

# Preliminary Significant Legislative Rule Analysis

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Proposed Zoonotic Disease Rules

DEPARTMENT OF HEALTH

**September 16, 2010**

# Significant Legislative Rule Analysis

WAC 246-100-191, Animals: General measures to prevent human disease  
WAC 246-100-192, Animals in public settings: Measures to prevent human disease  
WAC 246-100-197, Rabies: Measures to prevent human disease  
WAC 246-100-201, Psittacosis: Measures to prevent human disease

## Introduction

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. Zoonotic infections documented in Washington State include tularemia, hanta virus pulmonary syndrome, plague, psittacosis, salmonellosis, and rabies. Reptile-associated salmonellosis is one of the most commonly occurring zoonotic infections in Washington state. Rabies, while rare, is the most uniformly fatal disease. In addition to zoonotic infections acquired from pets, cases of zoonotic infections have been linked to petting zoos and fairs.

A succession of zoonotic disease outbreaks in the past decade has contributed to a growing concern over human vulnerability to these animal-borne diseases. Imported animals and animal products may carry infectious agents which can be transmitted to people or native animals. In fact, the United States has experienced the emergence of several zoonotic diseases recently, such as West Nile virus, monkeypox, and dengue fever. These, plus global outbreaks of severe acute respiratory syndrome (SARS) and highly pathogenic avian influenza have created intense public concern, resulted in extraordinary efforts and expenditures by public health agencies and private businesses, and increased our awareness of the potential risks associated with zoonotic diseases.

In addition, the trend toward importation and trade of exotic animals is increasing and carries with it the risk of future zoonotic disease outbreaks. United States Fish and Wildlife Service Data for 2005 shows 87,991 mammals, including 29 species of rodents; 259,000 birds; 1.3 million reptiles; and 5.1 million amphibians were imported into the United States. In 2006, United States Fish and Wildlife Service Data shows 135,731 mammals, including 34 species of rodents; 243,004 birds; 1,481,547 reptiles; and 4,776,023 amphibians imported into the United States. While importation of birds and amphibians decreased by 6 percent from 2005 to 2006, the increases in importation of other animals during this same time period dramatically increased. Importation of mammals increased by 54 percent and reptiles by 14 percent. Furthermore, public agencies frequently impound animals that people attempt to illegally smuggle into the country. These undocumented animals also pose serious public health risks as they may be sick or unvaccinated.

To compound the risk of zoonotic disease outbreaks in the United States due to increased importation of exotic pets, national resources dedicated to oversee importation are dwindling. As an example, the United States Quarantine Program, Centers for Disease Control and Prevention, has had significant reductions in stations and staffing since 1958. In 1958 there were quarantine inspection stations at 52 seaports, 41 airports, 17 border stations, 33 territory stations, 41 US Consulates 50 maritime vessels, with 600 employees throughout the country. By 2009, these resources had decreased to 18 airports, 2 border stations, with fewer than 150 employees.

To address the potential impact of zoonotic disease outbreaks on the health of Washington residents, the State Board of Health (board) created a work group comprised of representatives from the Washington State Department of Health (department), local public health jurisdictions, and the board to review and evaluate public health authorities, assess the exotic pet trade in Washington, and make recommendations for ways to reduce the risk of and manage zoonotic disease outbreaks. The group analyzed federal, state, and local laws regarding pet animals in the context of the public health mission to prevent and control communicable diseases.

The work group published its recommendations in October 2004 as “Zoonotic Diseases and Exotic Pets: A Public Health Policy Analysis.” The board unanimously adopted the analysis and the following recommendations which offer ways that public health can prevent, manage, and reduce the risk of zoonotic disease outbreaks:

- Develop a Zoonotic Disease Response Plan;
- Revise existing rules on rabies and psittacosis;
- Give further consideration to adopting point-of-sale education requirements for all reptile sales; and
- Monitor the situation and periodically re-evaluate to determine whether additional regulation is needed.

