. **Specimen must be shipped on dry ice if frozen.**

Maximum Transit Times for IDOH Serology Outbreak Assays

Measles	2 days at 2-8°C	West Nile Virus	48 hrs at 2-8°C
Mumps	48 hrs at 2-8°C	Arboviral Encephalitis	5 days at 2-8°C

If possible, avoid freezing and thawing multiple times prior to submission. Please contact us with any concerns.

3 Entering the Specimen into LimsNet

- Log in to LimsNet.
- Select requested tests for specimens and enter patient data into the request.
- Click "Ship" when ready to ship the specimen
- Print coversheets for all specimens.
- **PLEASE** ensure to double-check your LimsNet test request. - **if any errors exist between the submitted request and the label on the patient specimen, your test will be cancelled.**

4 Shipping the Specimen to IDOH

- Ensure all serum specimens are properly sealed.
- Place serum specimen in plastic bag or canister with absorbent material and seal.
- Place sealed plastic bag or canister containing specimen in envelope or cardboard box. Please note: if shipping refrigerated or frozen, an insulated inner container must be used with ice pack or dry ice.
- Add IDOH address, return address, and make sure package has a UN3373 Biological Substance, Category B label. If shipping refrigerated or frozen, please ensure package indicates refrigeration or presence of dry ice.

IDOH Serology Lab Address

550 W 16th St Suite B
Indianapolis, IN, 46202
Attn: Stephanie Sweets

IDOH Turnaround Time for Serology Outbreak Testing: 24 hours

***For questions or concerns, please contact:**
IDOH Serology Receiving at (317) 921-5557
Serology Supervisor Stephanie Sweets at (317) 921-5535

Questions?

Brian Pope
Director, Virology & Biological Preparedness
Email: bpope1@health.in.gov
Phone: (317) 921-5555

Stephanie Sweets
Serology & CT/GC Lab Supervisor
Email: ssweets@health.in.gov
Phone: (317) 921-5557

Lauren Franco, PhD
Director, Clinical Microbiology Division
Email: lfranco@health.in.edu
Phone: (317) 233-1610

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SPUTUM SHIPPING UPDATE

JESSICA GENTRY

MYCOBACTERIOLOGY LABORATORY SUPERVISOR

5/15/2025

NEW TB Shipping Requirements

TB specimens (sputum) are now required to be stored/shipped refrigerated and should be received at 2-8°C.

This is to ensure specimen integrity from the time of collection through the time of testing.

All specimens should be stored in a refrigerator prior to shipment.

- Specimens sent via STAT courier are to be sent as “route refrigerated”
- Specimens dropped of by LHD personnel should be transported in coolers w/ frozen ice packs
- Specimens sent via UPS should now be shipped in insulated shippers w/ two frozen ice packs

LimsNet Kit Ordering

LimsNet now has two options for TB Specimens:

☐	6A	TB (Returned via UPS) Min: 1, Max: 8 *Whole kit consist of 3 sputum tubes w/biohazards bags and absorbent material, 2 ice packs, insulated shipper w/box, and 1 UPS return label.		Sputum Tubes Max: 12
☐	6A	TB (Returned via STAT courier or Marion Co) Min: 1, Max: 8 * Whole kit consist of 3 sputum tubes with inner and outer containers.		Sputum Tubes Max: 12

UPS Shipped Packages

- Each sputum tube should be placed in an individual biohazard bag w/absorbent material
- Two frozen ice packs
- Insulated shipper box
- UPS label on the outside

STAT Courier Delivered Packages

- Each sputum tube should be placed in the white plastic can and then in the 6A outer can
- 6A cans should be placed in a plastic bag with the STAT label affixed to the outside
- Specimens should be sent in STAT portal as “route refrigerated”

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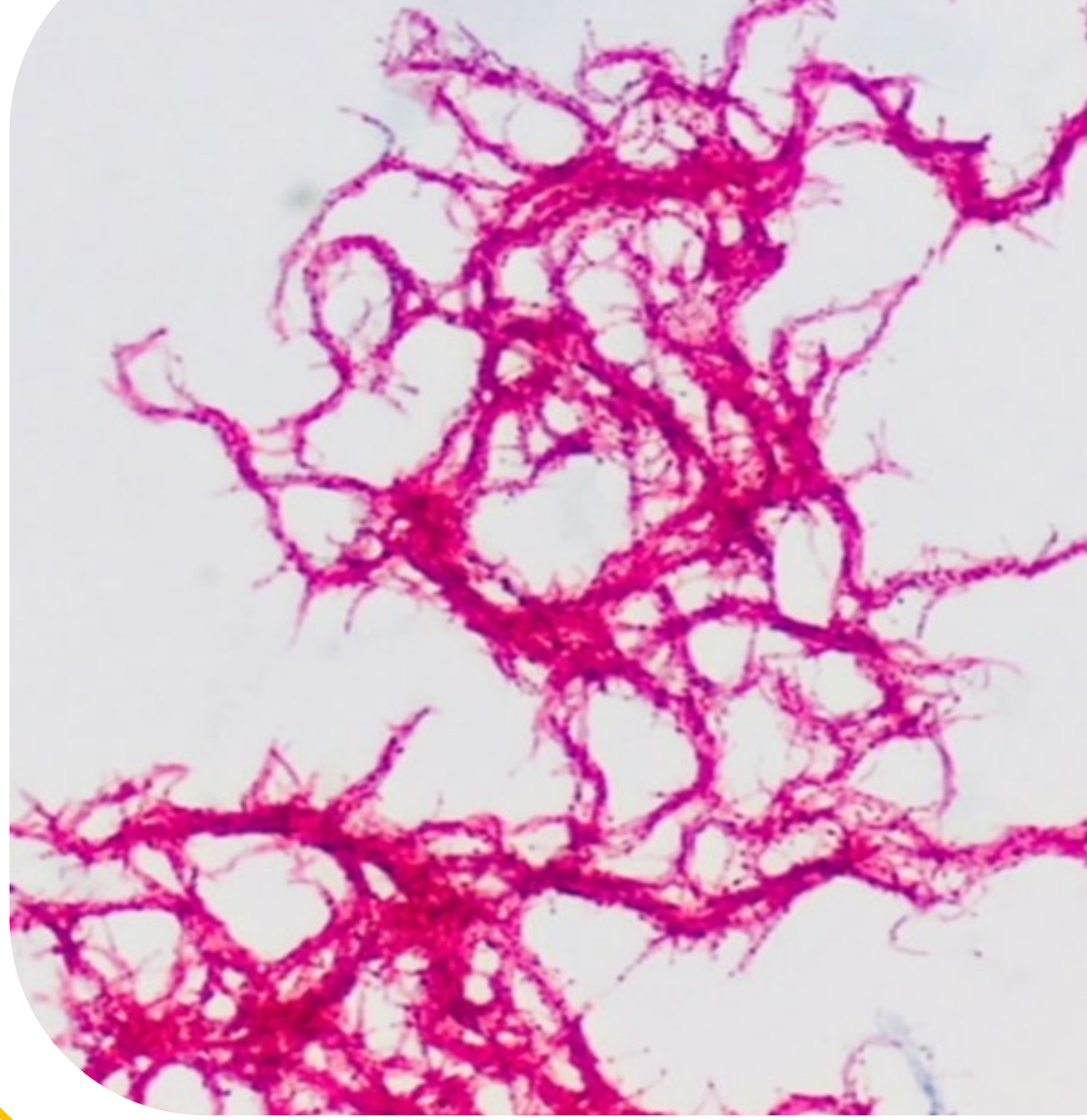
Local Health Department Delivered Packages

- Each sputum tube should be placed in the white plastic can and then in the 6A outer can
- 6A cans should be transported in a cooler with ice packs

Ordering New Kits

- Remember to order containers through LimsNet
- Goal is to have all UPS packages transitioned to the new kits before 4/30/25
- Return unneeded 6A cans to IDOHL via UPS bag



Questions?

