



- Animal Bite Reporting & Rabies Post-Exposure Prophylaxis

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Reporting Animal Bites in Washoe County

With the spring and summer months comes increased reports of animal bites and bat exposures. In 2006 and 2007, the Washoe County District Health Department (WCDHD) and Washoe County Regional Animal Services (WCRAS) received over 800 reports per year of animal bites and bat exposures of Washoe County residents. In the first six months of 2008, over 500 reports have already been received. The majority of reports are the result of dog and cat exposures, with less than 10 per year a result of other animals (including bats).

Nevada Administrative Code ([NAC 441A.225](#)) requires health care providers to report animal bites of humans by a rabies-susceptible animal. [NAC 441A.155](#) defines a rabies-susceptible animal as "any mammal, including, but not limited to, a bat, cat, dog, cow, horse, ferret, cougar, coyote, fox, skunk and raccoon, and any wild or exotic carnivorous mammal." Washoe County health care providers are asked to make reports by completing the attached form (also available on line at:

<http://www.washoecounty.us/health/cdpp/reporting.html>)

and **faxing it to (775) 328-3764**. Exposures to bats include *any bare-skin contact with a bat and situations where bat-to-skin contact or bat bites cannot be ruled out (e.g., a bat is found in a room with a child or inebriated person, or an adult wakes up to find a bat in the room)*. WCDHD works closely with WCRAS to investigate animal bites and facilitate observation and quarantine of the animal if needed.

Wound Management Following an Animal Bite

Immediate and thorough cleaning of any bite or scratch wound with soap and water may be one of the most important measures in preventing rabies. Simple local wound cleaning has been shown to markedly reduce the likelihood of rabies in animal experiments. The need for tetanus prophylaxis should be evaluated. Persons 11 to 64 years of age who require a tetanus toxoid-containing vaccine for wound management should receive Tdap instead of Td if they have not previously received Tdap. If Tdap is not available or was administered previously, Td should be administered. Adults who have never received tetanus and diphtheria toxoid-containing vaccine should receive a series of three vaccinations. The preferred schedule is a dose of Tdap, followed by a dose of Td >4 weeks later, and a second dose of Td 6 to 12 months later. Tdap can be substituted for Td for any one of the three doses in the series. See <http://www.cdc.gov/mmwr/PDF/rr/rr5517.pdf>, page 25 for additional information. The need for antibiotic prophylaxis should be evaluated. According to the American

Academy of Pediatrics 2006 Red Book, antimicrobial therapy should be initiated for the following:

- ◆ moderate or severe bite wounds, especially if edema or crush injury is present,
- ◆ puncture wounds, especially if penetration of bone, tendon sheath, or joint has occurred,
- ◆ facial bites,
- ◆ hand and foot bites,
- ◆ genital area bites,
- ◆ wounds in immunocompromised and asplenic persons, and
- ◆ wounds with signs of infection.

Wounds should be re-evaluated for signs of infection within 48 hours.

Rabies Post-Exposure Prophylaxis (PEP)

Although rare, rabies still occurs in humans in the U.S. Between 2000 and 2007, reported human rabies cases in the U.S. ranged from 1 -7 per year. Three cases of human rabies were reported from Texas, Indiana, and California during 2006 (the most recent year for which national statistics are available). The cases in Indiana and Texas were attributed to bat rabies virus variants, whereas the case in California was attributed to an exposure to a dog in the Philippines, *approximately two years before the onset of rabies*. None of these persons sought medical care until symptoms of rabies developed, at which point it was too late to administer PEP.

Persons with possible rabies exposure should be evaluated as soon as possible by a healthcare provider. Because rabies biologics are valuable resources that are periodically in short supply (such as now!), a risk assessment should be conducted in each situation involving a possible rabies exposure. The decision to initiate rabies PEP should be based on the following:

- 1) type of exposure,
- 2) epidemiology of animal rabies in the area where the contact occurred and species of animal involved, and
- 3) circumstances of the exposure incident.

Since administration of rabies PEP is a medical urgency, not a medical emergency, it can be delayed until animal rabies testing or clinical observation is completed. This approach not only limits administration of PEP to persons with confirmed rabies exposure, but it is also cost-saving and conserves limited resources.

Reporting animal bites to the WCDHD is the first step to ensuring appropriate investigation and follow-up of the

biting animal. Domestic dogs, cats, and ferrets that aren't exhibiting signs of rabies at the time of the bite can be observed for a 10 day quarantine period. If the animal survives this 10 day period in good health, the animal would not have been infectious for rabies at the time of the bite, and the person who was bitten does not need rabies PEP. If the animal becomes sick or dies during this period, testing for rabies should be done.

Bats are the primary reservoir for rabies in Nevada. Approximately 9% of bats tested in Washoe County between 2003 and 2007 were positive for rabies (Table 1). If possible, bats involved in potential human exposures should be safely collected and submitted for rabies diagnosis. This testing can be performed at the Nevada Department of Agriculture Animal Diseases Lab (775-688-1182).