## **Section 1. What is the scope of the rule?**

These proposed rules are in response to the recommendations of the work group and reflect current laws, rules, and standards of practice designed to prevent and control human cases of psittacosis, rabies, and other diseases transmissible from animals to humans. Consistent with the board’s rulemaking authority, the proposed rules focus on environmental factors and controls to prevent and control zoonotic disease outbreaks rather than human case tracking and management of illness.

Editorial, clarifying, and significant changes are proposed in two existing rules (WAC 246-100-191, Animals, birds, pets – Measures to prevent human disease, and WAC 246-100-Birds – Measures to prevent psittacosis). And two new sections of rule are proposed to enable a more comprehensive approach to the prevention and control of many zoonotic diseases and control of the environments in which they are most likely to cause increased risk to the public.

The proposed changes include:

**WAC 246-100-191: Animals: General measures to prevent human disease.** This section maintains a prohibition on selling milk, meat, hides, and hair from animals infected or suspected of being infected with anthrax; and maintains the prohibition on selling and displaying live turtles with a carapace length of less than four inches. This section also adds requirements that vendors provide written information about preventing human disease to buyers of certain animals intended to be pets; and adds a prohibition on the sale, transfer, or acquisition of animals or animal products related to a zoonotic disease outbreak.

**WAC 246-100-192: Animals in public settings: Measures to prevent human disease.**

This proposed new section establishes requirements for animal exhibitors to provide hand-washing stations or another method of sanitizing approved by the local health officer, post signs for visitors about safe interaction with animals, post signs at the exits of exhibits advising visitors to wash their hands, and prevent sick animals from being exhibited.

**WAC 246-100-197: Rabies: Measures to prevent human disease.**

This section maintains the prohibition on importing, selling, or acquiring certain animals known to carry rabies. It also maintains provisions for local health officers to control rabies through quarantine of animals or humane euthanasia. It establishes additional authority for local health officers to order euthanasia and testing of more types of animals that have bitten humans. The proposed rule also establishes a new requirement for owners of dogs, cats, and ferrets to vaccinate these pets against rabies; establishes a new requirement for zoological parks to quarantine wild-caught mammals for six months, and provides local health officers specific authority to implement special measures to control rabies during natural or manmade disasters.

**WAC 246-100-201: Psittacosis: Measures to prevent human disease.** This section primarily maintains, updates, and clarifies existing rule requirements. This proposal also requires vendors to provide written information to each recipient of a psittacine bird, adds provisions for local health officers to control illness in birds to prevent illness from spreading to humans, and eliminates leg banding requirements.

Analysis of the significant changes included in the proposed rules is included in Section 4 of this document.

**Section 2. What are the general goals and specific objectives of the proposed rule's authorizing statute?**

RCW 34.05.328(1)(a) requires that the department “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.

Stated directly, 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 adopting rules to control the sale, importation, movement, sale, transfer, or possession of pet animals.

### **Section 3. How do the proposed rules meet the general goals and specific objective of the statute being implemented?**

RCW 34.05.328(1)(b) requires that the board determine that the rule is needed to achieve the general goals and specific objectives of the statute and analyze alternatives to rulemaking and the consequences of not adopting the rule.

The proposed rules will achieve the authorizing statute's goals and objectives by adopting rules intended to prevent and control diseases transmissible from animals to humans. The proposed rules reflect current laws, other state and federal rules, and standards of practice designed to prevent and control human cases of psittacosis, rabies, and other diseases transmissible from animals to humans by focusing on environmental factors and measures to prevent and control zoonotic disease outbreaks.

There is no alternative to rulemaking because development and adoption of these rules is mandated by statute. The authorizing statute directs the board to adopt rules to protect the public health from diseases acquired from animals. The current rules are outdated and do not reflect current standards of practice, and in some cases are not consistent with other laws and rules. These rules must be revised in order to meet the goals and objectives of the underlying statute. If these rules are not adopted, they will be inconsistent with other related laws and rules, and out of date with national standards. This inconsistency leads to confusing requirements, inconsistent implementation, and a lower level of public health protection.

