

## 2010 Public Health Reporting Guide for Veterinarians – Instructions for online version

Hello to our animal health partners in Los Angeles County!

Here is your new 2010 Public Health Reporting information packet. This packet is an update to the yellow-and-white Public Health binder that was delivered to veterinary practices in Los Angeles County in 2008-2009.

1. Print out this pdf document.

- Ideally print the 2010 Cover page (second page) on yellow paper.
- Punch holes in packet for three-ring binder (except binder Cover page)

2. Locate the yellow and white Public Health binder that was delivered to your practice in 2008 or 2009.

- If your practice did not receive a binder in 2008-2009, contact us at (213)989-7060

3. Replace yellow cover (2008-2009) with new yellow cover (2010)

4. Discard everything in the old binder.

5. Place all new pages from this packet into binder.

6. Review the contents of the binder.

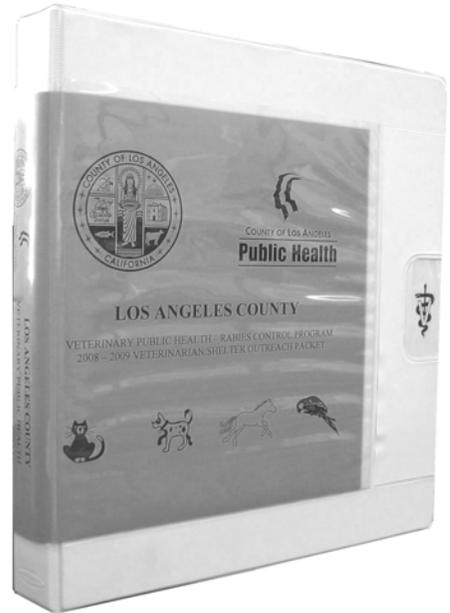
7. Please complete the Disaster Survey (page 5) and fax a copy back to our program ASAP.

8. Encourage staff to register to receive Animal Health Alerts from our program (form page 3)

9. Please make copies of the Rabies Laws Quiz, and Rabies Tales from Los Angeles cartoon and use to educate your staff.

10. Note: This packet is available online at: [publichealth.lacounty.gov/vet/ProOutreach.htm](http://publichealth.lacounty.gov/vet/ProOutreach.htm)

11. Please call and ask to speak to one of our veterinarians if you have questions: 213-989-7060





# COUNTY OF LOS ANGELES Public Health

Veterinary Public Health & Rabies Control

# 2010

## PUBLIC HEALTH REPORTING GUIDE FOR VETERINARIANS

**2010**  
PUBLIC HEALTH  
REPORTING GUIDE  
FOR VETERINARIANS





COUNTY OF LOS ANGELES

# Public Health

Veterinary Public Health & Rabies Control

As of Friday April 30, 2010

## WE HAVE MOVED!

Please note our new address:

**Veterinary Public Health and Rabies Control Program**

**313 N. Figueroa St, Rm 1127**

**Los Angeles, CA 90012**

**Tel. 213-989-7060 or 877-747-2243**

**Fax 213-481-2375 [vet@ph.lacounty.gov](mailto:vet@ph.lacounty.gov)**

**[publichealth.lacounty.gov/vet](http://publichealth.lacounty.gov/vet)**

OLD REPORTING FORMS →

Stop using immediately. Place in your recycling bin for disposal! They had 562 or 323 fax numbers.

NEW REPORTING FORMS →

Note "2010" in lower right corner, 213 fax number  
Download: [publichealth.lacounty.gov/vet/Forms.htm](http://publichealth.lacounty.gov/vet/Forms.htm)





COUNTY OF LOS ANGELES

# Public Health

Veterinary Public Health & Rabies Control

2010

## PUBLIC HEALTH REPORTING GUIDE FOR VETERINARIANS

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**VETERINARY PUBLIC HEALTH –RABIES CONTROL PROGRAM**  
Tel. (213) 989-7060 or (877) 747-2243 Fax (213) 481-2375  
[publichealth.lacounty.gov/vet](http://publichealth.lacounty.gov/vet)



**ANIMAL HEALTH ALERT NETWORK  
Registration Form**

In an effort to keep veterinarians and others informed about local animal disease problems or outbreaks, the Veterinary Public Health and Rabies Control Program set up an Animal Health Alert Network. Participants of the network will be notified of reported animal disease outbreaks, local rabies cases, important reportable diseases and other animal health problems. All reports are sent by e-mail, so an **e-mail address is required.**