Jessica Gentry
Mycobacteriology Supervisor
jgentry@health.in.gov

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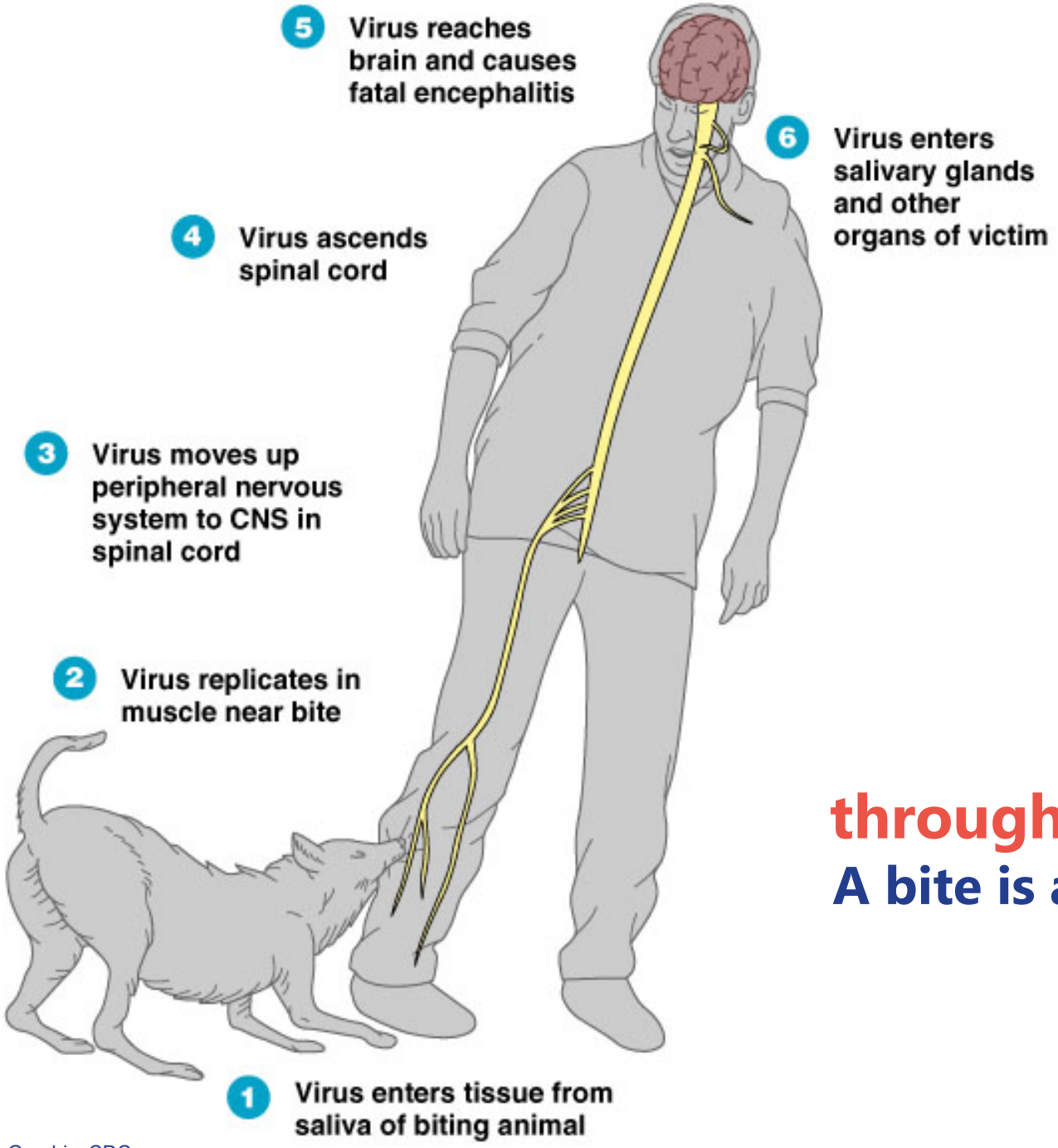
RABIES REMINDERS AND RECENT DATA IN INDIANA

ERIK OHANNESIAN
RABIES EPIDEMIOLOGIST

5/15/2025

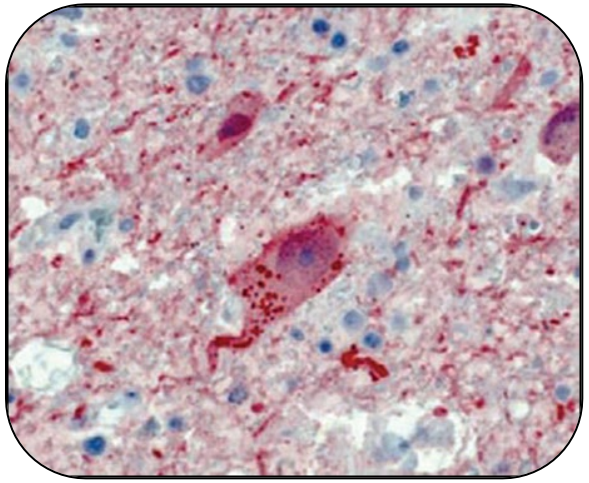


Graphic: CDC.

Rabies is transmitted in saliva through the bite of an infected animal.

A bite is any penetration of the skin by teeth.