### **Section 4. Do the probable benefits of the proposed rules outweigh the probable costs?**

RCW 34.05.328(1)(d) requires that the board determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented.

The four proposed rules are:

- WAC 246-100-191, Animals: General measures to prevent human disease;
- WAC 246-100-192, Animals in Public Settings: Measures to prevent human disease;
- WAC 246-100-197, Rabies: Measures to prevent human disease; and
- WAC 246-100-201, Psittacosis: Measures to prevent human disease.

All four sections of the proposed rules contain legislatively significant changes and are analyzed below.

**WAC 246-100-191, Animals: General measures to prevent human disease**

There are two legislatively significant rule changes in this section as described below.

**Analysis of Subsection 3:**

Vendors must provide recipients of a reptile, amphibian, or poultry chick with a written notification that includes information about possible diseases contracted from these types of animals, including *Salmonella* infection; individuals at greater risk for contracting disease and experiencing severe illness; and methods of disease prevention such as proper hand-washing.

**Benefit**

Written notification to recipients of a reptile, amphibian, or poultry chick is a basic public health protection measure. It is intended to increase awareness of potential illnesses that can be transmitted to humans from these specific types of animals, and influence behavior known to reduce the risk of illness such as hand-washing. This requirement is also intended to provide additional protection for those at greater risk of becoming ill, including young, elderly, and immunocompromised people, by clearly identifying their increased risk of illness related to contact with these animals.

**Cost**

The department estimates the cost of providing written notification to recipients of a reptile, amphibian, or poultry chick to be negligible. To improve compliance with the requirement and to reduce the cost of compliance, vendors may use materials provided by the department. Vendors can access these materials via the internet and print them as needed. Assuming vendors have access to the internet, printer, and paper, the cost of providing the notification is considered minimal.

**Analysis of Subsection 7:**

All persons are prohibited from selling, transferring, or acquiring animals or animal products associated with a zoonotic disease outbreak or suspected zoonotic disease outbreak as determined by the state health officer, local health officer, or a federal agency.

The proposed rule prohibits the sale, transfer, or acquisition of animals or animal products associated with a zoonotic disease outbreak or suspected zoonotic disease outbreak as determined by the state health officer or a local health officer. This proposed change extends the existing prohibitions for anthrax to all zoonotic disease outbreaks, acknowledges federal authority, and better coordinates local and state level actions with federal agency actions. This provision does not establish a permanent ban on specific animals, nor does it identify additional control measures, such as euthanasia, that may be deemed necessary by other federal or state agencies. This is a necessary precaution given today's pet animal market where many more exotic animals are being imported into the United States to be purchased as pets, increasing the risk of zoonotic disease in humans. Washington State has multiple international ports of entry including sea ports which increase the risk of importing infectious animals or animal products.

Imported animals and animal products may carry infectious agents that can be transmitted to people or native animals. Diseases that have never before been documented in the United States are now being seen with increasing frequency, including West Nile virus, monkeypox, and dengue fever. The risk of future zoonotic disease outbreaks from these and other microbial agents increases with the increased importation of exotic animals, which emphasizes the need for a coordinated public health response.

West Nile virus demonstrates the speed at which a virus can spread and become established. In 1999, the first cases of West Nile virus were recorded in North America on the eastern seaboard. The virus' spread across the continental United States took only three years before it reached California. In 2002, Washington state recorded its first detections of West Nile virus in two horses and two birds. The virus was not detected again until 2005 when it was found in two mosquito samples. The virus has since established itself in the Columbia Basin of Washington state. The most active year to date was 2009, with 38 human cases, including one fatality; 72 horses; 1 dog; 22 birds; and 346 mosquito samples testing positive for West Nile virus. Since the arrival of West Nile virus in the United States in 1999, over 29,500 human illnesses with more than 1,100 fatalities have been attributed to the virus.