**To sign up for the Los Angeles County Animal Health Alert Network, please complete the following information and fax the form to (213) 481-2375**

**Name:** \_\_\_\_\_

**Clinic/Organization:** \_\_\_\_\_

**Address:** \_\_\_\_\_  
\_\_\_\_\_

**Phone#:** \_\_\_\_\_

**Fax#:** \_\_\_\_\_

**Email Address:** \_\_\_\_\_

**\*Veterinarians, veterinary technicians, animal control officers, wildlife rehabilitators and others that may work in an animal health field in our local area are eligible to register and receive these alerts. Alerts may not be forwarded outside of your animal health organization, unless otherwise indicated in the alert**

**2010 Disaster Preparedness & Response Survey  
Los Angeles County Veterinary Clinics**

*L. A. County Veterinary Public Health is in the process of updating veterinary clinics, veterinarians, technicians, hospital staff, etc. who are interested in being identified as a resource in the event of a disaster. Please fill out one form per person.*

**Please FAX completed survey to 213-481-2375**

Person Completing Survey: \_\_\_\_\_

Clinic Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone number: \_\_\_\_\_ Fax number: \_\_\_\_\_ Email: \_\_\_\_\_

1. Are the hospital director, associate DVMs, RVTs, hospital manager, and/or any staff interested in assisting in disaster response activities?

Yes \_\_\_\_ No \_\_\_\_

If yes, names & position:

\_\_\_\_\_

2. Is your clinic/facility available to provide boarding for evacuated pets during a disaster?

Yes \_\_\_\_ No \_\_\_\_

If yes for:

- a. how many pets?
- b. how long of a duration?

3. Are any DVMs, RVTs interested in acting as disaster responders in the local community?

Yes \_\_\_\_ No \_\_\_\_

If yes, name & position:

\_\_\_\_\_

4. Would your clinic/DVMs be able to provide triage, treatment for pets of clients and non-clients?

Yes \_\_\_\_ No \_\_\_\_

If yes,

- a. on-site Yes \_\_\_\_ No \_\_\_\_
- b. at remote/local location Yes \_\_\_\_ No \_\_\_\_

5. Have any of your staff taken disaster response training? Yes \_\_\_\_ No \_\_\_\_

If yes, circle all that apply and indicate how many staff

- |                  |       |  |       |
|------------------|-------|--|-------|
| a. FEMA 100      | _____ | e. AHA Animal Emergency Sheltering       | _____ |
| b. FEMA 700      | _____ | f. CERT training                         | _____ |
| c. ICS training  | _____ | g. VMAT training                         | _____ |
| d. HSUS training | _____ | h. Animals in Disasters, IS-10 and IS-11 | _____ |

Other training, please specify \_\_\_\_\_

6. Has any of your staff participated as first responders in recent disasters/evacuations?

Yes \_\_\_\_ No \_\_\_\_

If yes, when and where? \_\_\_\_\_

7. Any other resources you could provide?

\_\_\_\_\_

**Please submit completed survey to:**

Dr. Alexandra Swanson  
Veterinary Public Health & Rabies Control Program  
313 N. Figueroa St., Rm 1127  
Los Angeles, CA 90012

213-989-7060 (Office)

**213-481-2375 (Fax)**

**2010 Disaster Preparedness & Response Survey  
Los Angeles County Veterinary Clinics**

**Suggested Disaster Response Training Resources**

- FEMA/ICS courses available on-line:  
<http://training.fema.gov/IS/NIMS.asp>  
<http://training.fema.gov/EMIWeb/IS/IS100a.asp>  
<http://training.fema.gov/emiweb/is/is700a.asp>
  
- Animals in disasters on-line  
<http://training.fema.gov/EMIWeb/IS/is10.asp>  
<http://training.fema.gov/EMIWeb/IS/IS11.asp>
  
- HSUS DART (Disaster Animal Response Training)  
[http://www.humanesocietyu.org/workshops\\_and\\_classes/disaster\\_animal\\_response.html](http://www.humanesocietyu.org/workshops_and_classes/disaster_animal_response.html)
  
- AHA Animal Emergency Services training  
<http://www.americanhumane.org/protecting-animals/conferences-trainings/animal-emergency-services-trainings/basic-animal-emergency-services-training.html>
  
- CERT (Community Emergency Response Team)  
<http://www.cert-la.com/index.shtml>
  
