Preliminary Significant Analysis

Proposed Rule
WAC 246-100-197, Rabies – Measures to Prevent Human Disease

DEPARTMENT OF HEALTH
April 1, 2017
SECTION 1:
Describe the proposed rule, including a brief history of the issue, and explain why the proposed rule is needed.

Zoonotic diseases (animal-borne diseases capable of being transmitted to human populations) account for more than 60 percent of recognized infectious diseases and 75 percent of emerging diseases. Rabies, while rare, is the most uniformly fatal zoonotic disease. It is highly infectious with no known cure once the disease is contracted. Rabies is a viral disease that affects the nervous system. All mammals, including humans, are susceptible to this viral disease that causes fatal encephalitis. When a mammal is infectious, the virus is present in the saliva in sufficient quantities to be transmitted to other animals and humans, typically through a bite. Mucous membrane contact with infectious saliva or neural tissue, under rare conditions, can transmit the disease as well.

In 2011, the State Board of Health (Board) adopted WAC 246-100-197, Rabies – Measure to prevent human disease, to establish standards and requirements critical to preventing rabies in humans. In adopting this rule, the Board incorporated elements of the National Association of State Public Health Veterinarians Compendium of Animal Rabies Prevention and Control (compendium), 2008. The current rule requirements are based on data that showed partially vaccinated and unvaccinated cats and dogs are at the same risk of developing rabies when exposed to a rabid animal. If this happens, the rule requires euthanasia of the dog or cat, or if the owner does not agree to euthanasia, the cat or dog must be quarantined for six months to ensure it does not develop rabies.

In 2016, the National Association of State Public Health Veterinarians updated the compendium1, which now includes several significant post exposure practice changes. The greatest change is for practices related to partially vaccinated dogs and cats that have been exposed to a rabid animal. If a dog or cat is overdue for vaccination, but the owners have documentation of appropriate previous vaccination, a veterinarian may administer a booster rabies vaccine and keep the animal under owner observation for 45 days. Published data demonstrates that previously vaccinated dogs and cats will mount an effective immune response to a booster rabies vaccination despite being overdue for vaccination.

The compendium includes two options for dogs and cats that are overdue for vaccination when the owner does not have proof of previous vaccination. The first option is for the veterinarian to treat the animal as unvaccinated and administer a rabies vaccine followed by strict quarantine. The second option allows the veterinarian to use a prospective serologic monitoring protocol2 to determine whether the animal mounts an adequate immune response to a rabies vaccination. This protocol has strict limitations and is not recommended in all exposure instances. The compendium also reduces the quarantine period from six to four months for unvaccinated and partially vaccinated dogs and cats that have been exposed to a rabid animal.

In addition to these changes, the proposed rule also revises the compendium publication date related to disaster response. Part I B 8 of the compendium is adopted by reference in the current rule to address emergency sheltering of mammals that have been displaced as a result of a disaster. The proposal updates this reference from the 2008 reference to the current compendium date of 2016.

Finally, the proposal allows wildlife rehabilitators permitted by the Department of Fish and Wildlife under chapter 77.12 RCW to retain bats, skunks, foxes, raccoons, or coyotes for the purposes of rehabilitation or euthanasia; and updates the reference to the Department of Health (department) Guidelines for the Submission of Specimens for Rabies Testing from 2006 to 2011.

The rule revision is necessary to incorporate the most current science related to post-exposure practices and quarantine periods as detailed in the compendium. This will provide dog and cat owners with more options if their animals are exposed to a rabid animal. These changes will also affect local health jurisdictions and practicing veterinarians tasked with handling animal bites or potential animal rabies exposures. Overall, the proposed rule will add flexibility for animal owners and potentially increase compliance with the state rabies rule resulting in greater public health protection.

SECTION 2:
Is a Significant Analysis required for this rule?

Modifying post-exposure practices and quarantine periods as detailed in the compendium is considered a significant legislative rule under chapter 34.05 RCW, and therefore, these changes require a significant analysis.