In 2003, the first outbreak of human monkeypox infection was recorded in the United States. This outbreak demonstrates how zoonotic disease can be spread to humans via the exotic pet trade. Most of the illnesses were linked to prairie dogs that became ill after contact with exotic African rodents shipped from Ghana to the United States in April 2003. According to the Centers for Disease Control and Prevention, there were a total of 37 confirmed human infections among exotic pet dealers, pet owners, and veterinary care workers in Illinois, Indiana, Kansas, Missouri, Ohio, and Wisconsin.

As a result of the 2003 monkeypox outbreak, on November 4, 2003, the Centers for Disease Control and Prevention and the Food and Drug Administration issued an interim final rule prohibiting the importation of all African rodents into the United States. The joint rule also banned within the United States any sale, offering for distribution, transport, or release into the environment, prairie dogs and six specific genera of African rodents.

Currently, a person may not import into the United States any rodent of African origin, including any rodents that were caught in Africa and then shipped directly to the United States or shipped to other countries before being imported to the United States. The prohibition also applies to rodents whose native habitat is in Africa, even if those rodents were born elsewhere. These animals may still be imported for scientific, exhibition, or educational purposes with a valid permit issued by the Centers for Disease Control and Prevention.

### **Benefit**

The proposed SBOH rule change is designed to provide public health protection in Washington state by allowing local and state health officers to take limited action to prevent or control a zoonotic disease outbreak. This proposed change coordinates with other federal and state agency authorities, including the United States Department of Agriculture, Washington State Department of Agriculture, Centers for Disease Control and Prevention, United States Fish and

Wildlife, and Washington State Fish and Wildlife, to implement appropriate control measures for human disease prevention.

### **Cost**

The costs of this proposed requirement are minimal. Vendors would be prohibited from selling, transferring, or acquiring animals or animal products during the initial health officer directed investigation. If the investigation concludes there is no imminent public health threat, the prohibition would be removed and sales could resume. The department assumes this could result in a delay of sales, but not a reduction in sales. If the investigation indicates that a zoonotic disease outbreak has occurred or is likely to occur, other national and state agencies would be involved and appropriate control measures would be employed to contain and eliminate the outbreak. In this case, costs associated with long-term control measures would be a result of other agency authorities and actions and not a function of this proposed rule. The department assumes no additional costs for this potential outcome.

### **WAC 246-100-192, Animals in Public Settings: Measures to prevent human disease**

There are two legislatively significant rule changes in this section as described below.

#### **Analysis of Subsection 3:**

Animal venue operators must provide accessible hand-washing stations or alternative hand sanitizing methods approved by the local health officer. Animal venue operators must also post a prominent sign at the entrance of animal exhibit areas that warns visitors that animals can carry germs that make people sick; eating, drinking, or putting things in your mouth in animal areas could cause illness; older adults, pregnant women, immunocompromised individuals, and young children are more likely to become ill from contact with animals; young children and individuals with intellectual disabilities should be supervised in animal exhibit areas; and strollers, baby bottles, pacifiers, and children's toys are not recommended in animal exhibit areas. Animal venue operators must also post a prominent sign at the exit of the exhibit area reminding visitors to wash their hands.

The proposed rule requires animal venue operators to provide accessible hand-washing or an alternative hand sanitizing method approved by the local health officer. Hand-washing has been proven to reduce the risk of communicable disease in multiple arenas including health care, child care, and food service. Proper hand-washing, including the use of warm water and lathering soap, removes visible particles and microscopic bacteria that can cause illness. Hand-washing has long been a cornerstone of public health for these reasons.

The department expects this requirement to primarily affect agri-tourism businesses and small scale animal venue operators. A typical agri-tourism business would be a bed and breakfast facility or orchard that has included a petting zoo type of attraction. The department assumes larger animal venue operators such as county fairs and zoos already have public restrooms with hand-washing facilities.