- VMAT (Veterinary Medical Assistance Team)  
<http://www.vmat.org/>
  
- California Veterinary Medical Reserve Corps, coordinator Peter Mundschenk, DVM  
[pmundschenk@cvma.net](mailto:pmundschenk@cvma.net)  
<http://www.cvma.net>

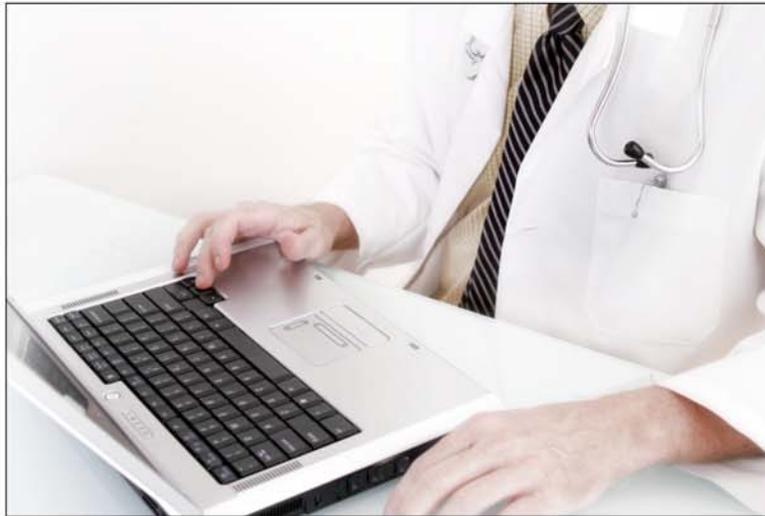
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# ARE YOU CONNECTED TO PUBLIC HEALTH?



[publichealth.lacounty.gov/vet](http://publichealth.lacounty.gov/vet)

This Public Health Reporting for Veterinarians packet

Reporting Forms and online reporting

Local animal disease data, maps

Disaster preparedness information

Recalls

Rabies-related Laws

Educational materials

Contact information for all LA County Animal Control agencies

...and much, much more!

**BOOKMARK US TODAY!**





## Answers to Common Questions

- Veterinary Public Health and Rabies Control (VPH-RC) is not the same as Animal Control. Our program works out of an office. We do not have a shelter or clinic.
- It is legally required to report ALL known incidents of mammal bites to people (except rodents, squirrels, and rabbits).
- It is also legally required to report bites and other exposures between pets and wild mammals (except rodents, squirrels and rabbits).
- Public health needs to know date and location of bite incidents.
- Most rabies-related quarantines are performed at home and monitored by an inspector (via phone and mail).
- VPH-RC is focused on rabies risk evaluation in bite incidents, not animal behavior evaluation. If a bite victim believes an animal is dangerous to the community, they may file a separate "Dangerous Animal Complaint" with their local animal control agency.
- Please hold body of rabies suspect until rabies results come back. If specimen is positive for rabies, the body must be cremated, not rendered
- If a bat is being tested for rabies, submit the whole body, not just the head.
- DO NOT FREEZE bodies or other samples for testing. REFRIGERATE.



**Animal Bite Reporting and Rabies Control  
Summary for the time-stressed, 2010**



## Legal Requirements

- The Department of Veterinary Public Health – Rabies Control Program (VPH-RCP) is responsible for enforcing laws pertaining to rabies control in Los Angeles County.
- The California Department of Public Health defines the county as a “rabies area.”
- Rabies titers are never accepted in lieu of documented vaccination.
- All animal bites to people are reportable to VPH-RCP and biting animals must be quarantined or tested for rabies.
- Animal bites are reportable by all individuals who are aware of the bite incident. This includes veterinarians and others, not just physicians.
- **DOMESTIC ANIMALS BITING PEOPLE**
  - Domestic biting animals are to be quarantined and observed for clinical signs of rabies by VPH-RCP.
  - Healthy domestic animals that have bitten a human are not to be euthanized during the quarantine period. Approval for exceptions must be granted by VPH-RCP. Gravely ill or injured domestic animals that have bitten a human may be euthanized during the quarantine period for humane reasons. In these cases, the head of the animal must be submitted appropriately for rabies testing.
  - Rabbit, gopher, squirrel and rodent bites are not reportable.
- **MAMMALIAN WILDLIFE BITING PEOPLE OR DOMESTIC ANIMALS**
  - Wild mammals (except rabbits, gophers, squirrels and rodents) are considered rabies suspects unless proven otherwise by testing.
  - Any wild mammal that has bitten a human or pet shall be humanely euthanized and properly submitted for rabies testing.
    - Rabbit, gopher, squirrel and rodent bites are not reportable as these animals are not considered potential rabies vector species. However, as with all animal bites, the bite victim should still consult with their physician.
  - Domestic animals that have had contact with a suspected rabid animal (e.g. wild animal) are quarantined and observed for clinical signs of rabies by VPH-RCP, unless the wild animal tested negative for rabies.

