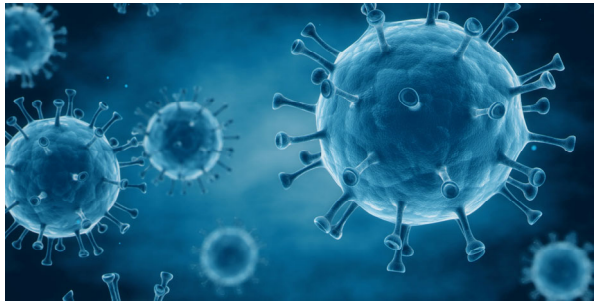
OREGON HEALTH AUTHORITY





Communicable Disease Exercises & Hot Topics

2026

Public Health Division
Acute and Communicable Disease Program



Rabies Scenarios

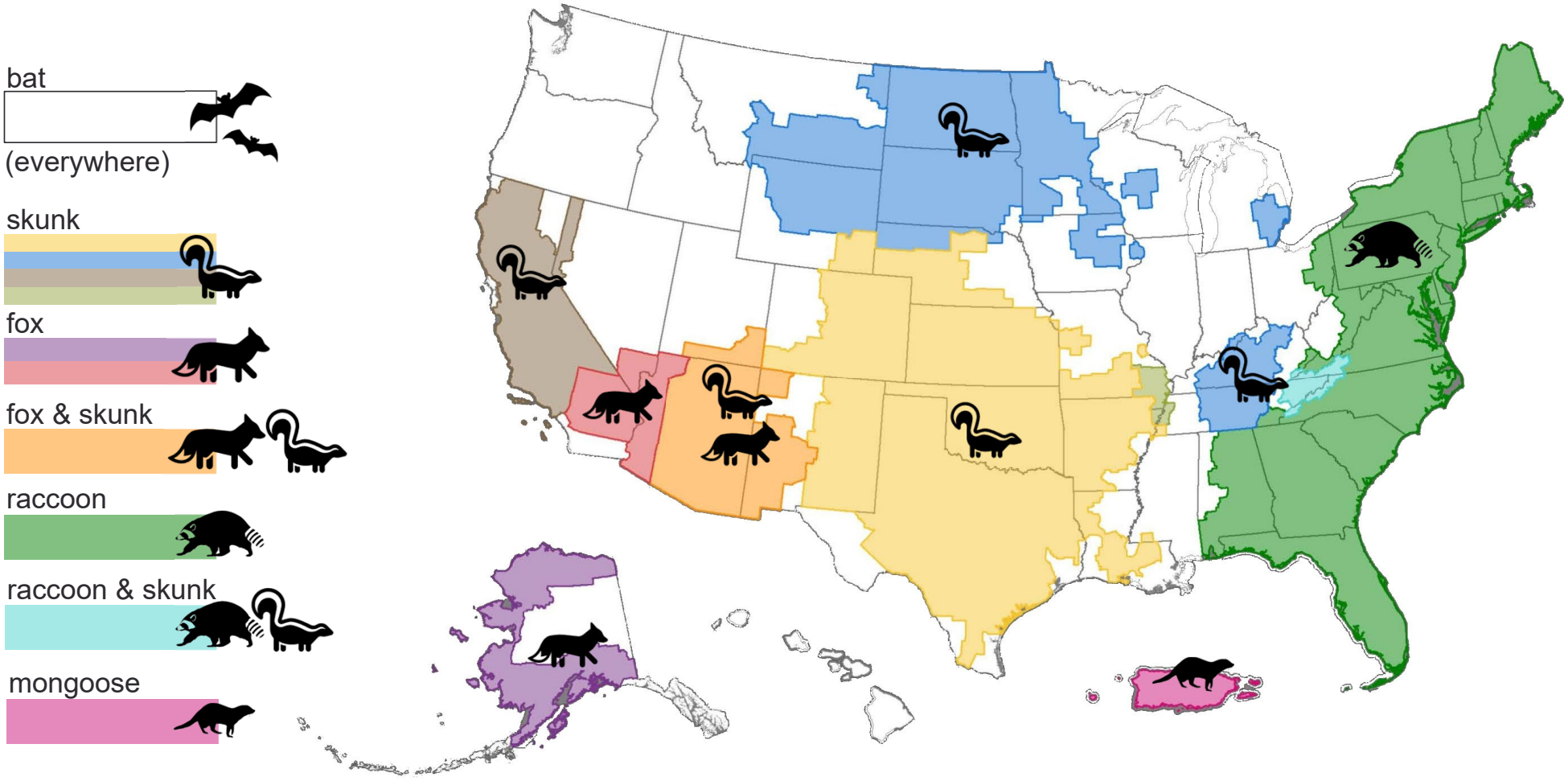
Thanks to Dr. Emilio Debess, DMV

Rabies Overview

- Virus
- Infected animals act oddly
  - Wild animals unafraid of humans
  - Bats in daylight
  - Bats crawling & hissing
  - Profuse salivation
- Spreads by saliva entering broken tissue
- In OR, WA, ID bats are the only reservoir (cats & foxes may be infected predators)
- No terrestrial rabies in Oregon!