Internet research shows that hand-washing station costs can range dramatically from \$150 to thousands of dollars. For the purposes of this analysis, the department assumes a range of \$150

to \$1000 per hand-washing station. The department also assumes these hand-washing stations would be located at each exit. For these smaller businesses, the board assumes there are one to two exits. Based on these assumptions, the cost of providing hand-washing stations could range from \$150 to \$2000 per venue. Additional costs of soap and disposable single-use towels are estimated at \$50 per station. The total range of cost for portable hand-washing stations is \$200 to \$2,100.

As a mitigation measure, the proposed rule allows local health officers to consider alternatives to hand-washing stations. These alternatives could include the use of moist towelettes and hand sanitizer. The cost of this alternative is estimated at \$75 and is significantly less than hand-washing stations.

The proposed rule also includes a requirement for animal venue operators to warn visitors of certain risks associated with interacting with exhibited animals. This requirement is similar to the proposed notification requirement in WAC 246-100-191, Animals: General measures to prevent human disease.

### **Benefit**

The proposed requirement is intended to increase awareness of the potential for acquiring illness from animals, and influence behavior known to reduce the risk of illness such as hand-washing. This requirement is also intended to provide additional protection for those at greater risk of becoming ill, including young, elderly, and immunocompromised people, by clearly identifying their increased risk of illness related to contact with animals.

### **Cost**

The department estimates the cost of providing warning signs to be negligible. To improve compliance with the requirement and to reduce the cost of compliance, animal venue operators may use materials provided by the department on the Department of Health web site. Animal venue operators can access them via the internet and print them as needed. Presuming vendors have access to the internet, printer, and paper, the cost of providing the notification is considered minimal.

### **Analysis of Subsection 5:**

The proposed rule requires animal venue operators and other people legally responsible for animals in public settings to observe animals daily for signs of illness and prevent public contact with sick animals. The proposed change puts into rule basic care for animals that can prevent unnecessary exposure of humans to animal illness. The rule requires that vendors take actions to prevent contact between humans and sick animals, but does not require the more strict option of quarantine.

### **Benefit**

Preventing sick animals from coming into contact with people visiting animal exhibits reduces the risk of transmitting zoonotic disease, such as salmonella, to humans.

### **Cost**

The department assumes observation of exhibit animals is a routine daily task that incurs no additional cost. The department also assumes exhibitors provide proper care of sick animals and, as part of proper care, prevent them from being handled or touched by members of the public. For these reasons, the department assumes this requirement will not increase costs to vendors.

### **WAC 246-100-197, Rabies: Measures to prevent human disease**

There is one legislatively significant rule change in this section as described below.

#### **Analysis of subsection 3:**

Subsection 3 requires an owner of a dog, cat, or ferret to have it vaccinated against rabies and revaccinated following veterinary and vaccine manufacture instructions. This requirement does not apply to animals shelters.

Rabies, while rare, is the most uniformly fatal 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 are susceptible to this viral disease that causes fatal encephalitis. When an animal is infectious, the virus is present in the saliva in sufficient quantities to be transmitted. Rabies is transmitted from an infectious mammal to another mammal, primarily through a bite. Mucous membrane contact with infectious saliva or neural tissue, under rare conditions, can transmit the disease as well.

This proposed requirement is designed to reduce the risk of rabies infection in humans by strengthening the single most effective measure to prevent this disease: vaccination. The Food and Drug Administration approves vaccines for use in animals. Currently there are approved rabies vaccines for dogs, cats, and ferrets. The proposed rule makes rabies vaccination for these animals mandatory to reduce the risk of rabies in humans. Washington state is one of only 9 states that does not require rabies vaccination. However, within Washington state, 14 counties and several municipalities have their own mandatory rabies vaccination requirement.

Several factors are increasing the risk of acquiring rabies in the United States. These factors include the importation of dogs and cats from rabies endemic areas and the increased rate of rabies infection in cats in the United States.