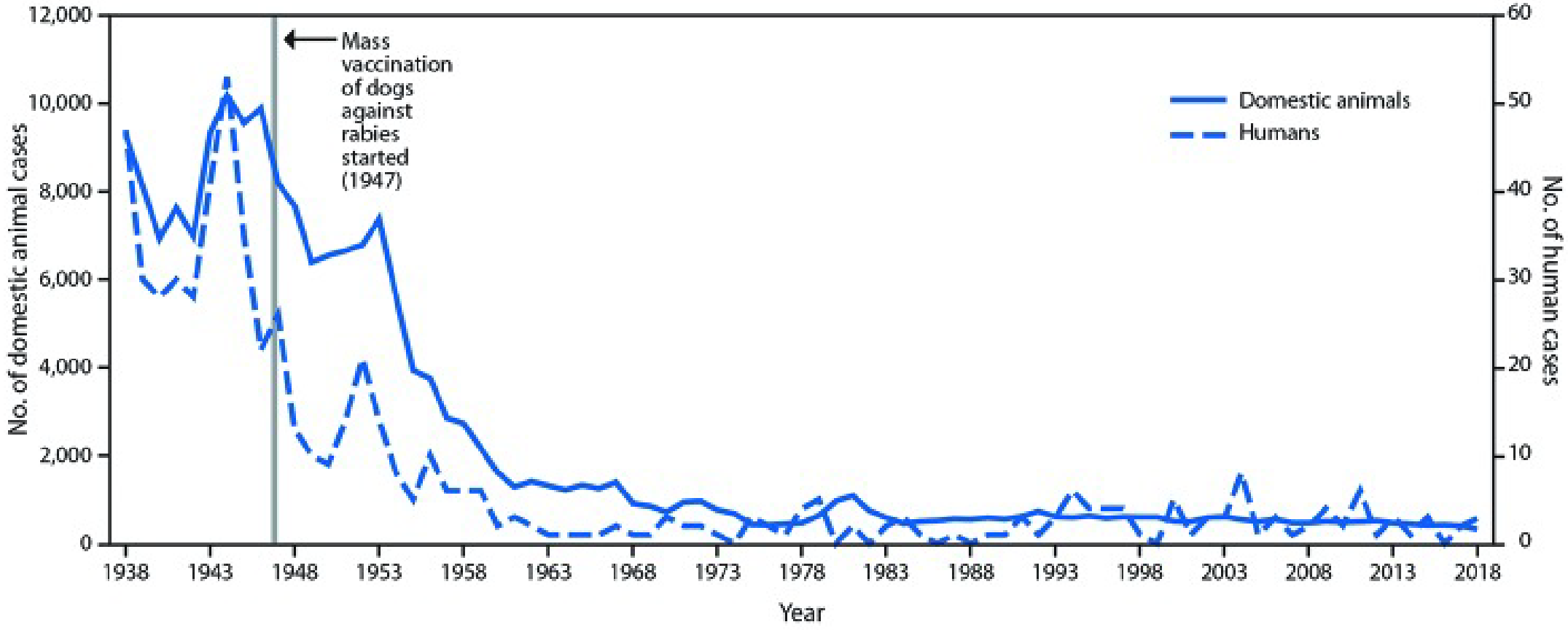
Rabies is a viral infection that causes acute, rapidly progressive neurologic disease



Photos: CDC.

Historical context for rabies surveillance

Rabies cases in humans and domestic animals — US, 1938–2018



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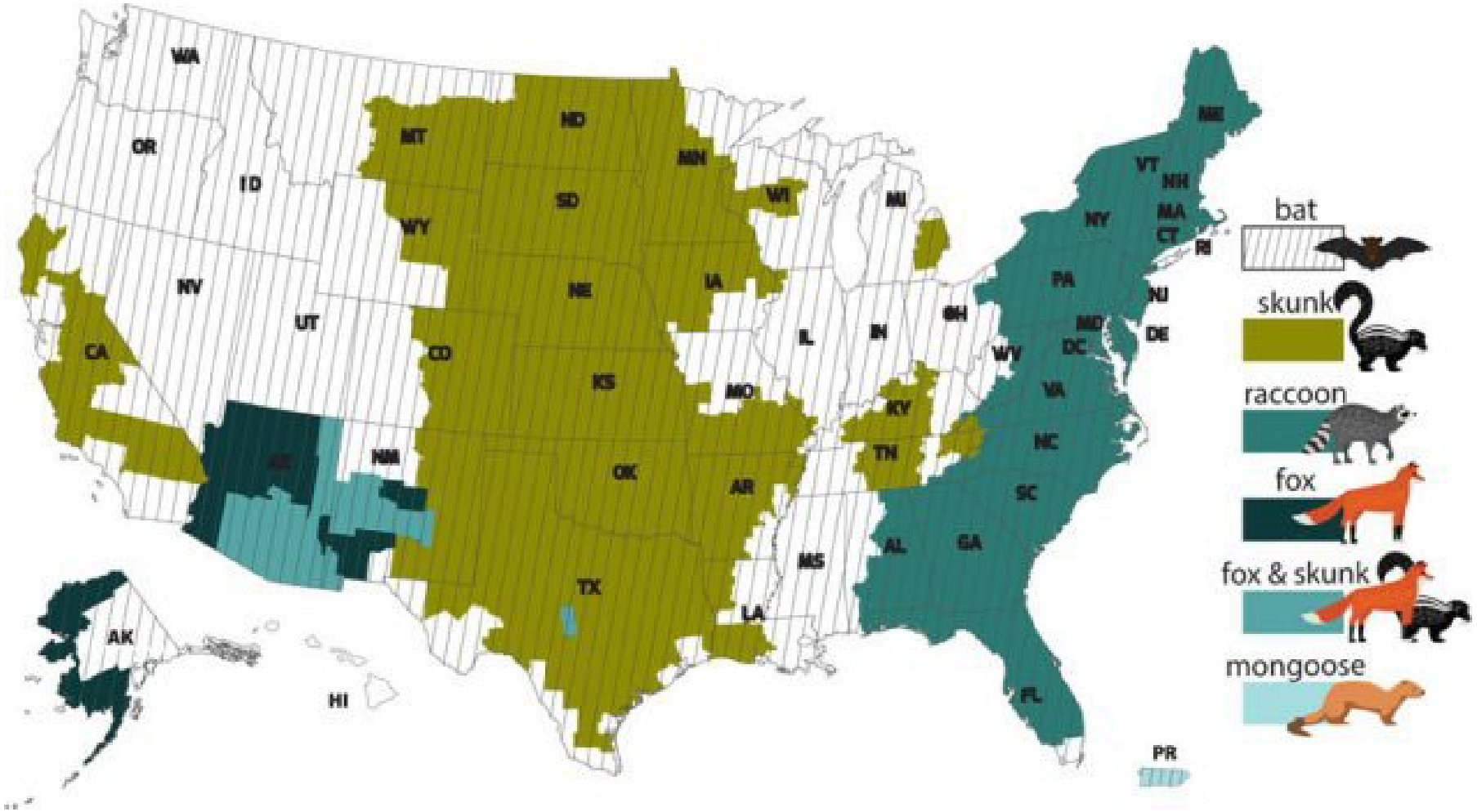
Pieracci et al. *MMWR Morb Mortal Wkly Rep*. 2019;68(23):524-528.

Rabies virus variants associated with terrestrial reservoir species circulate in definable regions



Ma et al. JAVMA 2021 (in press).

Bats, skunks, raccoons, and foxes are all considered high-risk species for rabies in Indiana

Indiana Department of Health

Big brown bats: Connor Long, Wikimedia Commons; Striped skunk: CC0 Creative Commons; common raccoon: Dr. Lloyd Glenn Ingles © California Academy of Sciences; red fox: Gerald and Buff Corsi © California Academy of Sciences.

Bats are the primary reservoir for rabies in Indiana

Bat bites inflict very limited injury, leading to underestimation of risk from bat exposures

Big brown bat.
Dr. Lloyd Glenn Ingles © California Academy of Sciences.

Wound inflicted by canine teeth of big brown bat.
Picture was taken on the same day as the bite.
Photo: CDC.