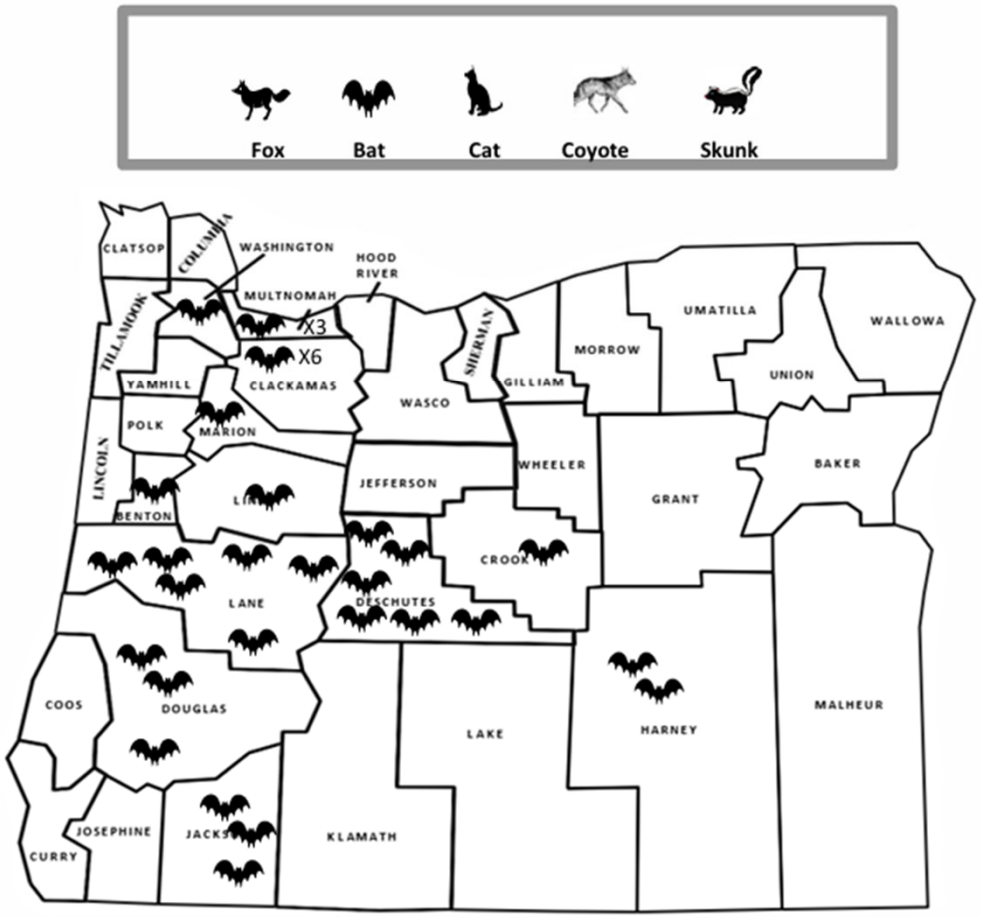


Rabies variants in the US



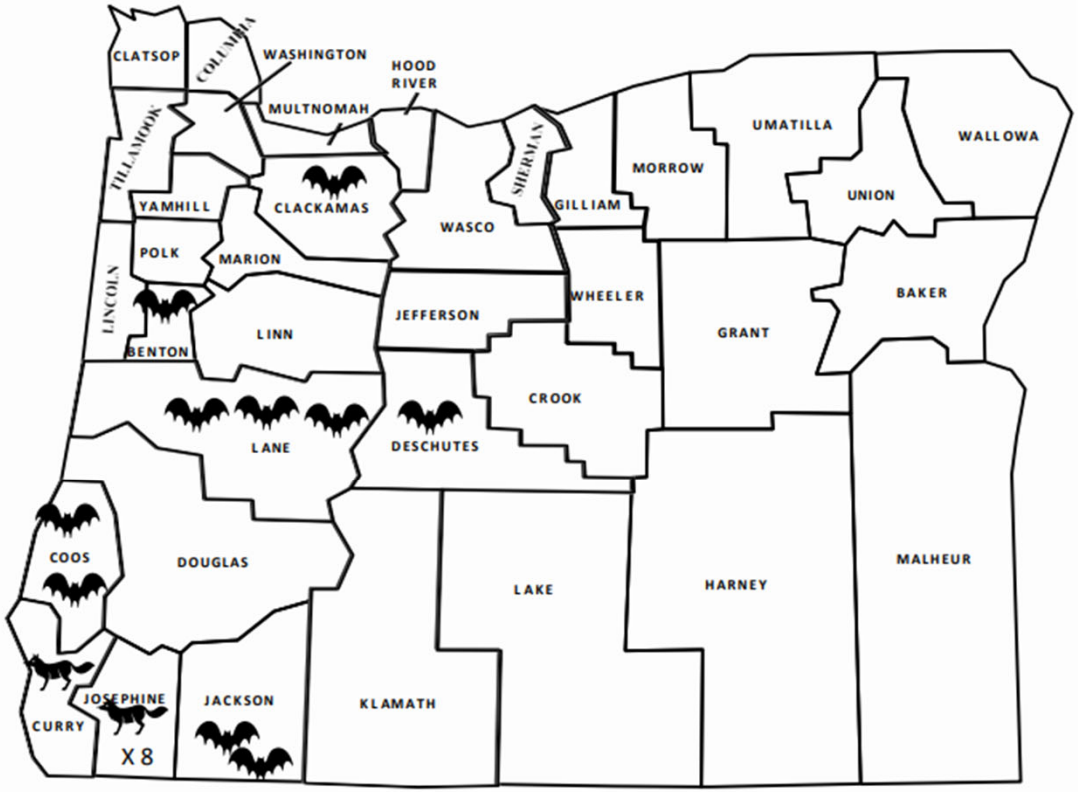
https://www.cdc.gov/rabies/media/images/2024/05/rabies-virus-variant_1.jpg

Rabies-positive Animals
Oregon, 2026

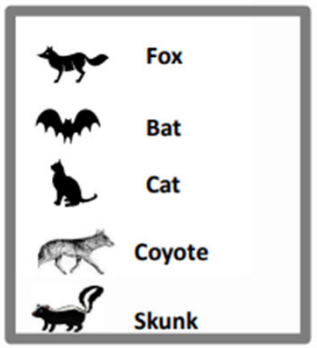


Month	County	Species	Common Names
March	Jackson	BAT	Brazilian Free tailed
April	Clackamas	BAT	Big Brown Bat
May	Deschutes	BAT	Big Brown Bat
May	Douglas	BAT	Big Brown Bat
June	Lane	BAT	Brazilian Free tailed
June	Deschutes	BAT	California Myotis
June	Lane	BAT	Big Brown Bat
June	Benton	BAT	Big Brown Bat
June	Clackamas	2 BATS	Big Brown Bat
July	Marion	BAT	Big Brown Bat
July	Lane	BAT	Big Bown Bat
July	Clackamas	BAT	Little Brown Bat
July	Deschutes	3 BATS	Big Brown Bats
July	Lane	BAT	California Myotis
July	Douglas	2 BATS	Big Brown Bat & Silver Haired Bat
July	Clackamas	BAT	Big Brown Bat

Rabies-positive Animals
Oregon, 2025



Month	County	Species
February	Josephine	FOX
March	Josephine	4 FOXES
April	Josephine	2 FOXES
May	Jackson Lane	BAT BAT
June	Coos	BAT
July	Clackamas	BAT
August	Jackson Benton Lane	BAT BAT BAT
September	Deschutes Coos Josephine Curry	BAT BAT FOX FOX
November	Lane	BAT



November 2025

OREGON HEALTH AUTHORITY

SW Oregon foxes

From CDC:

- “Phylogenetic analysis of three RABV sequences obtained from rabid gray foxes from southern Oregon collected in 2000, 2006 and 2008, identified all three foxes were infected with RABV variant associated with **Myotis bats** (little brown bats)”

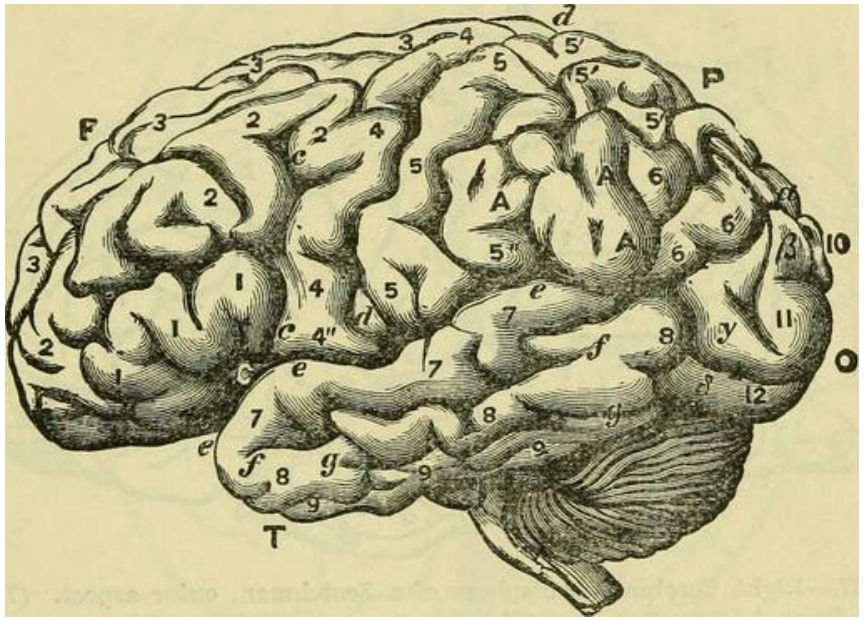
- “More sequences, ideally containing samples from bats near Josephine and Jackson counties are needed to confirm or rule out a rabies host shift”



Rabies detection

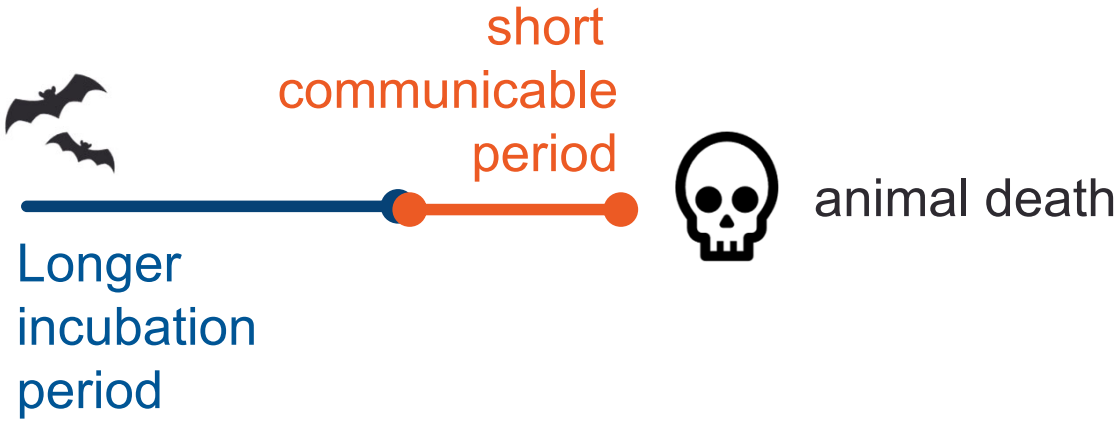
- The only way to test for rabies requires analyzing brain tissue
- Only one lab in Oregon:

Oregon State University
Oregon Veterinary Diagnostic Laboratory



Cost $85
+ $10-$158 carcass disposal fee

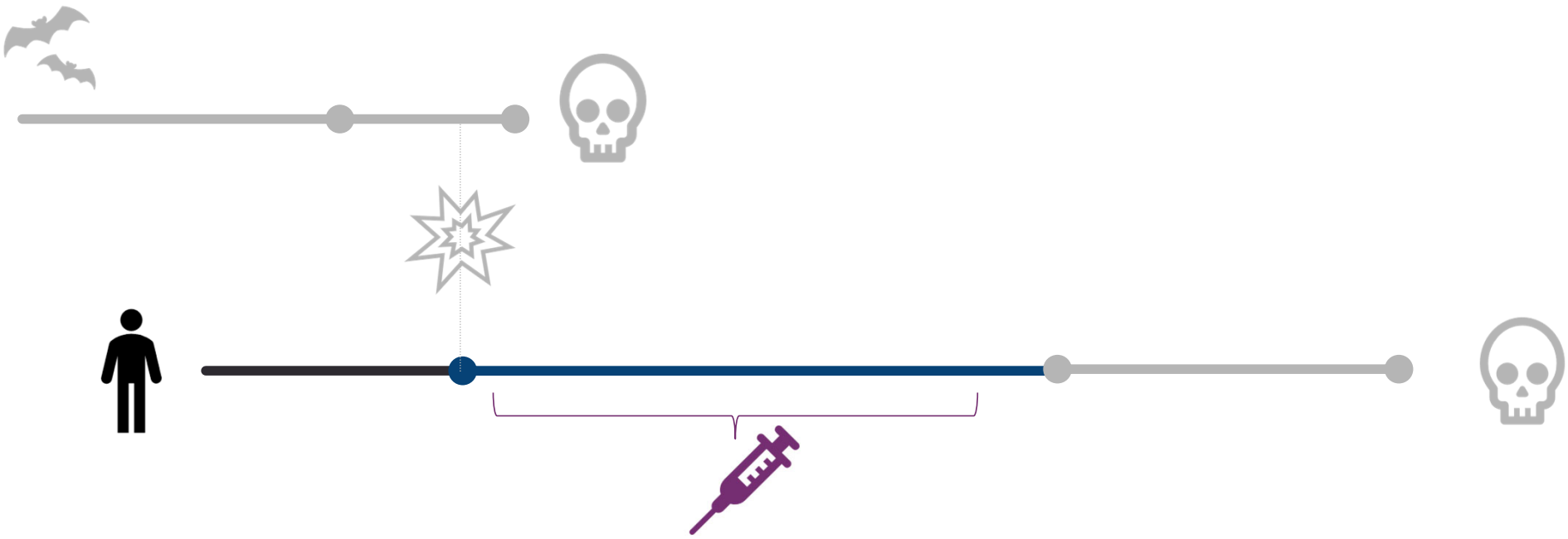
Progression of Rabies in humans



Progression of Rabies in humans



Progression of Rabies in humans



100% effective before onset of symptoms

Post exposure prophylaxis (PEP)