For persons who have never been immunized for rabies, PEP after a potential rabies exposure consists of 5 doses of rabies vaccine given intramuscularly on days 0, 3, 7, 14, and 28, **and** human rabies immune globulin (HRIG) at the recommended dosage of 20IU/kg body weight. HRIG is given at the same time as the first dose of

vaccine and, if anatomically feasible, the full dose of HRIG should be thoroughly infiltrated in the area around and into the wounds. Any remaining volume should be injected IM at a site distant from vaccine administration. HRIG is typically available only through hospital emergency departments; however rabies vaccine for doses 3, 7, 14 and 28, may be ordered by other health care providers through vaccine distributors. The Advisory Committee on Immunization Practices (ACIP) human rabies prevention recommendations are available online at:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5703a1.htm>.

Please remember that rabies vaccine should never be given in the gluteal area because of the risk that some, or all, of the vaccine might be injected into fat rather than muscle. Doses given in the gluteus are invalid and should be repeated. Rabies vaccine should always be administered intramuscularly. In adults, the preferred site is the deltoid muscle, for children, the anterolateral aspect of the thigh is also acceptable.

Table 1. Summary of Specimens Tested for Rabies, Washoe County, 2003 - 2007

	Bat		Canine, Domestic		Coyote		Feline, Domestic		Raccoon		Weasel family*		Rodents, all	
	# pos.	# tested	# pos.	# tested	# pos.	# tested	# pos.	# tested	# pos.	# tested	# pos.	# tested	# pos.	# tested
2003	5	50	0	29	0	2	0	16	0	10	0	5	0	3
2004	2	55	0	29	0	1	0	21	0	6	0	1	0	3
2005	9	44	0	0	0	1	0	0	0	5	0	3	0	1
2006	2	36	0	22	0	2	0	14	0	6	0	6	0	4
2007	3	58	0	25	0	0	0	25	0	9	0	2	0	5
Totals	21	243	0	105	0	6	0	76	0	36	0	17	0	16
% positive	8.6		0.0		0.0		0.0		0.0		0.0		0.0	

* Weasel family includes skunks and ferrets

Current Rabies Vaccine Shortage

On August 14, 2008, Sanofi Pasteur announced the unavailability of IMOVAX (rabies vaccine) until late September to early October. The only vaccine currently available is RabAvert®, made by Novartis, and this vaccine is in limited supply. Judicious and appropriate use of rabies vaccines is crucial to avert a situation in which persons exposed to rabies are put at increased risk due to depleted vaccine supplies. The Centers for Disease Control and Prevention (CDC) strongly recommends that healthcare providers, state and local public health authorities, animal control officials, and the public take immediate steps to ensure appropriate use of human rabies biologics.

To ensure that thorough risk assessments are conducted, Novartis (the manufacturer of the only rabies vaccine currently available) is now requiring that healthcare providers confer with public health officials, and obtain a confirmation code before

ordering vaccine doses for post-exposure prophylaxis.

The public should be aware of the following precautions to avoid rabies exposure and actions to take if an exposure occurs:

- ◆ avoid stray and wild animals,
- ◆ prevent bats from entering homes or occupied spaces where they might come in contact with people and pets,
- ◆ keep rabies vaccinations up-to-date for all dogs, cats and ferrets, and livestock, and
- ◆ safely capture or detain biting animals (preferably using animal control officials), or obtain owner contact information for follow-up.

For more information about rabies and its prevention, and updates regarding vaccine supply, contact the WCDHD Communicable Disease Program at (775) 328-2447, or CDC at 1-800-CDC-INFO [(800) 232-4636], or visit www.cdc.gov/rabies.

PLEASE PRINT CLEARLY



FAX COMPLETED REPORTS TO:
(775) 328-3764

ANIMAL BITE REPORT – To Be Completed By Health Care Provider

INSTRUCTIONS FOR COMPLETING FORM:	<p>This form should be completed by the health care provider, unless the person bitten did not seek medical care. PLEASE PRINT LEGIBLY. Complete all sections in full.</p> <p>Fax completed form as soon as possible to the District Health Department at 328-3764. This allows the local rabies control authority to evaluate & monitor the biting animal & fulfills the health care provider's requirement to report animal bites under Nevada Administrative Code 441A. The original form should stay with the patient's chart.</p> <p>Questions? Please call 328-2447.</p>
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Today's Date: ____/____/____	Name of Hospital/ Urgent Care/Clinic: _____
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Exposed Person	Name: _____ Age: _____
	Parent/Guardian's Name if patient is a minor: _____
	Street Address: _____ City: _____ State: _____ Zip: _____
	Phone: Home: _____ Work: _____ Cell: _____

Bite	Date Bite Occurred: _____ Time _____ <input type="checkbox"/> AM <input type="checkbox"/> PM
	Where on body bitten: _____ Skin Broken? <input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> If bite occurred at exposed person's address, check this box and skip to Animal Information. If not, complete the following: Address/place where bite occurred: _____
	Street Address: _____ City: _____ State: _____ Zip: _____

Animal Information	Species: <input type="checkbox"/> Dog <input type="checkbox"/> Cat <input type="checkbox"/> Ferret <input type="checkbox"/> Other: _____
	Owner's Name: _____
	<input type="checkbox"/> If owner is exposed person, check this box & skip to Medical care obtained. If not, complete the following:
	Street Address: _____ City: _____ Zip: _____
	Phone: Home: _____ Work: _____ Cell: _____

Medical care obtained? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, complete the following:
Health care provider: _____	Hospital/Urgent Care/Clinic: _____

Explain circumstances of bite incident: _____

This information is accurate to the best of my knowledge.

Signature of Person Bitten or Parent/Guardian: _____