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Small prey animals do not typically carry rabies

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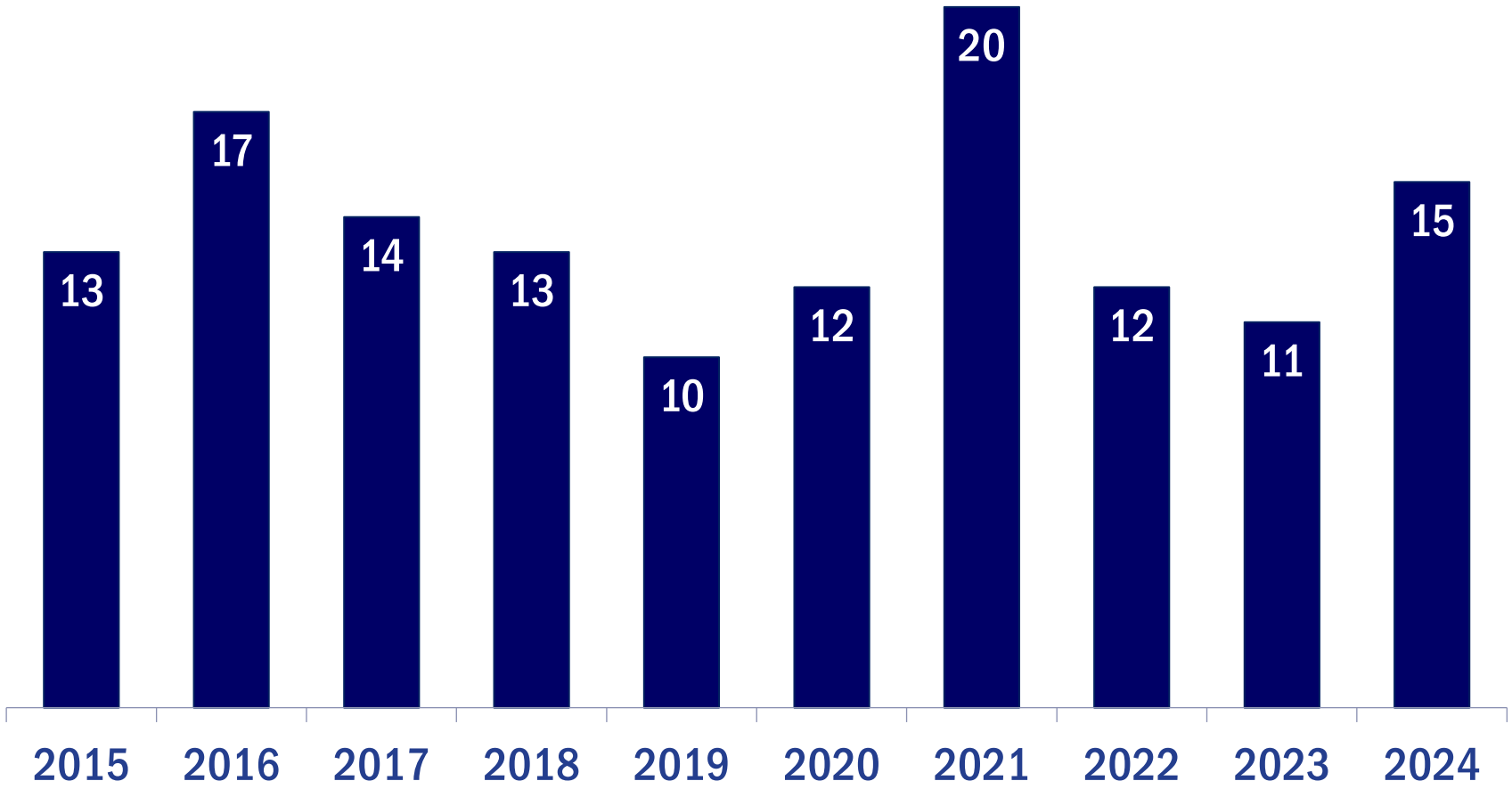
Eastern chipmunk: Oleksii Voronin, Wikimedia Commons; Eastern cottontail rabbit: Peter Broster, Wikimedia Commons; Eastern grey squirrel: Birdphotos.com, Wikimedia Commons.

Approximately 10–20 rabid bats are detected in Indiana during a typical year

Bat rabies case count, 2013–2024



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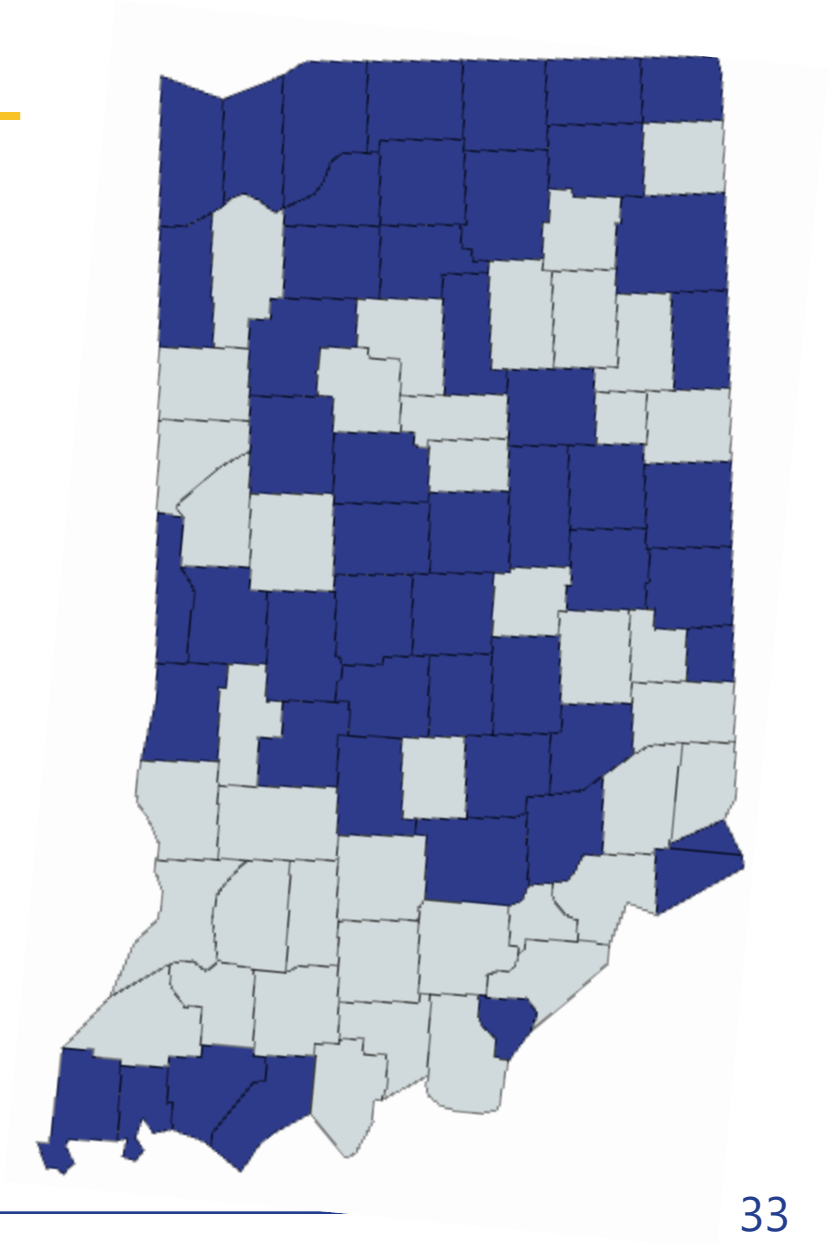
Rabid bats have been detected throughout Indiana