SECTION 3:
Clearly state in detail the general goals and specific objectives of the statute that the rule implements.

There are two authorizing statutes for the proposed rules: RCW 43.20.050(2)(f) and RCW 16.70.040(1).

RCW 43.20.050(2)(f) In order to protect public health, the state board of health shall: Adopt rules for the prevention and control of infectious and noninfectious diseases, including food and vector borne illness, and rules governing the receipt and conveyance of remains of deceased persons, and such other sanitary matters as admit of and may best be controlled by universal rule.

RCW 16.70.040(1) The secretary, with the advice and concurrence of the director of the department of agriculture, shall be authorized to develop rules for proposed
adoption by the board relating to the importation, movement, sale, transfer, or possession of pet animals as defined in RCW 16.70.020 which are reasonably necessary for the protection and welfare of the people of this state.

The general goal and specific objectives of RCW 43.20.050(2)(f) are to protect public health by adopting rules for the prevention and control of diseases transmissible from animals to humans.

The general goal and specific objectives of RCW 16.70.040(1) are consistent with RCW 43.20.050, but are specific to pet animals. RCW 16.70.040(1) provides specific authority for rules to protect the public by authorizing the State Board of Health to adopt rules to control the sale, importation, movement, transfer, or possession of pet animals.

SECTION 4:

Explain how the department determined that the rule is needed to achieve these general goals and specific objectives. Analyze alternatives to rulemaking and the consequences of not adopting the rule.

The proposed rule will achieve the authorizing statute’s goals and objectives by adopting amendments intended to prevent and control rabies transmission from animals to humans. The proposed rule reflects current laws, other state and federal rules, and national standards of practice designed to prevent and control human cases of rabies, the most uniformly fatal form of zoonotic disease.

There is no alternative to rulemaking. The authorizing statutes direct the board to adopt rules to protect the public health from diseases acquired from animals. The current rule is outdated and does not reflect current standards of practice, and in one case is not consistent with other state laws and rules. This rule must be revised in order to meet the goals and objectives of the underlying statute. If this rule is not adopted, it will be inconsistent with other related state laws and rules, and will be out of date with national standards. This inconsistency may lead to confusing requirements, inconsistent implementation, and a lower level of public health protection.

SECTION 5:

Explain how the department determined that the probable benefits of the rule are greater than the probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented.

There are two legislatively significant rule changes in the proposed rule: Reducing the quarantine period for dogs and cats from 6 months to 4 months that have been exposed or potentially
exposed to rabies without proof of a previous vaccination, and allowing prospective serologic monitoring for dogs and cats.

**Benefit**
The rule currently requires animals without proof of a previous vaccination that have been exposed or potentially exposed to rabies to be euthanized or put in quarantine for 6 months. Some pet owners choose quarantine over euthansia to preserve the life of their pet in hopes of a healthy outcome. However, quarantine is challenging in that it requires the animal be kept completely isolated from human and other animal contact for the entire quarantine period. This is seen by some as inhumane treatment and anecdotal evidence suggests compliance with the requirement varies as a result. This potentially increases the risk of rabies transmission to other animals and to humans.

The proposed rule allows owners a reduced quarantine period of 4 months (reduced from 6 months), or prospective serologic monitoring with a 45 day observation period if deemed appropriate by the Local Health Officer. Observation is less strict than quarantine. The owner can directly interact with the animal in their home, and the period of observation is dramatically shorter than even the shortened proposed quarantine period.

By allowing less burdensome options for pet owners who are unwilling to euthanize their pet, the Department assumes the proposed rule will improve compliance with rabies prevention measures and potentially reduce the risk of rabies in humans. The benefits are a less burdensome post exposure response to rabies exposure or potential rabies exposure than 6 month quarantine or euthanasia.

