



Communicable Disease and Epidemiology News

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- **CHANGES IN ANIMAL BITE REPORTING**
- **REVIEW OF ANIMAL BITE REPORTS IN 2010**

- **APPROACH TO RACCOON BITES**
- **ANIMAL BITE CASE SCENARIOS**

Low Risk Animal Bites No Longer Notifiable

Revisions to the Washington State notifiable conditions rule were implemented in February 2011, including a change in animal bite reporting requirements. Now, only suspected human rabies exposures should be reported to Public Health; low-risk bites are no longer reportable. Suspected human rabies exposures should be reported by healthcare providers and facilities immediately, preferably before the patient has been discharged.

The change is intended to decrease the burden of reporting for health care providers and public health agencies by eliminating reporting and follow-up activities for low-risk cases, and to focus attention on appropriate evaluation and management of suspected high-risk bites and exposures.

The last identified cases of human rabies in Washington occurred in 1995 and 1997, both attributed to bat exposures. Prior to that, the last known human case of rabies was in 1939 from a rabid dog bite. Animal rabies in Washington is also rare. Dog rabies was not uncommon in the early 1900's, but since the 1930's, only bat variant rabies has been identified. There is currently no known terrestrial reservoir of rabies in Washington; bats are the only reservoir of the virus. The only documented cases of animal rabies in Washington since the 1920's have been in bats, four pet skunks that were not wild, and domestic animals (cats, dogs, horses, cattle, a llama, and a sheep).

A suspected human rabies exposure occurs when saliva or other possibly infectious material (such as central nervous system tissue) from a potentially infected animal penetrates the skin or comes into contact with mucosal surfaces. Rabies is not transmitted by contact with blood, urine, feces, or fur.

Bats are a special case because bat variant rabies has been documented in persons with no history of a scratch or a bite. In some of these cases a bat had been discovered in the bedroom of the sleeping patient. Bat teeth are razor sharp and tiny, so a bite wound may not be detectable on physical examination.

Public Health has created a guideline that health care providers can refer to when seeing an animal bite victim. The document can be used to help assess the risk of rabies and whether the bite is reportable to Public Health. This and other clinical and patient education resources related to suspected rabies exposures is available on the Public Health website at:

www.kingcounty.gov/health/cd click on "R" for rabies.

If you have questions about the new animal bite reporting requirements, please call Public Health at (206) 296-4774.

2010: The Year in Animal Bites

Under the old reporting rule, in 2010 a total of 1,042 animal bites and other potential rabies exposures were reported in King County. The highest incidence of animal bites was seen in children. Rabies post-exposure prophylaxis (PEP) was recommended for 89 people (9%). Fifty-one (57%) of the 89 rabies PEP cases resulted from exposures within King County to bats

(20) and raccoons (31); seventeen exposures (19%) occurred outside of the U.S.

Forty animals (including bats, raccoons, dogs, cats, raccoons, a weasel, a goat, and a bear) that potentially exposed humans were tested for rabies; none were positive. Two bats that exposed animals in King County, but not humans, tested positive for rabies.. However, most bats do not carry rabies, and most bats tested for rabies in Washington are not infected.

Rabies and Raccoon Bites

Raccoons account for most reports of wild terrestrial animal exposures in King County. Common scenarios include a dog owner bitten by a raccoon while breaking up a fight between a raccoon and the dog, or attempting to feed a raccoon.

The decision to initiate rabies PEP for a raccoon exposure can be difficult. On one hand, the Center for Disease Control and Prevention's (CDC) national guidance recommends rabies PEP be initiated for bites by all wild terrestrial carnivores unless the animal is tested and determined not to be rabid. On the other hand, CDC advises consideration of local epidemiology, and rabies is not endemic among raccoons in the Pacific Northwest the way it is in the eastern and southeastern U.S. An important caveat is that without an active surveillance system for rabies in wild animals in Washington, it's possible that rabies could spill over from bats to raccoons and not be promptly detected.

Previously, Public Health's recommendation for rabies PEP after raccoon bites and scratches has been to endorse CDC guidelines while recognizing the low risk for rabies, and that the ultimate decision should be made by the health care provider and patient after a discussion of the risks and benefits of PEP. In this context, most health care providers reporting raccoon bites have elected to initiate PEP.

In recognition of the absence of any known local or regional reservoir of raccoon rabies, our revised Public Health algorithm summarizing human rabies prevention guidelines categorizes most raccoon exposures as low-risk, with PEP administration at the discretion of the health care provider and patient. Public Health explicitly recommends PEP for raccoon bites occurring in areas where raccoon rabies is endemic or when the raccoon has signs or symptoms suggestive of rabies. (*continued...*)

Erratum

Due to a layout problem in last month's *Epi-Log*, the following conditions and their reporting time frames did not appear in the list of notifiable conditions:

- Listeriosis (24 hours)
- Lyme disease (3 days)
- Unexplained critical illness or death (24 hours)

For the complete list of notifiable conditions in King County in PDF format, please go to the Communicable Disease website at www.kingcounty.gov/health/cd and click on *What to report and how to report it*.

(...continued) Raccoon behaviors that may increase the risk of rabies includes not only unusual aggression but also unusual passiveness. Recommendations will change if rabies is detected in the raccoon population in our area.