Counties with detection of rabid bats, 2012–2023 (N=49)



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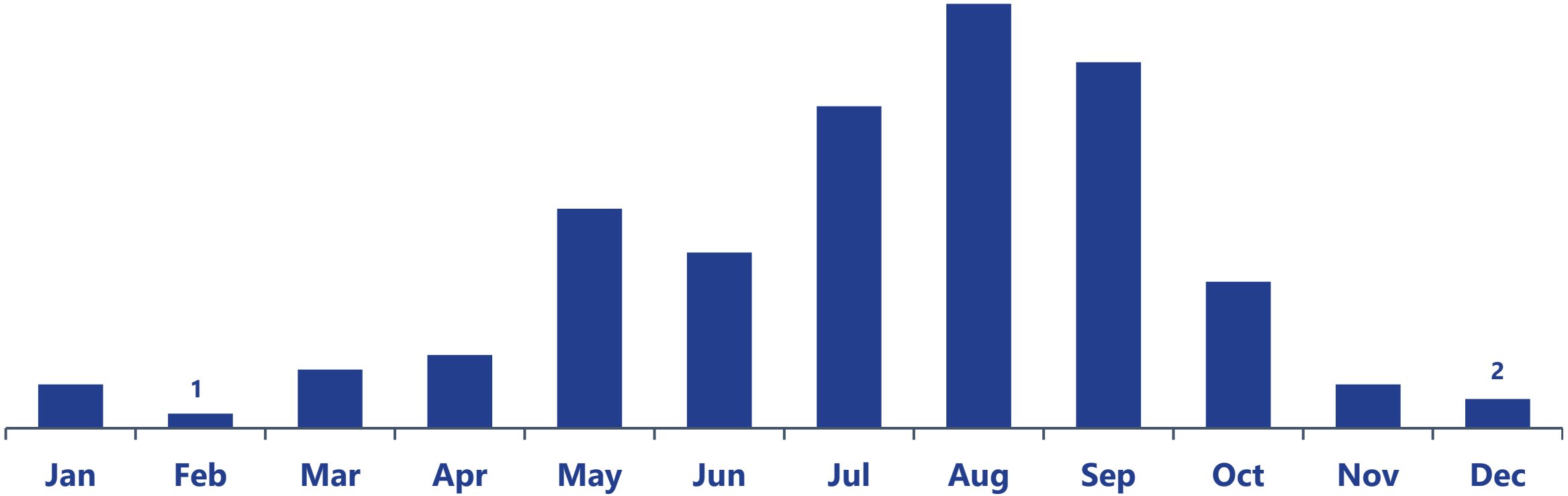
Bat rabies cases peak in August in Indiana

Number of rabid bats by month, 2012–2025



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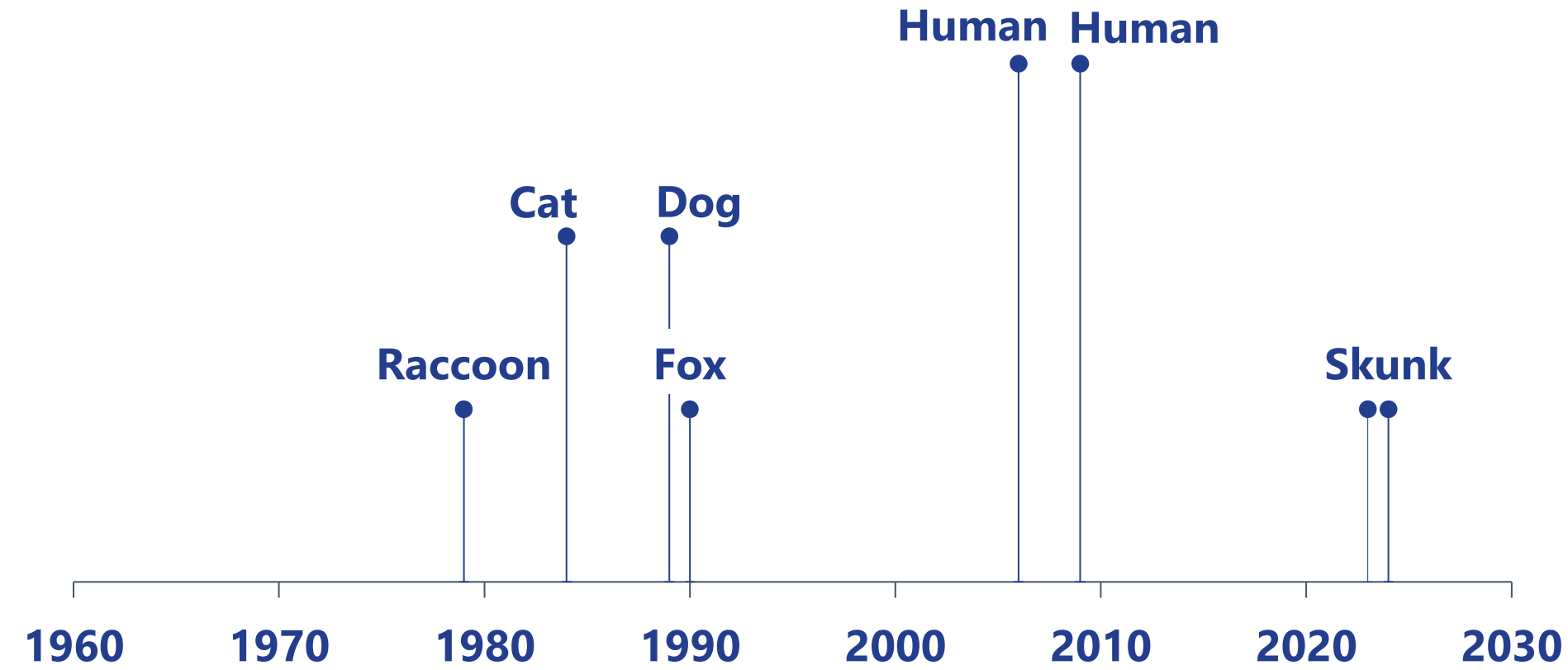
Rabies cases are detected in bats in Indiana every year