Contact between pet animals and wild mammals that carry rabies is common. Dogs and cats often interact with bats, skunks, raccoons and other wild mammals. While Washington state has no recorded incidence of terrestrial rabies in the wildlife population, this is not the case in many parts of the United States. According to Centers for Disease Control and Prevention data, rabies is endemic in wild mammal populations in 37 states including the entire Eastern seaboard. The CDC also reports that domestic animal rabies infections are primarily attributed to “spillover” from local reservoirs.

The primary reason Washington state does not have endemic terrestrial rabies is the current ban on importation of certain mammals known to carry rabies in other parts of the country. This ban includes skunk, fox, coyote, raccoon, and bat. However, given that movement of pets throughout the United States is common and vaccination requirements are inconsistent from state to state,

there is a possibility that terrestrial rabies could be introduced in Washington state from another state or internationally from rabies endemic countries. One of the most recent states to acquire endemic terrestrial rabies is New Jersey. Raccoon rabies was introduced there in 1990.

In recent years, the importation of dogs from around the world has increased. Many of these animals are being imported from areas where rabies is endemic and vaccination is rare. This set of circumstances is increasing the likelihood that pets and people may be exposed to animals carrying rabies. In 2007, a puppy from India was brought into the United States by a United States citizen. The puppy had contracted rabies in India and began to show signs of illness after arrival in the United States. In this case, the puppy's health deteriorated rapidly and it was euthanized for testing. Following confirmation that the puppy was infected with the rabies virus, 20 people were interviewed to determine exposure, and 8 people received post-exposure rabies vaccination clinically referred to as post-exposure prophylaxis or PEP.

In 2008, a group of dogs from Iraq were imported into the United States through the New Jersey Centers for Disease Control and Prevention Quarantine Station. All the dogs were active duty service member pets adopted from the streets of Baghdad. Three of the dogs were brought to Washington State to live. Unfortunately, one of the dogs in the original shipment from Iraq was infected with rabies and exposed the other dogs, none of which were properly vaccinated. With significant public health response, the animals were located and quarantined for 6 months. The infected dog was euthanized and several people received PEP.

These two examples clearly demonstrate that increased importation of animals from rabies endemic countries coupled with limited resources to oversee the importation process, increases the likelihood of rabid animals, particularly dogs, entering the United States undetected.

Along with movement of pets throughout the country and the world that cause greater public health concern, the latest Centers for Disease Control and Prevention data shows a steady increase in the incidence of rabies in cats since the early 1990s. The number of reported rabies cases among cats in 2008 increased by approximately 12 percent from the previous year. The increase in rabies among cats suggests a greater risk of rabies infection in humans.

Mandatory rabies vaccination for dogs, cats, and ferrets will provide additional public health protection than is currently provided by the existing rule. Vaccination creates a protective barrier between the rabies reservoir and humans. Appropriately vaccinated pets are protected and therefore will not develop the disease after exposure, thereby reducing the risk of human exposure and potential disease.

### **Benefit**

Once a person has been exposed to rabies either through a bite or contact with mucous membranes, a person must receive PEP as soon as possible after exposure to prevent the disease. PEP requires one immunoglobulin shot and four to five doses of vaccine. The cost can range from \$800 to \$1500 for the immunoglobulin shot. The cost for rabies vaccination can range from \$200 to \$400 per shot. The total cost of medication ranges from \$1,600 to \$3,500 per person.

The cost of administering PEP also varies. Because rabies exposure is usually through animal bites, the first visit to a health care provider is usually at the emergency room of a hospital. Follow-up visits for the remaining rabies vaccination can be performed at a doctor's office. However, most primary care physicians do not stock rabies vaccine, so patients often receive all the follow-up visits at the hospital. Based on a Massachusetts study, the board estimates the cost of PEP administration at \$2,376. However, there are isolated reports of much higher costs reaching as high as \$30,000 in Southeastern Pennsylvania for vaccine and administration of PEP.