Consists of:

- Rabies immune globulin (RIG) administered as soon as possible
- 4 vaccines given on days 0, 3, 7, 14

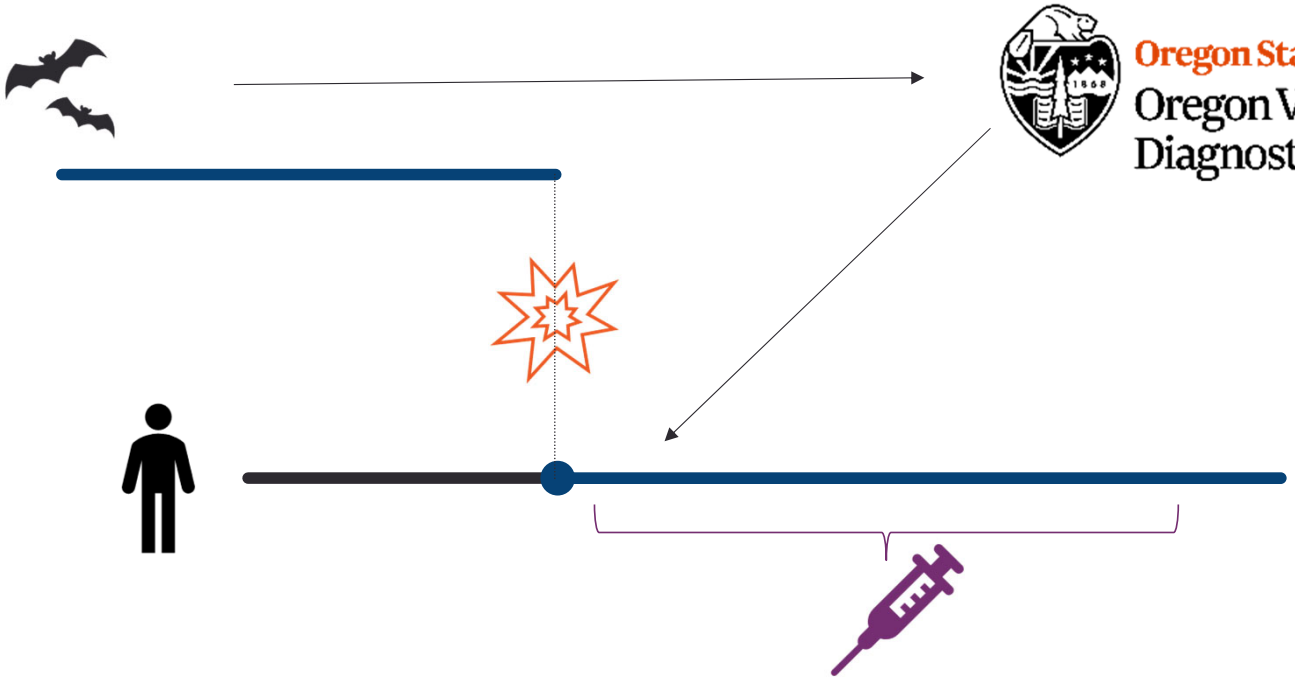
Very effective

Expensive; may not be covered by insurance

Rabies prevention tools:

- Animal testing
- Animal quarantine
- PEP/Vaccine

Animal testing

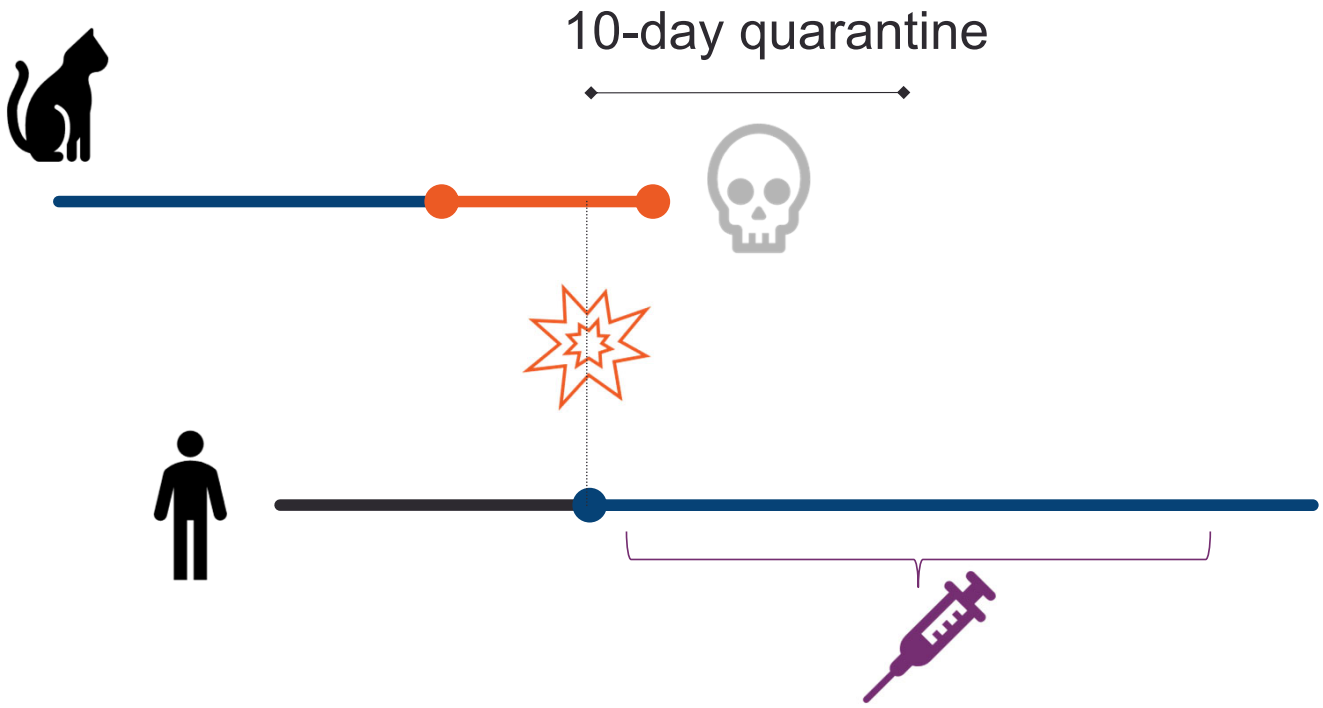


Oregon State University
Oregon Veterinary Diagnostic Laboratory

Rabies prevention tools:

- Animal testing – if the animal is available
- Animal quarantine
- PEP/Vaccine

Animal quarantine



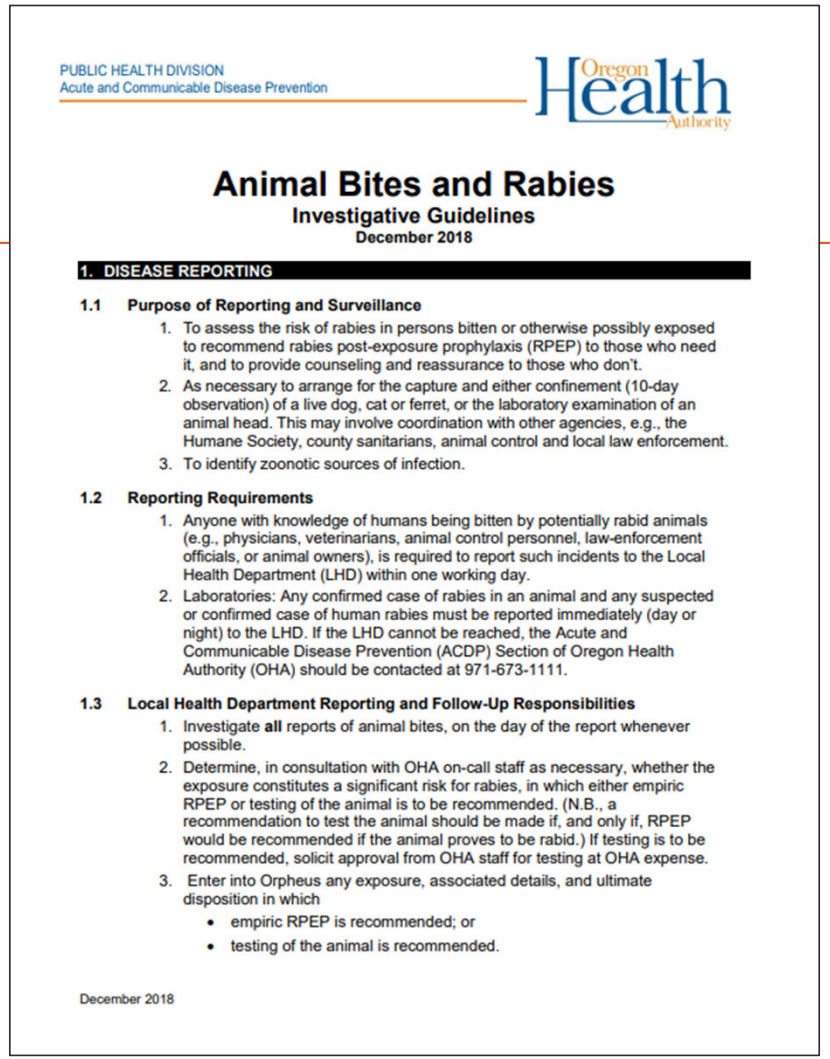
Rabies prevention tools:

- Animal testing – if the animal is available
- Animal quarantine - if the animal is a pet
- PEP/Vaccine – animal unavailable; rabies possible

To PEP or not to PEP?

- Recommendation for PEP or testing varies by:
  - Type of animal involved
  - Circumstances of the bite:
    - Actual bite?
    - Provoked bite?
    - Behavior of the animal

Rabies & animal bite investigative guidelines



PUBLIC HEALTH DIVISION
Acute and Communicable Disease Prevention

Oregon Health Authority

Animal Bites and Rabies

Investigative Guidelines

December 2018

1. DISEASE REPORTING

1.1 Purpose of Reporting and Surveillance

1. To assess the risk of rabies in persons bitten or otherwise possibly exposed to recommend rabies post-exposure prophylaxis (RPEP) to those who need it, and to provide counseling and reassurance to those who don't.
2. As necessary to arrange for the capture and either confinement (10-day observation) of a live dog, cat or ferret, or the laboratory examination of an animal head. This may involve coordination with other agencies, e.g., the Humane Society, county sanitarians, animal control and local law enforcement.
3. To identify zoonotic sources of infection.

1.2 Reporting Requirements

1. Anyone with knowledge of humans being bitten by potentially rabid animals (e.g., physicians, veterinarians, animal control personnel, law-enforcement officials, or animal owners), is required to report such incidents to the Local Health Department (LHD) within one working day.
2. Laboratories: Any confirmed case of rabies in an animal and any suspected or confirmed case of human rabies must be reported immediately (day or night) to the LHD. If the LHD cannot be reached, the Acute and Communicable Disease Prevention (ACDP) Section of Oregon Health Authority (OHA) should be contacted at 971-673-1111.

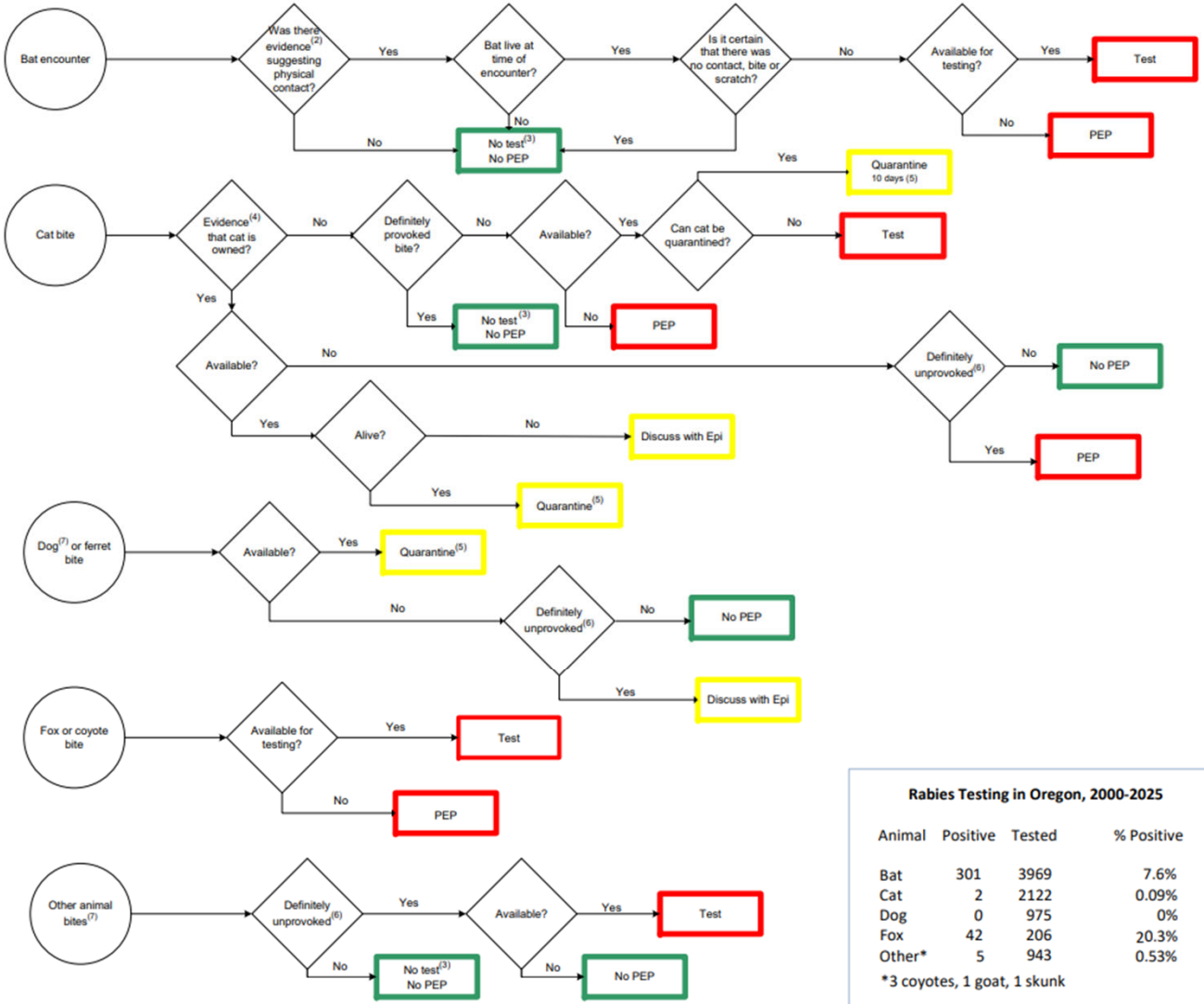
1.3 Local Health Department Reporting and Follow-Up Responsibilities

1. Investigate **all** reports of animal bites, on the day of the report whenever possible.
2. Determine, in consultation with OHA on-call staff as necessary, whether the exposure constitutes a significant risk for rabies, in which either empiric RPEP or testing of the animal is to be recommended. (N.B., a recommendation to test the animal should be made if, and only if, RPEP would be recommended if the animal proves to be rabid.) If testing is to be recommended, solicit approval from OHA staff for testing at OHA expense.
3. Enter into Orpheus any exposure, associated details, and ultimate disposition in which
   - empiric RPEP is recommended; or
   - testing of the animal is recommended.

December 2018

Algorithm for Prevention of Rabies After Animal Encounters in Oregon [1]

Updated: 3/16/2026



Rabies Testing in Oregon, 2000-2025

Animal	Positive	Tested	% Positive
Bat	301	3969	7.6%
Cat	2	2122	0.09%
Dog	0	975	0%
Fox	42	206	20.3%
Other*	5	943	0.53%

*3 coyotes, 1 goat, 1 skunk

Notes

1. Oregon law mandates reporting of any bite of a human being by any other mammal (Oregon Administrative Rule 333-018-0015(5) (c)); such reports should be made to the local public health authority for the jurisdiction in which the patient resides. Decisions about rabies PEP are the purview of the clinician attending the patient. Although these recommendations regarding the need for rabies PEP represent the best judgment of state public-health officials, they are not binding on clinicians. Clinicians should be advised that, aside from concern about rabies, prophylaxis against tetanus or bacterial infection might be warranted, depending on the nature of the wound and the animal involved. Local health department personnel are advised to call Acute and Communicable Disease Prevention at 971-673-1111 with specific questions regarding the application of these guidelines.

As of Jan.1, 2019, all animals to be tested for rabies will be performed at Oregon State University Veterinary Diagnostic Laboratory (541-737-3261).

2. Such evidence might include, e.g., a young child's waking up, crying, with a bat found in the room.

3. "No Test" means that the animal will not be tested at the State's expense. In such cases, the animal may be tested at the owner's expense.