Last detection of rabies in Indiana by species, 1960–2024



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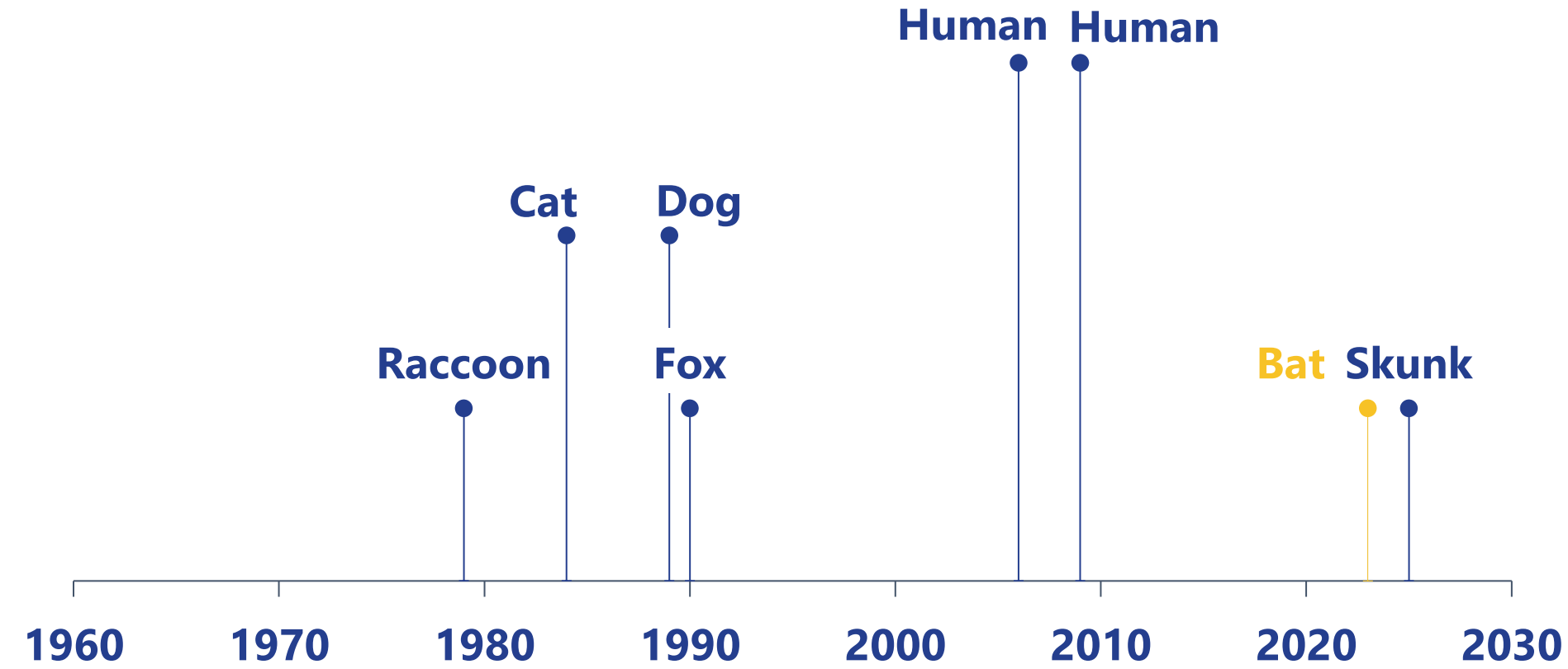

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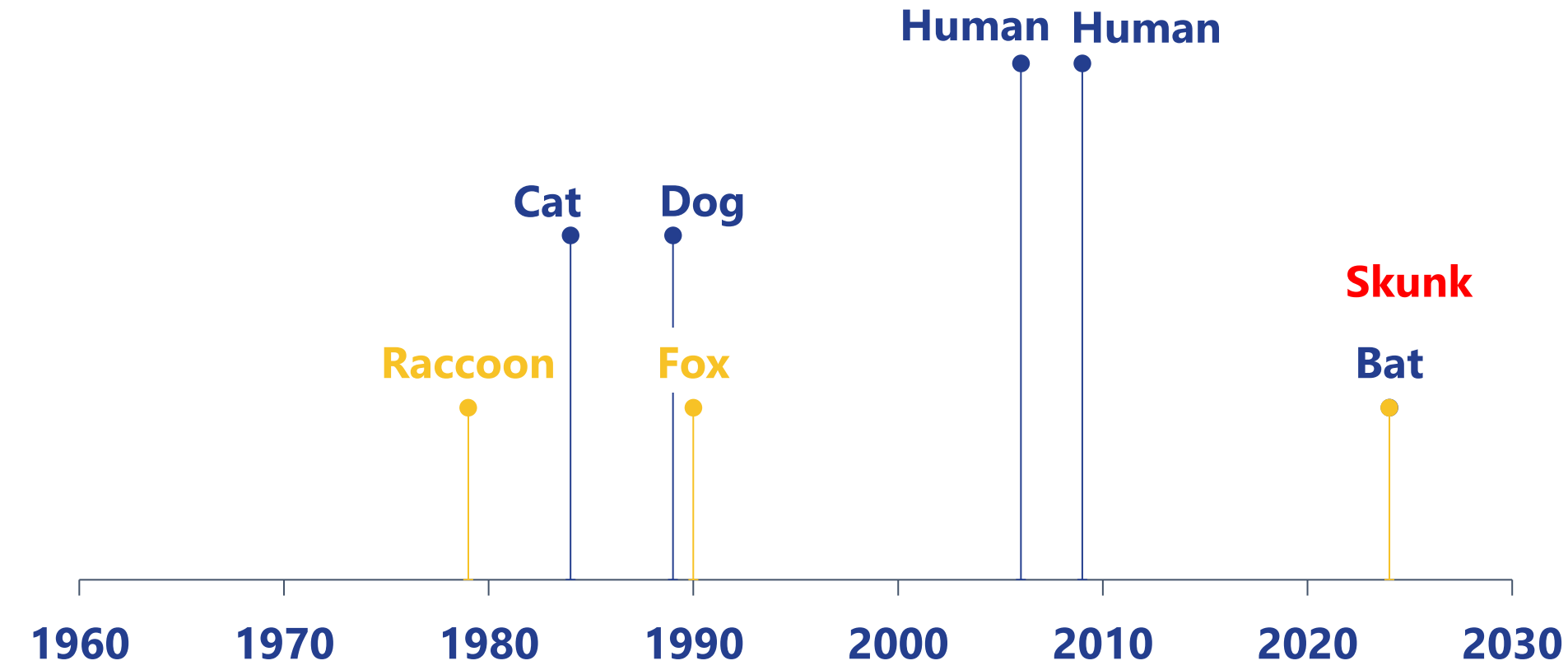
The last rabies case in Indiana in a terrestrial wild animal was in a skunk in 2024