## Quarantine procedure

- Dogs/cats that have bitten a human: minimum 10 day quarantine. DO NOT booster vaccine during quarantine.
- Horses/ruminants that have bitten a human: 30 day quarantine. DO NOT booster vaccine during quarantine.
- Dogs/cats/horses/ruminants with rabies vaccination up-to-date, that have been bitten by wild mammals: revaccinate immediately and 30 day quarantine.
- Dogs/cats/horses/ruminants unvaccinated against rabies or without up-to-date rabies vaccination, that have been bitten by wild mammals: euthanasia OR vaccinate immediately and 180 day quarantine.
- Ferrets are illegal in California. Rabies control procedures for ferrets are the same as for dogs and cats with concurrent reporting to CA Department of Fish and Game.
- Acceptable quarantine sites: secure site in home (no charge to owner), veterinary clinic (clinic to determine cost to owner), shelter (shelter to bill owner for costs).
- Our priority is to make sure the animal is healthy. The majority of quarantines are done with the animal remaining at the owner’s home.

## How do I report?

- The appropriate forms are enclosed in this packet. See Reporting Forms section. Report bites on a same-day basis. Fax completed reports to (213) 481-2375
- You can also report online at: [publichealth.lacounty.gov/vet/biteintro.htm](http://publichealth.lacounty.gov/vet/biteintro.htm)

## How do I submit an animal for testing?

- For non-bat animals, submit only the head. For bats, submit the entire body. Do NOT decapitate bats.



## VETERINARY PUBLIC HEALTH-RABIES CONTROL PROGRAM

Phone: (213) 989-7060 or (877) 747-2243

Fax (213) 481-2375 or (213) 482-2588



# PROCEDURE for SPECIMEN SUBMISSION for RABIES TESTING

Remember: healthy **domestic** animals that have bitten a human are not to be euthanized during the quarantine period. Gravely ill or injured domestic animals that have bitten a human may be euthanized during the quarantine period for humane reasons. In these cases the head of the animal must be submitted appropriately for rabies testing.

Specimens should be kept refrigerated. **DO NOT FREEZE!** Freezing damages the tissue and makes testing difficult. Only properly prepared specimens will be collected for testing.

1. Complete a Bite Report Form. If no person was bitten, write "None" in the "Person Bitten" section.
2. Spray the animal's body with flea spray to kill any fleas or ticks.
3. Sever the head from the body for all animals, except bats. Submit only the head for testing.
4. Wrap the specimen (animal's head) in newspaper or other absorbent paper, and then place the wrapped specimen in a plastic, leak proof bag. Place the specimen in a second plastic bag to prevent any leakage.
5. Place the double bagged specimen into an insulated outer container (eg. box with ice pack). Add packing material to box, if needed to fill up the interior.
6. Place a copy of a completed Bite Report Form on the outside of the container. If the animal did not bite a person, note in the Remarks area why the animal is being submitted for rabies testing (eg. Symptoms compatible with rabies).
7. After the specimen is prepared, fax a copy of the completed Bite Report Form to Veterinary Public Health at (213) 481-2375 or (213) 482-2588 and then call our office (213) 989-7060 to request transportation of the specimen to the Public Health Laboratory for testing.
8. Our office will need your clinic/shelter name, address, phone and fax number to ensure proper specimen collection and reporting of results.
9. Contact our office if you have any questions about the required procedures for submitting rabies specimens.