4. Evidence of ownership might include, e.g., presence of collar or previous appearances of the animal in a neighborhood.

5. "Quarantine" means confining a dog, cat or ferret for 10 days to observe for signs of illness after biting a human being. The nature of the confinement is determined by the local public health authority. If the animal develops neurological illness during the period of quarantine, it should be euthanized and its head shipped to OSUVDL for testing within one working day. If the animal survives quarantine, rabies vaccine can be administered at the end of quarantine.

6. "Unprovoked" implies that, in the context of the situation, there was no obvious alternative motivation for the animal to bite. A good history is essential. In practice, unprovoked bites are quite rare. Examples of provocation include: being hit by a car, being handled, fed or caged, being cornered in a garage, having a jogger run past your yard, or crowding animal's space, etc.

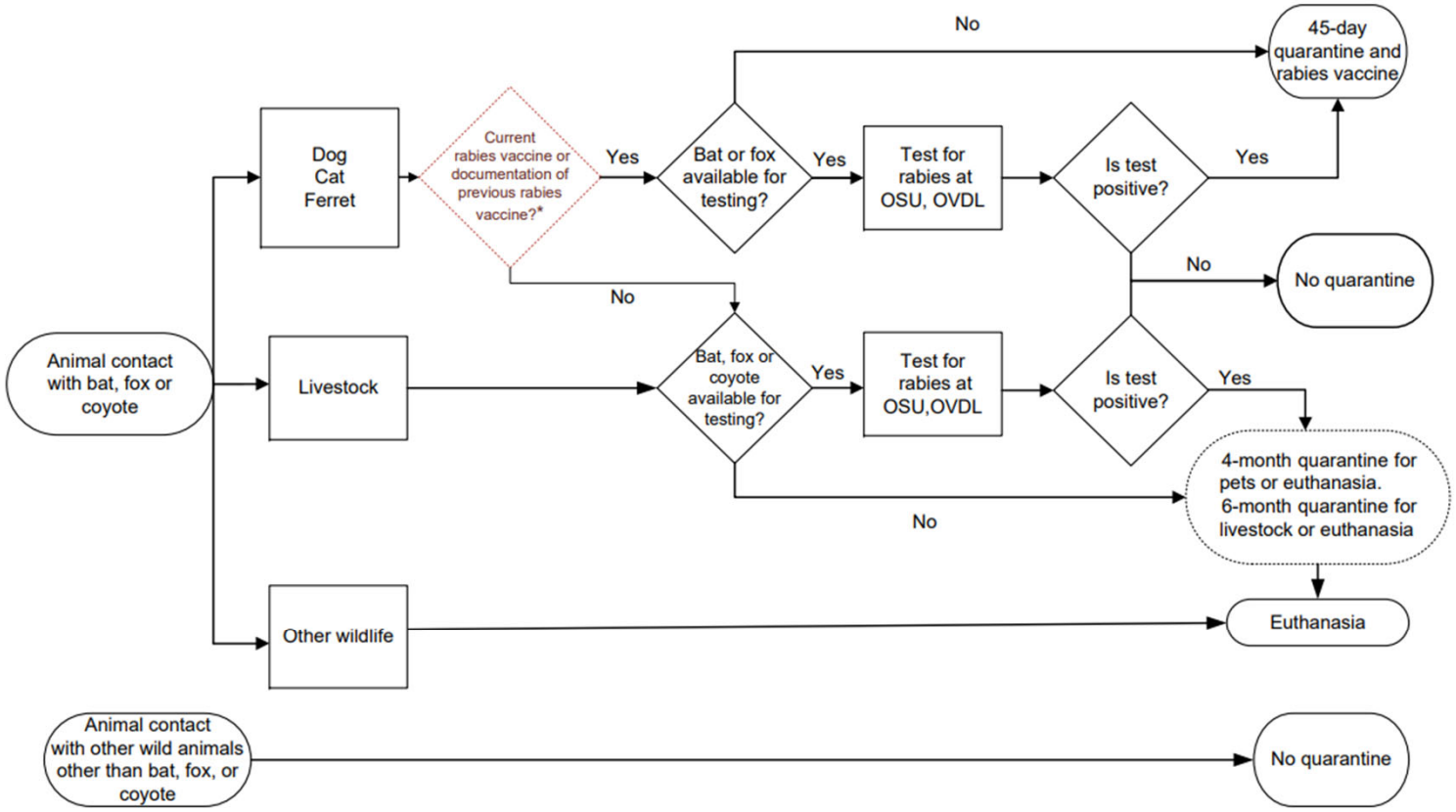
7. For purposes of determining need for rabies PEP, wolf-hybrids are considered wild animals and not dogs. Wolf-dog hybrids that bite or otherwise expose persons, pets, or livestock should be considered for euthanasia and rabies examination. Whether an animal is a dog or a wolf-dog hybrid must be determined by a licensed veterinarian, subject to review by the State Public Health Veterinarian or designee (OR 333-019-0022).

Abbreviations

OSUVDL: OSU Veterinary Diagnostic Laboratory (541-737-3261)
PEP: Post-Exposure Prophylaxis against rabies
Epi: Epidemiologists at the Oregon Health Authority; Weekdays, nights and weekends (971-673-1111)

OREGON HEALTH AUTHORITY
Center for Public Health Practice
Acute and Communicable Disease Prevention

Algorithm for Prevention of Rabies
Animal to Animal Contact, 2023



* Current on vaccines implies having the appropriate documentation such as an actual copy of the rabies certificate.
NOTE: Testing of any wild animals that may have exposed a pet to rabies will be at the expense of the pet's owner

Compendium of Animal Rabies Prevention and Control, 2016
http://nasphv.org/Documents/NASPHVRabiesCompendium.pdf

QUARANTINE
When quarantine is recommended, strict quarantine is required without outdoor access (dogs may be taken outside and should be on a leash at all times). Human contact should be limited to one person only and no other animals.

Managing animal bites

- Wash the wound immediately with soap and water
- If medical care is needed, provider may prescribe antibiotics and give a Tetanus booster
- Know where someone can get rabies PEP in your county
- Your state epi is here to help!

1. A man calls to say that he was jogging close to his house when a dog ran out of its yard and bit him on the ankle. He wants to know what to d. What do you tell him?

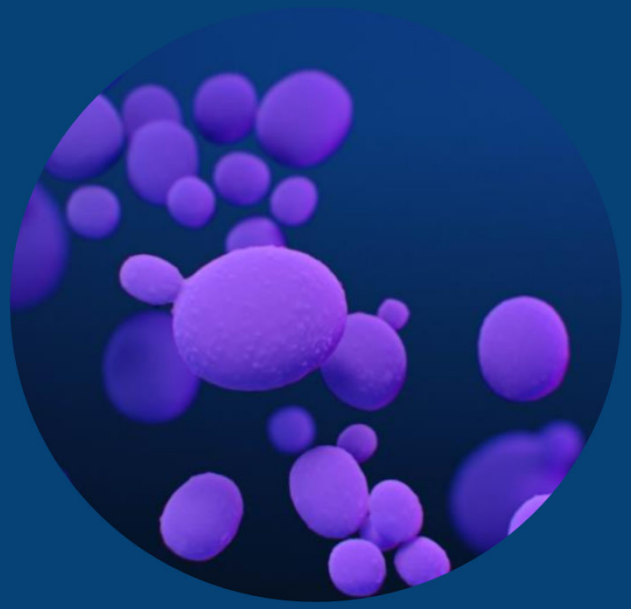
a) Advise him to seek medical attention (antibiotics, tetanus booster)

b) Advise him to report the bite to animal control so they can place the dog on a 10-day post-bite quarantine

c) Assume the dog is vaccinated since it lives in his neighborhood. Just tell the jogger to be more careful next time

2. A family is having a BBQ. The parents look over just in time to see their two-year-old girl pick up a dead, desiccated bat on the deck and put it in her mouth. (Yes, this actually happened!) What do you tell them?

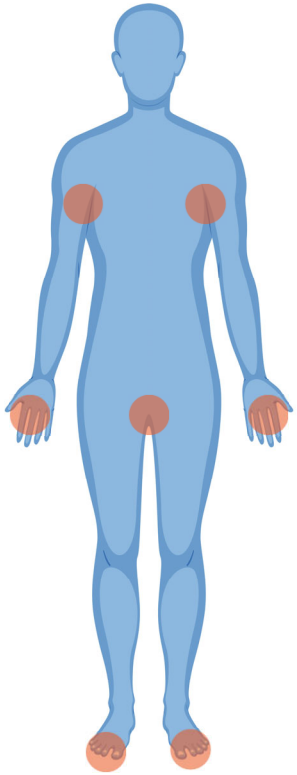
a) Provide PEP: RIG and vaccines for the girl as soon as possible
b) Bats rarely carry rabies in Oregon. No PEP
c) Rabies virus does not survive in saliva after an animal dies. No PEP
d) Children will put anything in their mouths. Don’t leave dead bats lying around!