Last detection of rabies in Indiana by species, 1960–2024



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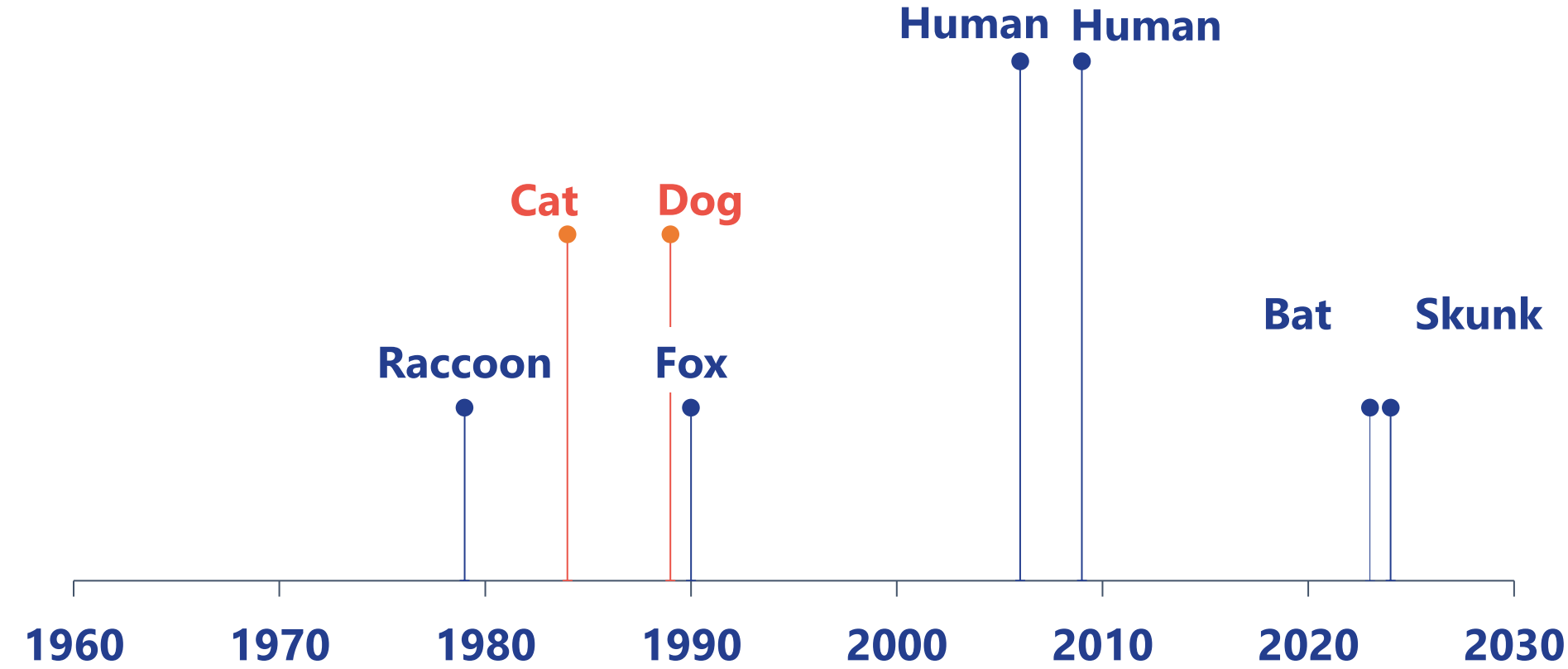
Skunk Rabies Detection

- In January 2024, a rabid skunk was found in Clark County
- CDC variant typing confirmed north-central skunk variant
- First rabid skunk detected in Indiana since 2004
- Active surveillance techniques established
  - IDOH, BOAH, DNR
- Risk assessment changes in four counties
  - Harrison, Washington, Floyd, Crawford

The last rabies case in Indiana in a dog or cat was in the 1980s

Last detection of rabies in Indiana by species, 1960–2024



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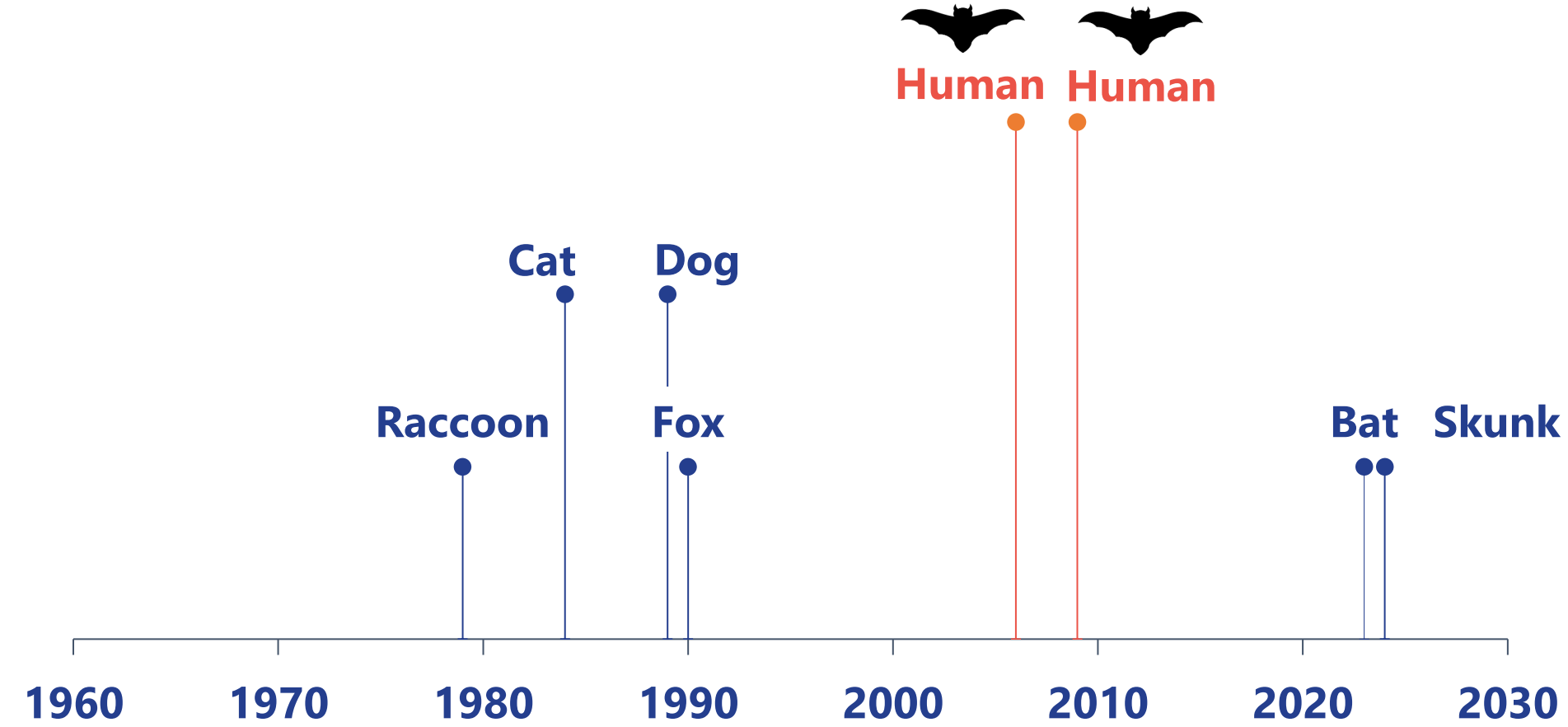
The last rabies cases in Indiana in humans were in the 2000s

Last detection of rabies in Indiana by species, 1960–2024



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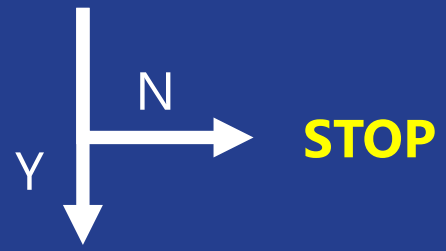
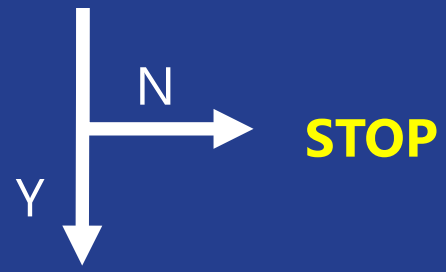
Risk assessment approach

Did sufficient contact occur to allow rabies virus transmission?



Was the animal rabid or potentially rabid?