Common Animal Exposure Case Scenarios

Read each scenario, and decide if you would start PEP and report the case to Public Health.

Case 1. Amy Adams was taking a walk with her dog Rover one evening when the neighbor’s dog, Fido, ran from the front porch and bit Amy on the leg.

Case 2. Chevy Chase woke up in his home in Covington to find a bat hanging from the lampshade on his nightstand. He ran out of the room to get heavy gloves and a glass jar to capture the bat, but when he returned the animal had flown out the window. Chevy examined himself for bite marks, but didn’t find any.

Case 3. Ben Bratt was backpacking in Borneo when he tried to pet a village’s napping dog and was bitten on the hand. Ben reached Brunei three days later, went to an emergency department and received a dose of rabies vaccine. He returned to King County five days after his first dose of vaccine and called his doctor for advice. He has his medical record and vaccine package insert from his ED visit in Brunei indicating he received 1 mL of Rabipur intramuscularly in his left deltoid.

Case 4. Danny Devito was in his backyard in Duvall with his dog Spot late one evening when a raccoon hopped over the fence and ambled over to sample the food in Spot’s dog dish. Spot attacked the raccoon. Danny reached into the fray to pull Spot away and was bitten by the raccoon multiple times on the hand and arm.

Discussion:

Case 1: Rabies PEP not recommended, not reportable. This is a provoked bite – biting while protecting its territory is considered normal dog behavior. The recommendation would be to confine and observe Fido for 10 days following the bite, and call Public Health if Fido becomes sick or dies during that time. Observation of a healthy-appearing pet can be done at the pet owner’s home, or through a local animal control agency. When observation is not possible after a provoked bite, as is often the case when people are bitten at the park by a dog that runs away, PEP is not recommended unless the dog had signs of possible rabies.

Case 2. Rabies PEP recommended, reportable. Waking up to a bat in the bedroom is generally considered a rabies exposure. Finding a bat in the same room as a person who might be unaware or unable to communicate whether a bite or direct contact had occurred (e.g., a previously unattended infant, developmentally disabled person, or intoxicated person) might also qualify as an exposure. When the bat cannot be captured and tested, PEP is recommended. Except for head and neck bites that require immediate PEP, it is always preferable to test the bat before initiating PEP.

Case 3. Rabies PEP recommended, reportable. Rabies PEP is recommended for bites by dogs, cats, and ferrets in rabies endemic areas if the animal cannot be confined and observed. Public Health can help assess the need for additional vaccination, rabies immune globulin, or serologic testing after PEP doses administered outside the U.S.

Case 4. Rabies PEP at health care provider’s discretion, not reportable unless PEP is initiated. Exposure to a normal appearing and behaving raccoon in Washington represents a low risk for rabies. However, PEP would always be recommended if the raccoon had signs of possible rabies such as abnormal gait, unusual aggressiveness or docility, shrill vocalizations, drooling, or frothing at the mouth. In such cases, if the pet was also bitten, the Public Health veterinarian should also be consulted by calling (206) 205-4394. If Danny can identify the raccoon and hire an animal control expert to capture it for testing, delaying PEP until test results are available is an option.

Disease Reporting

AIDS/HIV.....

(206) 296-4645

STDS.....

(206) 744-3954

TB.....

(206) 744-4579

All Other Notifiable

Communicable Diseases

(206) 296-4774

Automated reporting line for conditions

not immediately notifiable (24/7).....

(206) 296-4782

Hotline

Communicable Disease.....

(206) 296-4949

Online Resources

Home Page:

www.kingcounty.gov/health/cd

The EPI-LOG:

www.kingcounty.gov/health/epilog

Communicable Disease Listserv:

mailman.u.washington.edu/mailman/listinfo/phskc-info-x

Reported Cases of Selected Diseases, Seattle & King County 2011

	Cases Reported in March		Cases Reported through March	
	2011	2010	2011	2010
Campylobacteriosis	22	14	69	47
Chlamydial infections	384	556	1275	1478
Cryptosporidiosis	0	1	4	4
Giardiasis	17	14	44	40
Gonorrhea	109	139	306	363
Hepatitis A	2	2	6	2
Hepatitis B (acute)	2	2	2	2
Hepatitis B (chronic)	49	61	139	160
Hepatitis C (acute)	0	2	2	2
Hepatitis C (not acute, includes current and past infection)	121	145	349	390
Herpes, genital (primary)	26	47	124	126
HIV and AIDS (includes only AIDS cases not previously reported as HIV)	35	33	80	96
Legionellosis	0	1	4	3
Listeriosis	1	0	3	1
Measles	0	0	0	1
Meningococcal Disease	1	1	4	3
Mumps	0	0	0	0
Pertussis	5	2	9	7
Rubella (including congenital rubella)	0	0	0	0
Salmonellosis	11	12	30	38
Shiga toxin producing E. coli (STEC), including E. coli O157:H7 and non-O157)	2	2	9	7
Shigellosis	0	0	0	0
Syphilis	30	15	99	52
Syphilis, congenital	0	0	0	0
Syphilis, late	10	6	22	24
Tuberculosis	5	12	20	30
Vibriosis	0	0	0	0
Yersiniosis	0	1	1	3

The Epi-Log is available in alternate formats upon request.