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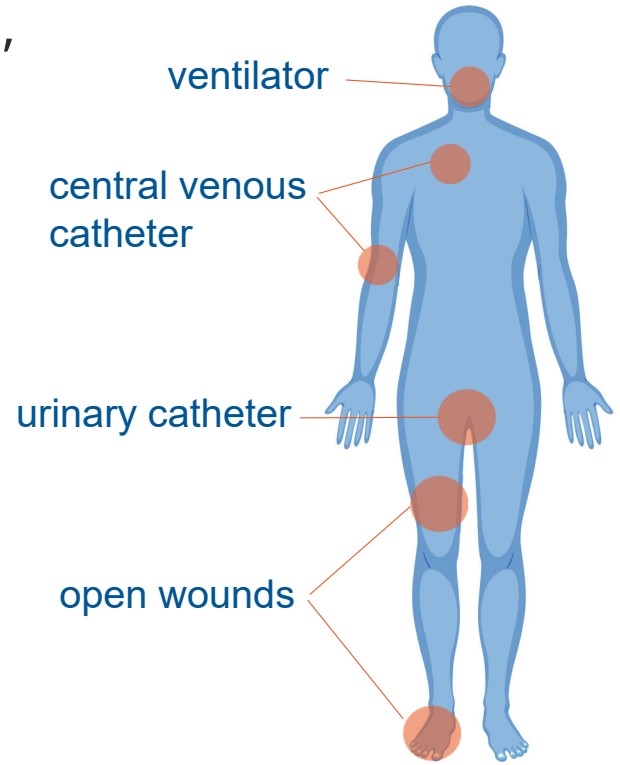
Fdqglgr}|p d#dxulv **(formerly** Fdqglgd#dxulv**)**

- Fungus (yeast)
- Skin colonizer
- Colonization outcomes differ:
  - Most healthy people eventually decolonize (62%)
    - median length carriage 8.6 months
  - Long-term colonization (~20%)
  - 7%-13% develop an infection



F1#dxulv#infections

- Non-specific infections: bloodstream infections, wound infections, urinary tract infections
- Risk factors include invasive medical devices and open wounds
- Among critically ill patients, progression to illness is much higher (17-25%)
- Crude mortality is quite high:
  - 1 in 3 patients



Why are we concerned?

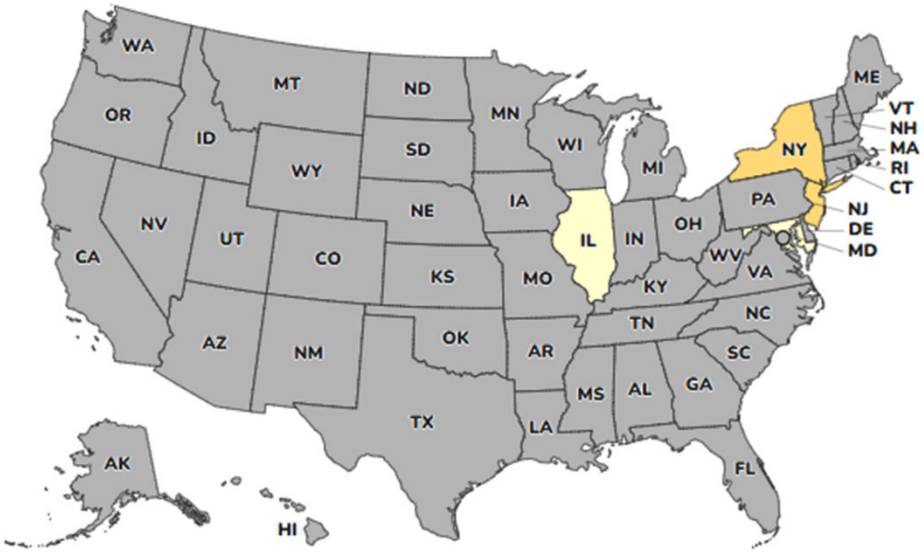
- High morbidity & mortality for invasive infections
- Drug-resistant : difficult or impossible to treat
- Spreads quickly in healthcare settings

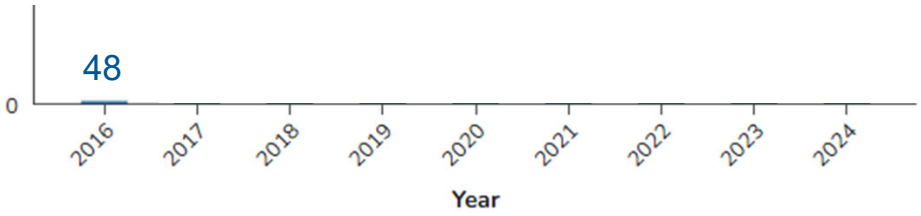
5. Candida auris is considered an emerging pathogen. Why?

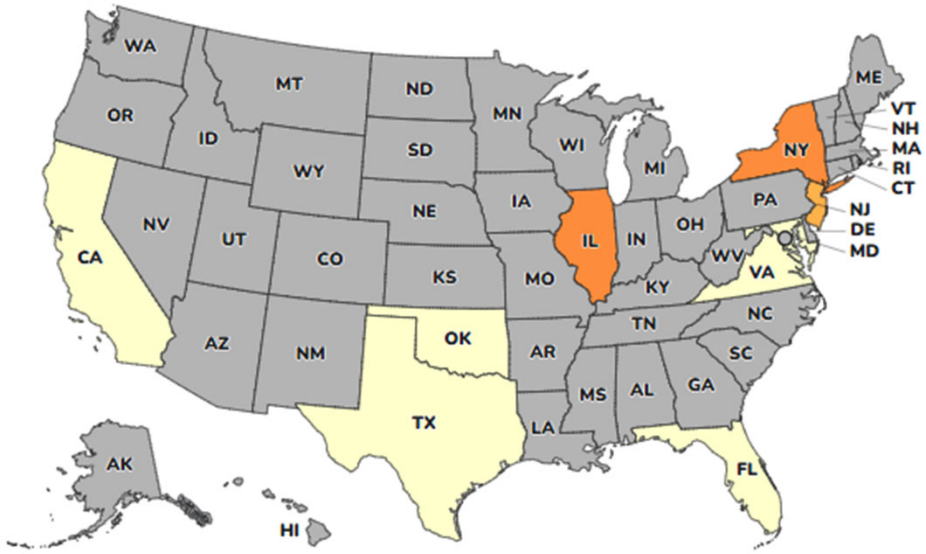
a) It is a healthcare-associated infection, so cases emerge from healthcare systems into the community

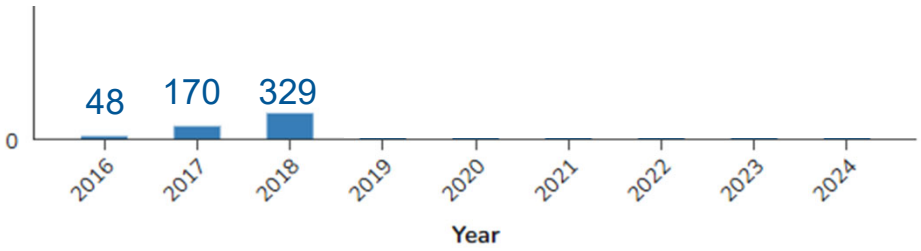
b) It is a relatively new disease and incidence is increasing rapidly

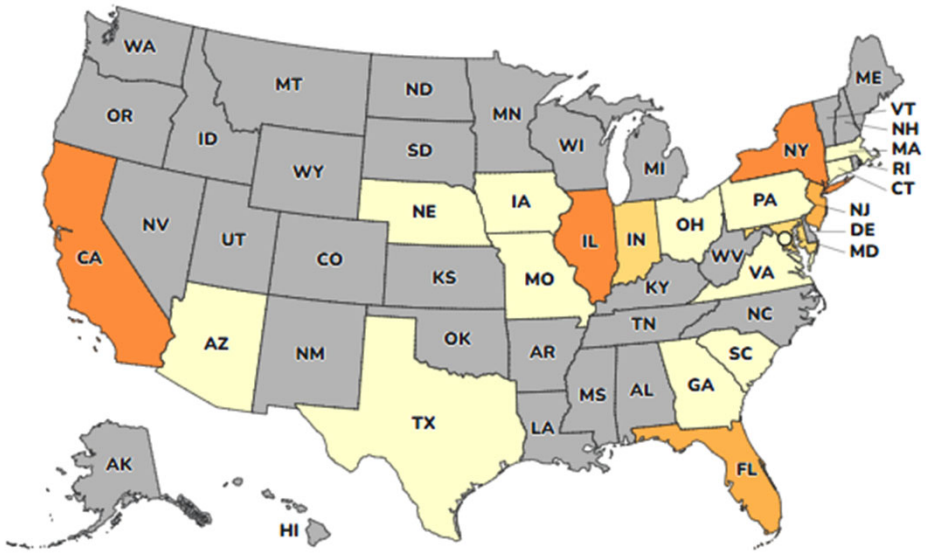
c) It colonizes sweat glands and emerges when you sweat.