From 2007 through 2009, there were 791 uses of PEP reported to the Department of Health. Of these cases, 30 were related to dog bites that occurred in Washington state, and 14 were related to cat bites that occurred in Washington state. (Other dog and cat related exposures occurred through saliva, scratches, and other means; or were acquired outside Washington state and are not included in this analysis.) There were no reported cases of PEP related to ferrets during this time period.

Using this data, the board estimates the cost of PEP for dog, cat, and ferret potential rabies exposures at \$202,776 to \$299,676 every three years, or \$67,592 to \$99,892 per year.

In addition to the cost of PEP, there is a cost to test unvaccinated animals when they have potentially exposed humans to rabies. The estimated cost for rabies testing at the Washington state Public Health Laboratory is \$150 per animal. The number of dogs tested over the past three years was 97 (2007), 76 (2008), and 90 (2009). The number of cats tested was 132 (2007), 143 (2008), and 133 (2009). The number of ferrets tested was one each of the three years. Based on the number of animals tested for the past three years, the cost of rabies testing of dogs, cats, and ferrets ranges from \$33,000 to \$34,500 per year.

The board estimates the costs of PEP and rabies testing of unvaccinated dogs, cats, and ferrets to be from \$100,592 to \$134,392 annually. The qualitative benefits of the proposed rule include reduced fear and stress after an animal bite, and avoiding the emotional and physical pain of multiple injections and repeated visits to a stressful health care setting. In addition, with reduced potential rabies exposures, the public health system is less burdened with epidemiological investigations and response.

### **Cost**

The population of dogs, cats, and ferrets can be estimated for Washington State based on survey data, census data, and state population data. However, not all animals receive routine veterinary care so the vaccination rate in Washington state is not known. For that reason, the cost of this requirement is based on the percentage of yearly expenditures typical US pet owners make for dogs, cats, and ferrets extrapolated for Washington state.

The cost of vaccinating dogs and cats per household compared to the existing expenditures typical pet owners make is relatively low. According to the 2007 - 2009 APPA National Pet Owners Survey, the annual average amount pet owners spend for a dog is \$1,425 and for a cat is \$990. This includes basic annual expenses for dog and cat owners including surgical veterinary visits, food, kennel boarding, routine veterinary care, grooming, vitamins, treats, and toys. The survey does not ask how much in total the owner spends on their dog or cat so actual expenses

are higher than included in the survey results. Annual average expenses for ferrets was not included in the APPA survey. The board assumes ferret expenses to be similar to those of cats at \$990 per year.

To make a cost comparison between the national survey data and Washington state, we used 2009 population data. The 2009 US population was estimated at 305.5 million<sup>1</sup> and the 2009 Washington state population was estimated at 6.7 million<sup>2</sup>. Washington state population is 2 percent of the national population at that time.

Rabies vaccine is available in a one year dose and a three year dose for dogs and cats. Based on a department survey of veterinary clinics in Washington state, the department estimated the cost of a three year rabies vaccine with an examination. There was no cost difference between the single year dose and the three year dose. The cost for rabies vaccination of dogs and cats is the same. The range is \$12.00 to \$83.40 with an average cost of \$53.43 every three years. This translates to an average annual cost of \$17.81 per dog or cat.

As part of the department survey, costs for rabies vaccination of ferrets was also requested. Single year rabies vaccine was not offered for ferrets. The costs for a three year vaccine with examination ranged from \$22.00 to \$79.00 with an average of \$53.10. This translates to an average annual cost of \$17.70.

Using the above data, the department estimates rabies vaccination to increase the annual cost of having a pet dog by approximately 1 percent. The percentage of increase related to rabies vaccination of a pet cat or ferret is approximately 2 percent.

### **WAC 246-100-201, Psittacosis: Measures to prevent human disease**

There is one legislatively significant rule change in this section as described below.