Public health recommendation for rPEP

Sources of information

Animal bite report
Medical record
Patient and/or proxy interviews

10-day post-bite quarantine*
Rabies testing
Risk estimation

* Dogs, cats, and ferrets ONLY

Rabies PEP Schedule

Days post presentation	**0**	**3**	**7**	**14**	**28**
Where to go	Hospital ED	Hospital infusion clinic +/- PCP, pharmacy, LHD			
Unvaccinated Immune competent	RIG + Vaccine	Vaccine	Vaccine	Vaccine	
Unvaccinated Immune compromised	RIG + Vaccine	Vaccine	Vaccine	Vaccine	Vaccine
Previously vaccinated	Vaccine	Vaccine			

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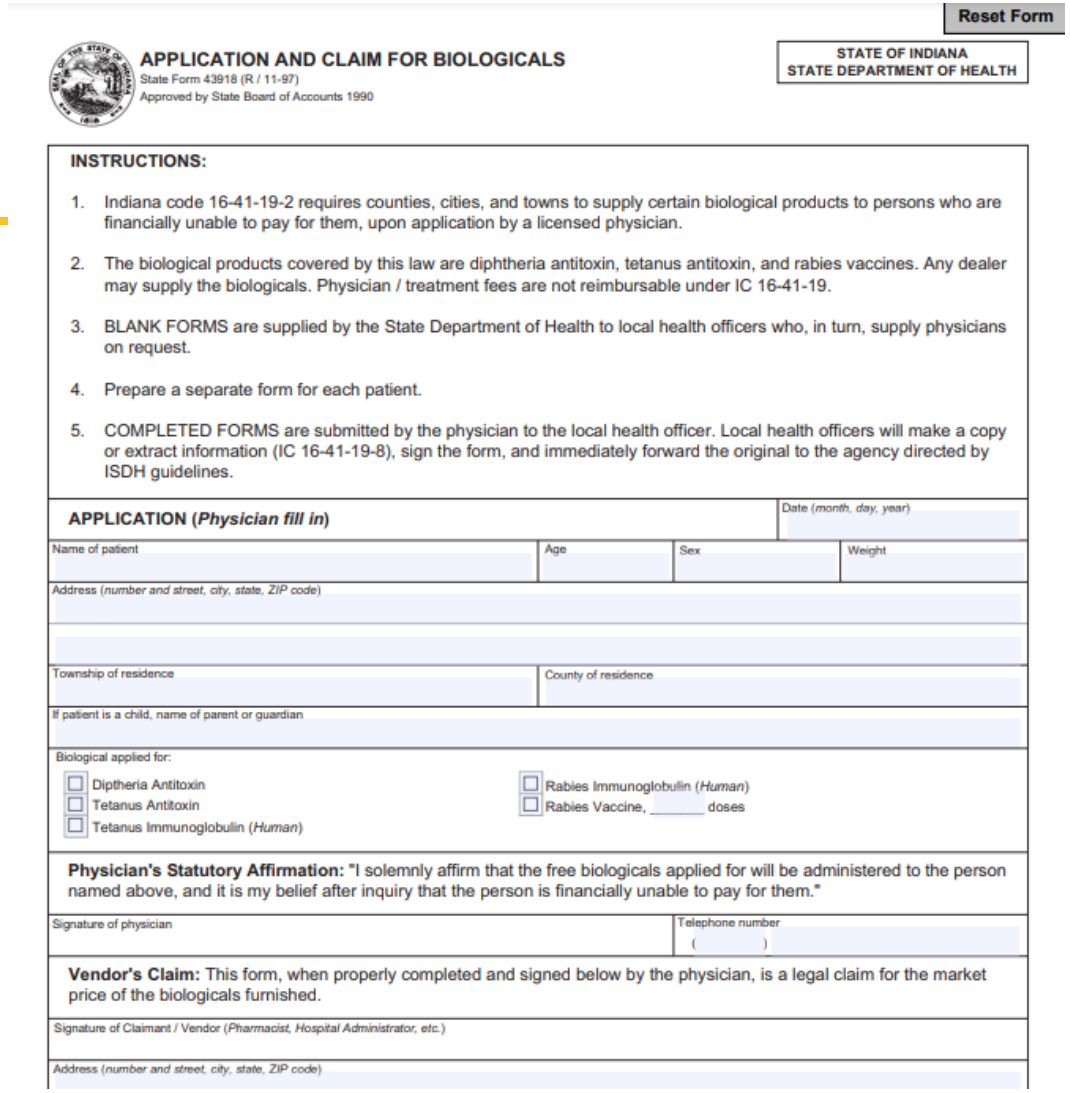
rPEP FAQs

- Who pays for vaccines?
  - The exposed person
  - The county
- Application and Claim for Biologicals
  - State Form 43918
  - Physician affirms patient's inability to pay for vaccination series
  - Covers both HRIG and vaccine doses
- HFI funds can be used for PEP



Reset Form

APPLICATION AND CLAIM FOR BIOLOGICALS
State Form 43918 (R / 11-97)
Approved by State Board of Accounts 1990

STATE OF INDIANA
STATE DEPARTMENT OF HEALTH

INSTRUCTIONS:

1. Indiana code 16-41-19-2 requires counties, cities, and towns to supply certain biological products to persons who are financially unable to pay for them, upon application by a licensed physician.
2. The biological products covered by this law are diphtheria antitoxin, tetanus antitoxin, and rabies vaccines. Any dealer may supply the biologicals. Physician / treatment fees are not reimbursable under IC 16-41-19.
3. BLANK FORMS are supplied by the State Department of Health to local health officers who, in turn, supply physicians on request.
4. Prepare a separate form for each patient.
5. COMPLETED FORMS are submitted by the physician to the local health officer. Local health officers will make a copy or extract information (IC 16-41-19-8), sign the form, and immediately forward the original to the agency directed by ISDH guidelines.

APPLICATION (*Physician fill in*) — Date (*month, day, year*)

Name of patient | Age | Sex | Weight

Address (*number and street, city, state, ZIP code*)

Township of residence | County of residence

If patient is a child, name of parent or guardian

Biological applied for:

- ☐ Diptheria Antitoxin
- ☐ Tetanus Antitoxin
- ☐ Tetanus Immunoglobulin (*Human*)
- ☐ Rabies Immunoglobulin (*Human*)
- ☐ Rabies Vaccine, _____ doses

Physician's Statutory Affirmation: "I solemnly affirm that the free biologicals applied for will be administered to the person named above, and it is my belief after inquiry that the person is financially unable to pay for them."

Signature of physician | Telephone number ( )

Vendor's Claim: This form, when properly completed and signed below by the physician, is a legal claim for the market price of the biologicals furnished.

Signature of Claimant / Vendor (*Pharmacist, Hospital Administrator, etc.*)

Address (*number and street, city, state, ZIP code*)

Indiana Department of Health

Questions?

Erik Ohannesian
Rabies Epidemiologist
erohannesian@health.in.gov

Question & Answer Session

Indiana Department of Health

Questions?

IDOH Laboratory
317-921-5500
IDOH-lab-info@health.in.gov

Next webcast

The next Indiana Laboratory System webcast is scheduled for:

Date: Thursday, June 19

Time: 10:30 – 11 a.m. EDT

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THANK YOU FOR JOINING THE WEBCAST!

- IDOH Laboratory Team