Rabies Postexposure Treatment Recommendations

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

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

Was the skin broken and/or were mucous membranes (eye, mouth) exposed to saliva or nerve or brain tissue?

- No (No exposure—no further action required)
- Yes

Was the animal a mammal? (birds, reptiles, and amphibians do not get or transmit rabies)

- No
- Yes

The animal is a wild animal (higher risk)

The animal is a domestic animal (lower risk)

The animal is a species at high risk for rabies (bat, skunk, raccoon, fox, coyote)

The animal is not a species at high risk for rabies

The animal is a squirrel, rabbit, field mouse, or other rodent

The animal is a cow, horse, or other livestock

The animal is a dog, cat, or ferret

The animal is a cage-raised/confined animal such as a hamster, mouse, or gerbil

Generally, if the animal is available for laboratory exam, PEP may be delayed until lab results are available. If not available, consult with local health department or ISDH if desired.

Generally, these species do not contract or transmit rabies. Unless there is an unusual circumstance, PEP is not required. Consult with local health department or ISDH if desired.

Consult with the local health department or ISDH. Generally, no other action is required.

If the animal escaped or is not available, the decision to use PEP should be based on the circumstances of incident and the presence of rabies in the area. Local health department or ISDH is available to assist in the decision.

If the animal is available for observation or laboratory exam, no further action is needed until laboratory or observation results are available.

These animals generally do not have an opportunity to be exposed to rabies virus and rarely have rabies. Except in unusual circumstances, no further action is required.

ISDH Rabies Consultant
M-F 317.233.7125
Evenings, weekends, and holidays 317.233.1325
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)
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

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 1st vaccine was given NOT when the exposure occurred
What if RIG wasn’t given?

- Should be given with the 1\textsuperscript{st} dose of vaccine (different location on body)
- May be given up to 7 days after the 1\textsuperscript{st} 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
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Questions?