**Avoided Cost**
Though there are costs associated with the proposed rule, ultimately the cost is lower than the current rule. If an owner choses to quarantine a pet, the quarantine period would be reduced by 2 months, or by one third. Specific costs for extended quarantine are not readily available for Washington State. Most quarantine is provided as a result of aggressive behavior in animals. Quarantine is then limited to 10 to twenty days. If no signs of rabies have developed, the animals are released to the pet owner under the direction of the Local Health Officer. However, cost identified by the State of Hawaii for a 4 month quarantine period is $1,080. ³ The Department assumes this cost is consistent across the quarantine period resulting in a monthly cost of $270. Based on this monthly cost, the Department assumes reducing quarantine from 6 to 4 months would reduce quarantine costs by $540.

**Cost**
Prospective serologic monitoring requires two blood tests to measure an animal’s anamnestic response. One blood sample is collected before vaccination with a USDA-approved rabies vaccine and the second is collected 5 to 7 days after vaccination. The blood is tested and the results compared to “measure the ability of rabies specific antibodies to neutralize rabies virus and prevent the virus from infecting cells.“⁴ The cost of one test from Kansas State Veterinary

---

³ [http://hdoa.hawaii.gov/ai/aqs/faq-for-animal-quarantine/#q2](http://hdoa.hawaii.gov/ai/aqs/faq-for-animal-quarantine/#q2)
Diagnostic Laboratory is $144\textsuperscript{5}. Based on the per test cost, the cost of two blood tests is $288. The Department assumes costs of shipping blood specimens overnight at $22. In addition, the Department assumes the cost of quarantine while awaiting test results at $315 ($22.50 per day\textsuperscript{6} for up to two weeks). Based on these assumptions, the total potential cost of prospective serologic monitoring is $615. Because the animal does not need to be placed in quarantine for 4 months under this circumstance, the Department assumes a cost savings of the full cost of quarantine, or $1,080, resulting in a cost savings of $465.

**Conclusion**
Based on the preceding analysis of the proposed rule, the Department assumes a cost savings ranging from $465 for animals that successfully undergo prospective serologic monitoring to $540 for animals placed in quarantine.

---

**SECTION 6:**

**Identify alternative versions of the rule that were considered, and explain how the department determined that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives stated previously.**

The department considered not changing quarantine periods for unvaccinated dogs and cats when exposed or potentially exposed to a rabid animal. This would have retained the six month quarantine period rather than reduce it to four months. Leaving the quarantine period at six months would have kept the requirement consistent with the quarantine period for ferrets. However, based on the available science\textsuperscript{7} related to periods necessary to determine whether a dog or cat has or has not contracted rabies, the department determined keeping the six months quarantine period would not increase public health protections thereby making the proposed rule overly burdensome.

---

**SECTION 7:**

**Determine that the rule does not require those to whom it applies to take an action that violates requirements of another federal or state law.**

The rule does not require those to whom it applies to take an action that violates requirements of federal or state law.

---

**SECTION 8:**

\textsuperscript{5} https://vetview2.vet.k-state.edu/LabPortal/catalog/list?CatalogSearch=RFF
\textsuperscript{6} Phone survey results of humane societies and veterinary facilities in Thurston, King, Spokane, Kitsap, and Kittitas counties.
\textsuperscript{7} Comparison of anamnestic responses to rabies vaccination in dogs and cats with current and out-of-date vaccination status, JAVMA, Vol 246, No. 2, January 15, 2016; Scientific Reports, p 205.
Determine that the rule does not impose more stringent performance requirements on private entities than on public entities unless required to do so by federal or state law.

The rule does not impose more stringent performance requirements on private entities than on public entities.

SECTION 9:

Determine if the rule differs from any federal regulation or statute applicable to the same activity or subject matter and, if so, determine that the difference is justified by an explicit state statute or by substantial evidence that the difference is necessary.

The rule does not differ from any applicable federal regulation or statute.

SECTION 10:

Demonstrate that the rule has been coordinated, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter.

Consistent with RCW 16.70.040(1), development of the rule proposal was coordinated with the Washington State Department of Agriculture regarding its lead role in controlling diseases of livestock and its joint role in controlling diseases of pets. Development was also coordinated with local health officers, local environmental health directors, and local health communicable disease epidemiologists.