

# **Rabies Postexposure Treatment Recommendations**

**Jennifer House, DVM, MPH, DACVPM  
Veterinary Epidemiologist**



**Indiana State  
Department of Health**

Epidemiology Resource Center

# Bite Treatment

- **Clean wound**
- **Use a virucidal agent**
- **Evaluate the need for antibiotics**

# When to use Prophylaxis

- ◉ When animal *tests positive* for rabies
- ◉ When animal is a *high risk animal* that is NOT available for testing or tests results are inconclusive
  - Bats
  - Skunks
  - Raccoons
  - Coyotes
  - Foxes

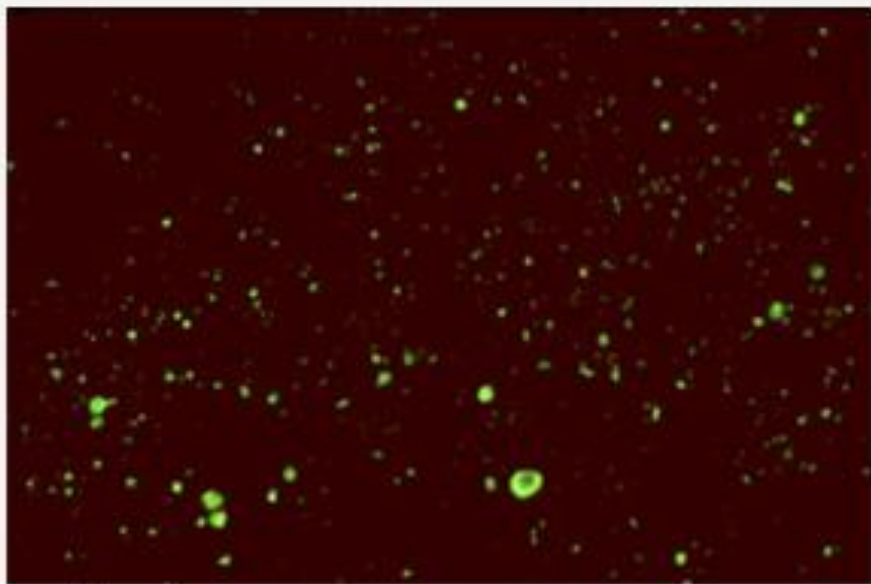
# When NOT to use Prophylaxis

- ⦿ When the biter is NOT a mammal
- ⦿ Low risk species with normal behavior
- ⦿ Domestic animal that is known to be alive and can be quarantined
- ⦿ When animal is available for testing

# ISDH Testing for Rabies

- Results within 24 hours of delivery
- Same day testing
  - Critical Samples that arrive before 11am
- Deliver 8:30-4:30 Monday-Friday
- Weekend testing can be arranged
  - Urgent situations with approval
  - Bats or symptomatic animals