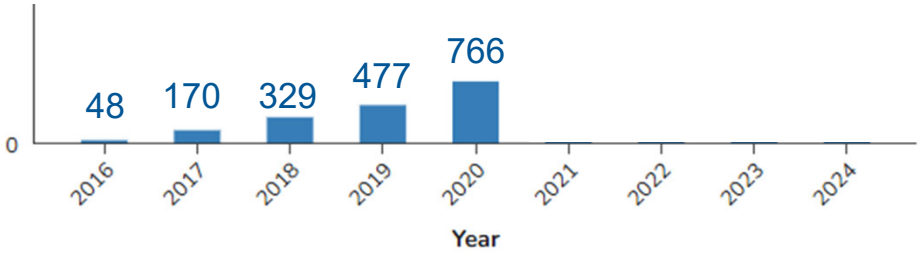

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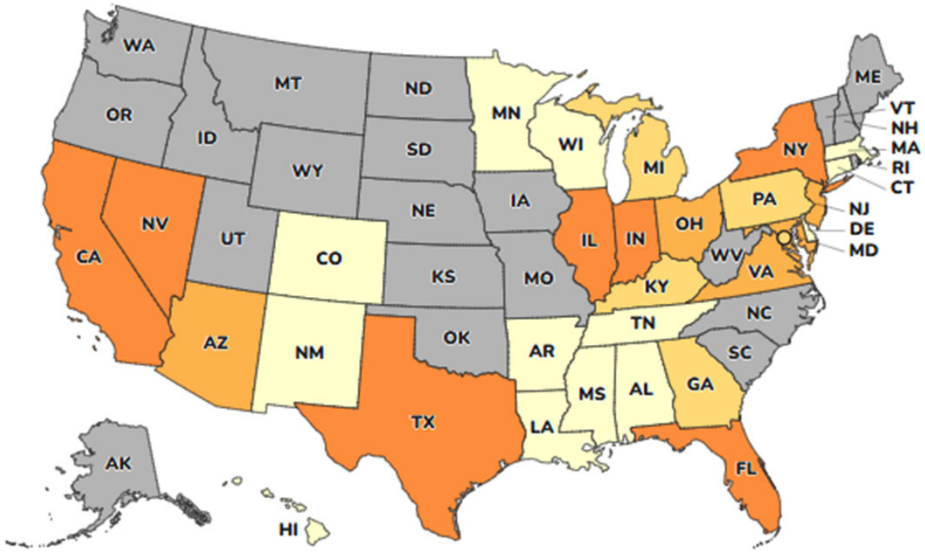

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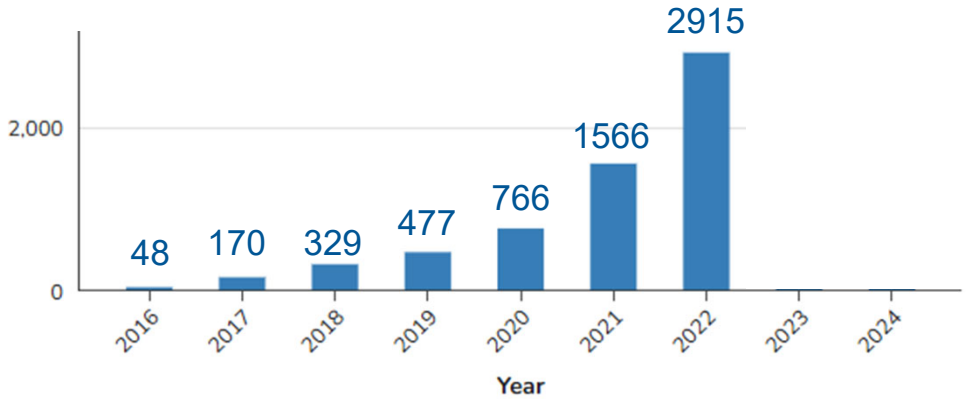

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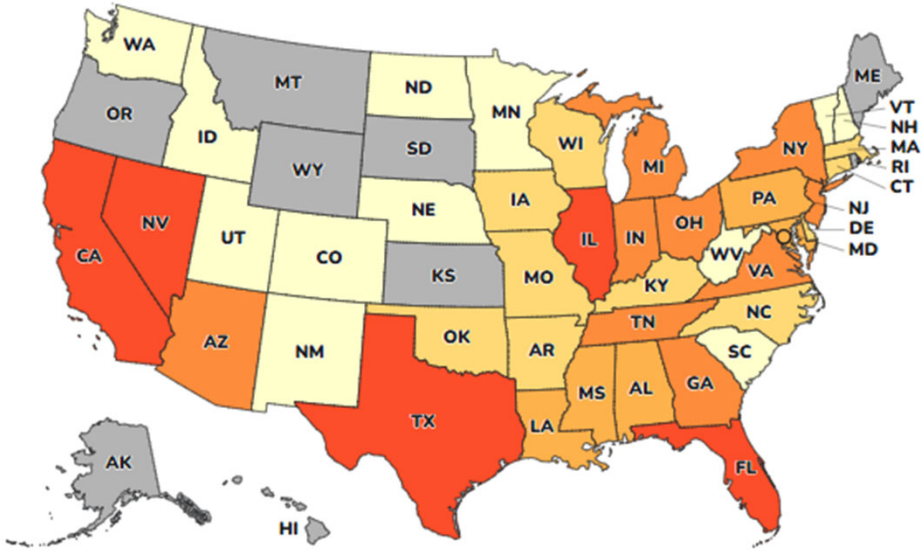

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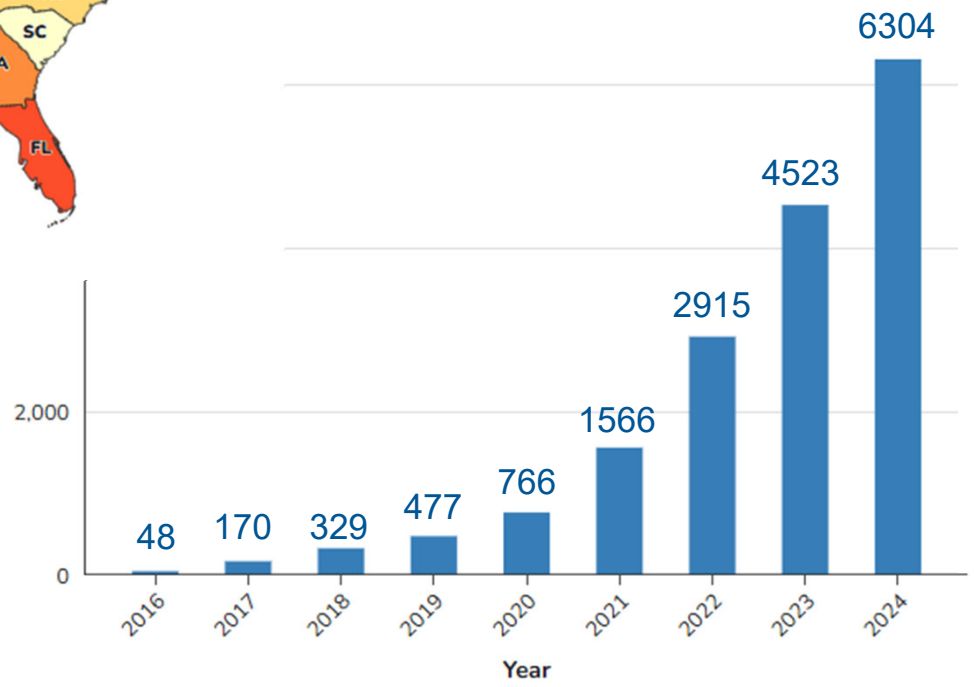

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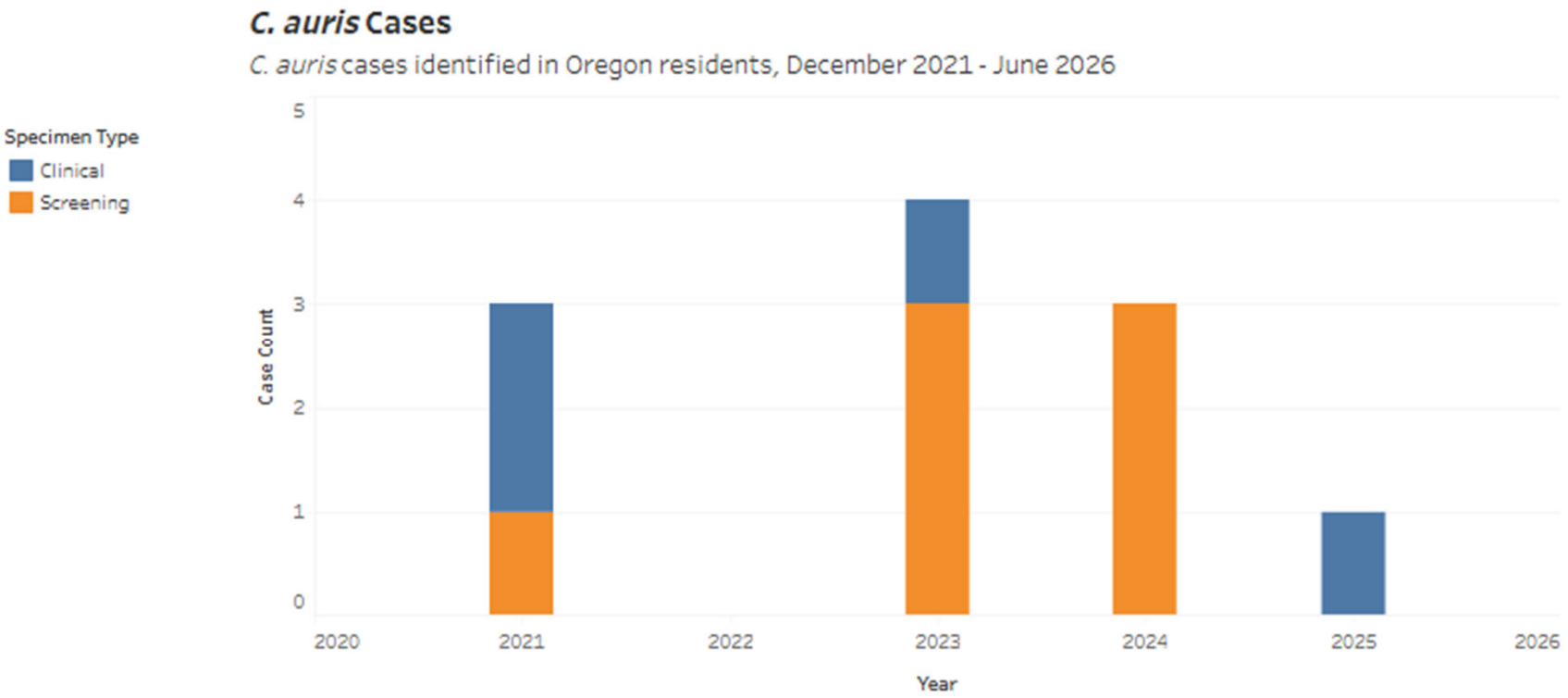