LOS ANGELES COUNTY VETERINARY PUBLIC HEALTH and  
RABIES CONTROL PROGRAM



**ANIMAL DISEASE REPORTING  
SUMMARY FOR THE TIME-STRESSED, 2010**

- **Important Points about Animal Disease Reporting**
  - There is an increasing effort to track significant zoonoses, emerging infectious diseases, and outbreaks in companion animals and wildlife in addition to agricultural animals.
  - Data from animal surveillance assists both veterinarians and physicians.
  - In some cases and outbreaks, VPH-RCP may be able to assist with diagnostics.
  - Data from surveillance improves Public Health's ability to detect bioterrorist attacks.
    - Anthrax, plague, tularemia, and botulism are on the list of potential bioterrorist agents. These organisms, although only rarely causing natural infections, are considered endemic in LA County. Local veterinarians and physicians should keep these infections on their differential diagnoses lists.
- **Legal Requirements**
  - Los Angeles County law states that all infectious diseases in animals are reportable to Public Health.
    - LA County Veterinary Public Health has established guidelines and a list of diseases of elevated priority for reporting.
- **What to report.**
  - Occurrence of any unusual disease.
  - Outbreak or cluster of any animal diseases/deaths (definition of "cluster" is 3 or more cases).
  - Animal illness concurrent with human illness.
  - Disease not endemic to area.
  - Illness in an animal recently imported from another country
  - Any disease on the Disease Priority List.
- **How to report.**
  - Fill out appropriate disease reporting form. If the disease has a specific form, ideally use that form. Fax completed form to (213) 481-2375
  - You can also report online at: [publichealth.lacounty.gov/vet/disintro.htm](http://publichealth.lacounty.gov/vet/disintro.htm)

Please call our office at (213) 989-7060 if you have questions about our data or our surveillance. Ask to speak to one of the veterinarians.

## REPORTING ANIMAL DISEASES/DEATHS

### Always report as soon as possible:

-  Occurrence of any unusual disease
-  Outbreak or cluster (3 or more cases) of animal disease/deaths of any cause
-  Animal illness concurrent with human illness
-  Disease not endemic to area
-  Illness in animal recently imported from another country

### Urgency Reporting Requirements

-  = Report **immediately** by telephone
-  = Report within **1 working day** of identification
-  = Report within **7 calendar days** from time of identification

## DISEASE PRIORITY LIST 2010

<ul style="list-style-type: none"> <li> All Diseases on the Reportable Disease List of the California Department of Food and Agriculture (CDFA)</li> <li> Anthrax</li> <li> Babesiosis</li> <li> Botulism</li> <li> Bovine Spongiform Encephalopathy</li> <li> Brucellosis</li> <li> Calicivirus, feline virulent</li> <li> Campylobacteriosis</li> <li> Chagas Disease</li> <li> Chronic Wasting Disease</li> <li> Coccidioidomycosis</li> <li> Contamination of product-suspected</li> <li> Distemper</li> <li> Domoic Acid Poisoning</li> <li> Ehrlichiosis</li> <li> Exotic Newcastle Disease</li> <li> Foot-and-Mouth Disease</li> <li> Giardia</li> <li> Glanders</li> <li> Heartworm</li> <li> Hemorrhagic gastroenteritis (HGE) of dogs</li> </ul>	<ul style="list-style-type: none"> <li> Hemorrhagic Fevers, viral (Crimean-Congo, Ebola, Lassa, Marburg)</li> <li> Influenza (any type)</li> <li> Leptospirosis</li> <li> Lyme Disease</li> <li> Methicillin-resistant <i>Staphylococcus</i> spp</li> <li> Mycobacterium spp</li> <li> Parvovirus</li> <li> Panleukopenia</li> <li> Plague</li> <li> Psittacosis</li> <li> Pseudorabies</li> <li> Q Fever</li> <li> Rabies</li> <li> Rocky Mountain Spotted Fever</li> <li> Salmonellosis</li> <li> Salmon Poisoning Disease</li> <li> Screwworm myiasis</li> <li> Tetanus</li> <li> Tularemia</li> <li> Viral Encephalitis (EEE, WEE, VEE, Japanese Enceph)</li> <li> West Nile Virus</li> </ul>	<p>In Los Angeles County, report all diseases in this list <b>and the list of the California Department of Food and Agriculture (CDFA)</b> to the Los Angeles County Veterinary Public Health office.</p> <p>We will forward reports to the CDFA as needed.</p>
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\*\* Ringworm and roundworm are not reportable

### Report to VPH-RCP by:

**Phone:** (213) 989-7060 or toll free (877) 747-2243

**Fax:** (213) 481-2375. **E-mail:** [vet@ph.lacounty.gov](mailto:vet@ph.lacounty.gov) **Web:** [publichealth.lacounty.gov/vet](http://publichealth.lacounty.gov/vet)