# ISDH Specimen Testing



Positive dFA



Negative dFA

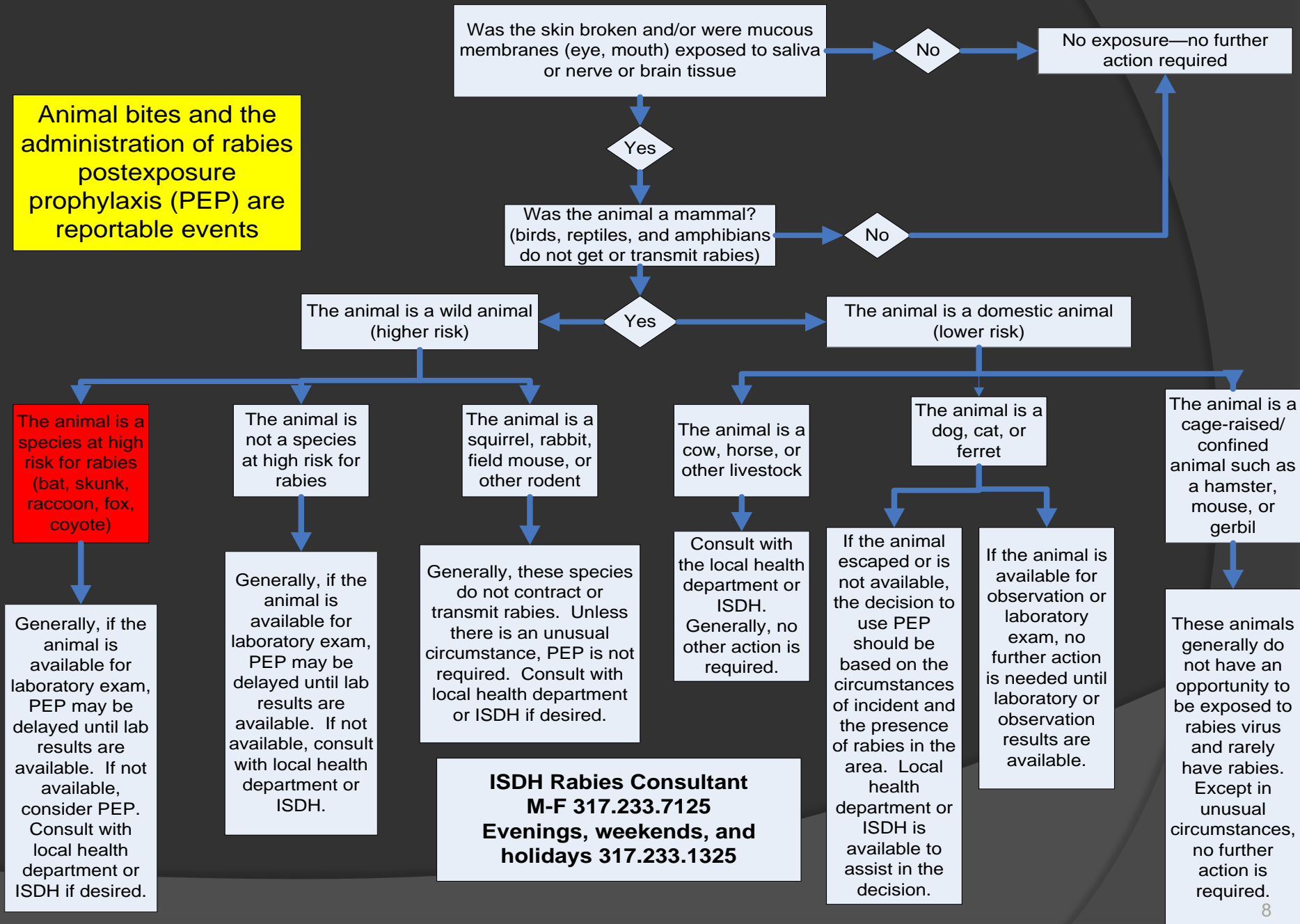
# Prophylaxis Window

- ⦿ Delay the decision for PEP if animal is quarantined or available for testing
- ⦿ Incubation period for development of rabies symptoms is normally 3 to 12 weeks after exposure
- ⦿ Yes you CAN wait to treat

# Rabies Treatment Algorithm

This chart applies only to Indiana and to the current rabies situation (2/27/08)

Animal bites and the administration of rabies postexposure prophylaxis (PEP) are reportable events





# Rabies Prevention Guidance

- Human Rabies Prevention-United States, 2008 Recommendations of Practices (ACIP)
  - MMWR: May 23, 2008 / 57 (RR-03);1 – 28
  - MMWR Update: March 19, 2010 / 59(02);1-9
- Animal : Compendium of Animal Rabies Prevention and Control, 2011 (NASPHV)
  - <http://www.nasphv.org/Documents/RabiesCompendium.pdf>

# Incidence in Animals (IN)

- ◎ Bat variant is endemic
  - 39 positive bats – 2009
  - 24 positive bats – 2010
- ◎ Skunk variant - 2004
- ◎ Other variants are not currently present, but may be introduced

# Treatment...

- Effective if given after exposure
- Anytime before symptoms develop
- Can be shipped to HCP overnight (manufacturer)
- Expensive!



# When patient can't pay.....



## 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.

# Rabies Immunoglobulin (RIG)

- Given once (day 0)
- Immediate, passive antibodies
- Weight based (20 IU/kg)
  - several injections at same time
- Given at the site of bite or in a large muscle group



# Vaccine

- Small dose
- Given in muscle (arm)
- 4 doses over 2 weeks
  - Day 0 (with RIG)
  - Day 3
  - Day 7
  - Day 14



*Day 0 is the date when the 1<sup>st</sup> vaccine was given NOT when the exposure occurred*

# What if RIG wasn't given?

- Should be given with the 1<sup>st</sup> dose of vaccine (different location on body)
- May be given up to 7 days after the 1<sup>st</sup> dose of vaccine
- If no vaccine has been given but it's been days to weeks after a high risk exposure give RIG immediately!

# What if a dose of vaccine is missed?

- Give that dose as soon as possible
- Give the next dose the appropriate # of days later
  
- Dose 1 = Day 0
- Dose 2 = 3 days later
- Dose 3 = 4 days later
- Dose 4 = 7 days later



# Unusual Situations

- ⦿ Foreign exposure (higher risk)
- ⦿ Treatment started somewhere else
- ⦿ Using recommendations not consistent with CDC
- ⦿ Part of treatment given incorrectly

Jennifer House, DVM, MPH, DACVPM  
Indiana State Department of Health  
317-233-7272  
jhouse@isdh.in.gov

**Questions?**