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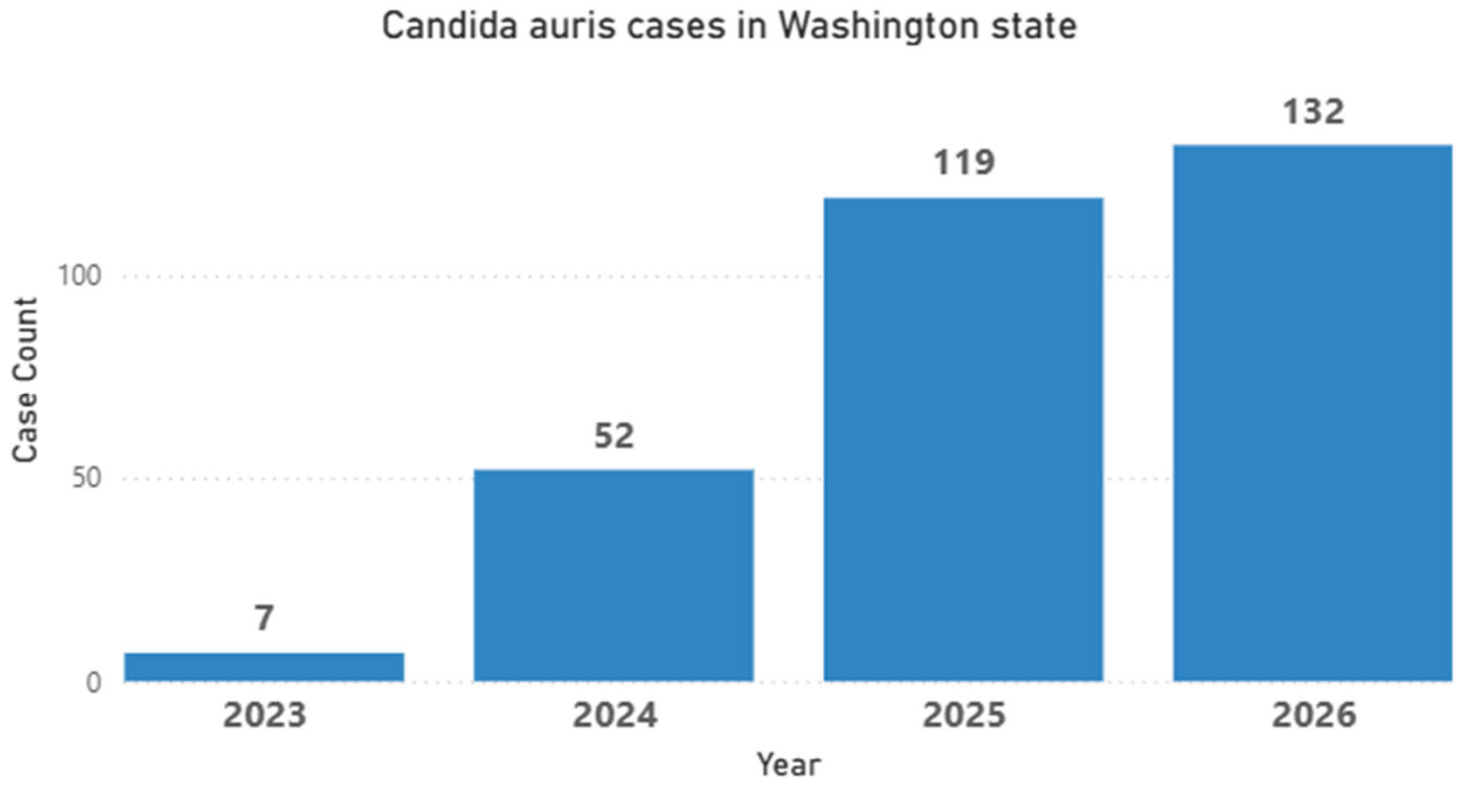

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F1#dxulv in Oregon

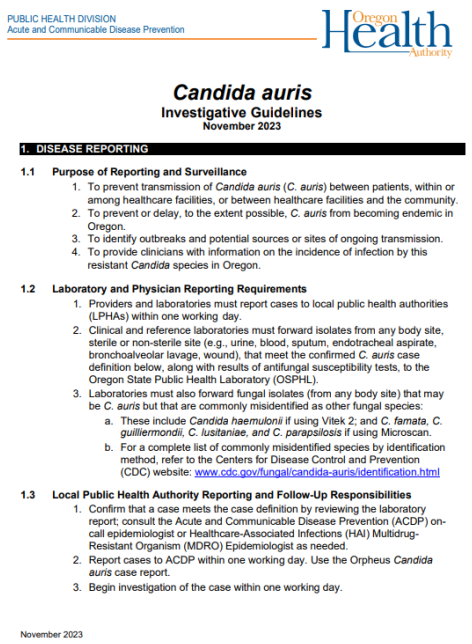


F1#dxulv in Seattle-metro



Responding to F1#dxulv

- First 24 hours: healthcare facility call
- Case interview
- Testing healthcare contacts
- On-site visit



PUBLIC HEALTH DIVISION
Acute and Communicable Disease Prevention

Oregon Health Authority

Candida auris
Investigative Guidelines
November 2023

1. DISEASE REPORTING

1.1 Purpose of Reporting and Surveillance

1. To prevent transmission of *Candida auris* (*C. auris*) between patients, within or among healthcare facilities, or between healthcare facilities and the community.
2. To prevent or delay, to the extent possible, *C. auris* from becoming endemic in Oregon.
3. To identify outbreaks and potential sources or sites of ongoing transmission.
4. To provide clinicians with information on the incidence of infection by this resistant *Candida* species in Oregon.

1.2 Laboratory and Physician Reporting Requirements

1. Providers and laboratories must report cases to local public health authorities (LPHAs) within one working day.
2. Clinical and reference laboratories must forward isolates from any body site, sterile or non-sterile site (e.g., urine, blood, sputum, endotracheal aspirate, bronchoalveolar lavage, wound), that meet the confirmed *C. auris* case definition below, along with results of antifungal susceptibility tests, to the Oregon State Public Health Laboratory (OSPHL).
3. Laboratories must also forward fungal isolates (from any body site) that may be *C. auris* but that are commonly misidentified as other fungal species:
   a. These include *Candida haemulonii* if using Vitek 2; and *C. famata, C. guilliermondii, C. lusitaniae, and C. parapsilosis* if using Microscan.
   b. For a complete list of commonly misidentified species by identification method, refer to the Centers for Disease Control and Prevention (CDC) website: www.cdc.gov/fungal/candida-auris/identification.html

1.3 Local Public Health Authority Reporting and Follow-Up Responsibilities

1. Confirm that a case meets the case definition by reviewing the laboratory report; consult the Acute and Communicable Disease Prevention (ACDP) on-call epidemiologist or Healthcare-Associated Infections (HAI) Multidrug-Resistant Organism (MDRO) Epidemiologist as needed.
2. Report cases to ACDP within one working day. Use the Orpheus *Candida auris* case report.
3. Begin investigation of the case within one working day.

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6. If you receive a report of a f1#dxulv#case in your county, what should you do first?

a) Call the on-call epidemiologist right away
b) Call Heather or Evelyn (MDRO Epidemiologists) directly right away
c) Assume it's incorrect because F1#dxulv#s very rare in Oregon
d) Make a case in Orpheus
e) Read the F1#dxulv IGs

Questions?

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Acute and Communicable Disease Program
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Portland, OR 97232
971-673-1111
www.healthoregon.gov/diseases

OREGON HEALTH AUTHORITY

Please complete a course evaluation

Thank you!