#### **Analysis of subsection 3:**

Vendors must create a record of transfer of a psittacine bird to a member of the general public and maintain it for at least one year. The proposed rule also eliminates the requirement for vendors to record leg band codes on the record of transfer of a psittacine bird.

#### **Benefit**

The proposed changes to the rule are designed to improve epidemiological investigation of outbreaks of psittacosis. Vendors are currently required to create and maintain a record of transfer of a psittacine bird to anyone other than a member of the general public. The proposed rule broadens the existing requirement to include members of the general public so that birds that are potentially ill can be found and the number of potential human exposures reduced.

#### **Cost**

The department assumes that since vendors are already required to create a record of transfer for customers other than the general public and maintain those records for a year, all procedures and

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<sup>1</sup> US Census estimate

<sup>2</sup> OFM population estimate, April 1, 2009

supplies for complying with the proposed requirement are in place. Based on this assumption, the department assumes there is no additional cost for this proposed change.

The proposed rule also eliminates the requirement to record leg band codes on records of transfer. This is a redundant requirement with the Department of Agriculture and is unnecessary to include in the board rule. There is no cost change for this proposed revision.

### **Analysis Conclusion**

Based on the preceding analysis, the department concludes the probable qualitative and quantitative benefits of public health education, hand-washing, limited animal quarantine, and rabies vaccination of pet dogs, cats, and ferrets included in the proposed rules exceed the probable increase in costs for these activities.

### **Section 5. What alternative versions of the rule did we consider? Is the proposed rule the least burdensome approach?**

During rule development, the following alternatives were considered:

Reference the full compendia for rabies, animals in public settings, and psittacosis. While the compendia are designed to prevent the spread of disease from animals to humans, the standards are broader than the scope of the proposed rule revision which is “prevention and control of human cases of psittacosis and other diseases transmissible from animals to humans.” Instead, the department proposes the board incorporate specific standards from the compendia that more directly address the potential for human illness and the specific conditions in Washington state. Other standards not incorporated from the compendia include those directed toward human case tracking and management, and prevention and control methods related to wildlife. Since human case tracking and management is beyond the scope of this rulemaking, and because the board does not have authority to regulate wildlife, these standards are not included in the proposed rules.

Prohibit wolf-hybrids species for import and ownership largely because there is no approved rabies vaccine for wolf-hybrids. This alternative was rejected as state law allows ownership of wolf-hybrids as pets. Instead the proposed rules delineate clearly the actions a local health officer may take when a wolf-hybrid is involved in a potential or confirmed rabies exposure.

Require animal vendors, animal exhibitors, and animal venue operators to develop their own educational signage based on the requirements in the proposed rules. Instead of placing the burden of developing materials on these groups of people and creating the potential for misinformation, the board proposal includes a provision allowing vendors, exhibitors, and venue operators to print prepared signs from the department’s web site.

Allow individual ownership of animals currently prohibited, including bats, skunks, foxes, raccoons, and coyotes. However, this would require creating a state level certification program to track these high risk animal species. This idea was rejected because there is no statutory authority to create such a program and the public health risk of importing terrestrial rabies virus variants is far too great. In addition, a federal program already exists that allows conditional

possession of these animals for exhibition and educational purposes. Reference to this federal program is included in the proposed rules.

Based on the preceding analysis, the department concludes that the proposed requirements are the least burdensome alternatives that meet the general goals and specific objectives of the underlying statutes.

**Section 6. Did you determine that the rule does not require anyone to take an action that violates 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 7. Did we determine that the rule does not impose more stringent performance requirements on private entities than on public entities unless the difference is required in federal or state law?**

The department determined that the rule does not impose more stringent performance requirements on private entities than on public entities.

**Section 8. Did you determine if the rule differs from any federal regulation or statute applicable to the same activity or subject matter and, if so, did we 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 9. Did we demonstrate that the rule has been coordinated, to the maximum extent possible, 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 and local environmental health directors. The proposal includes updated requirements to coordinate with federal and other state agency laws and rules.