**LIST OF REPORTABLE CONDITIONS FOR ANIMALS AND ANIMAL PRODUCTS\***

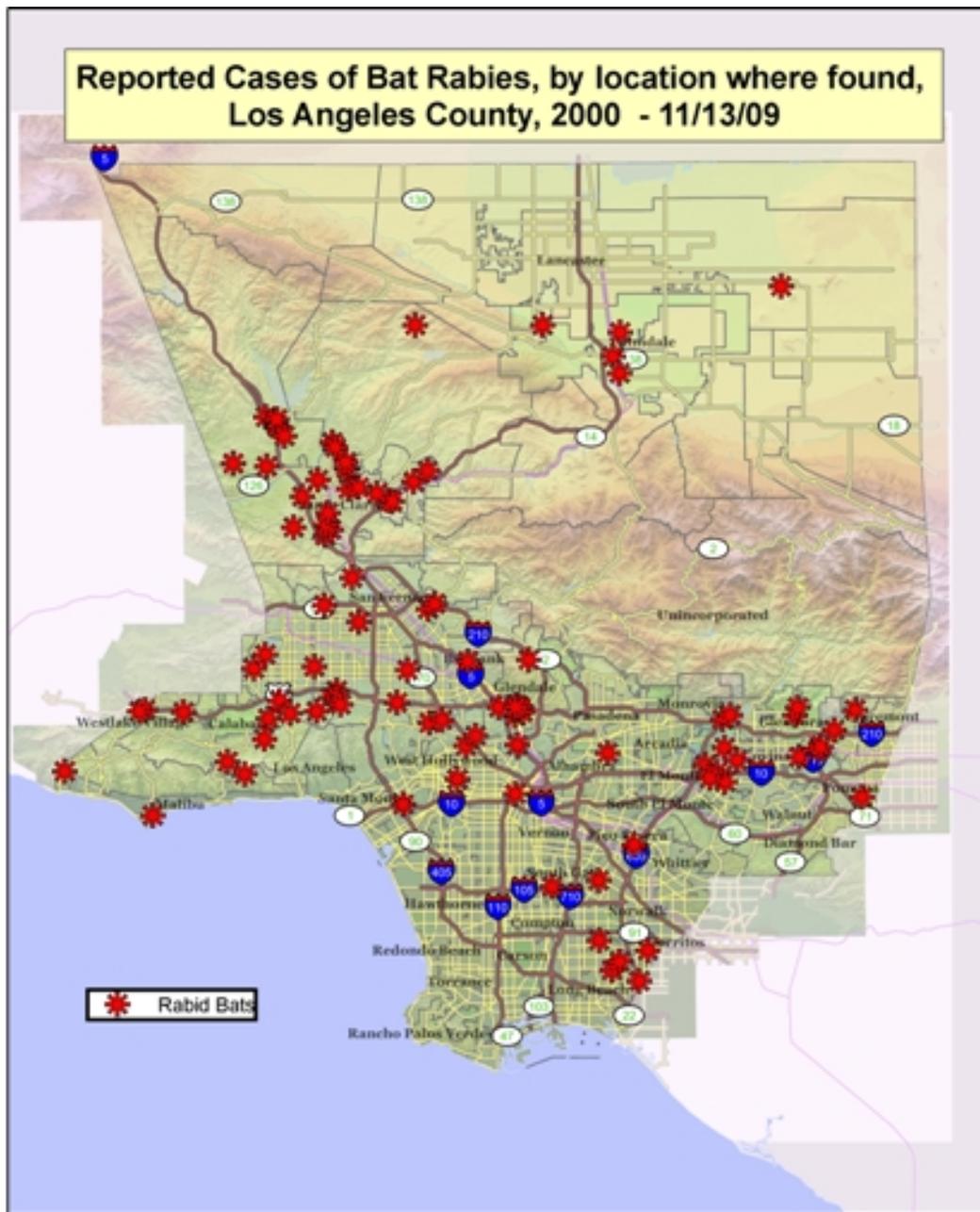
\*Pursuant to Section 9101 of the California Food and Agricultural Code and Title 9 Code of Federal Regulations Section 161.4(f)

**WHO MUST REPORT:** Certain conditions pose or may pose significant threats to public health, animal health, the environment, or the food supply. Any licensed veterinarian, any person operating a diagnostic laboratory, or any person who has been informed, recognizes or should recognize by virtue of education, experience, or occupation, that any animal or animal product is or may be affected by, or has been exposed to, or may be transmitting or carrying any of the following conditions, must report that information.

**WHAT TO REPORT:** Any animal disease not known to exist in the United States, any disease for which a control program exists, or any unexplained increase in the number of diseased animals or deaths must be reported. Any conditions caused by exposure to toxic substances that have or may have the potential to be a public health, animal health, or food safety threat must be reported within 24 hours.

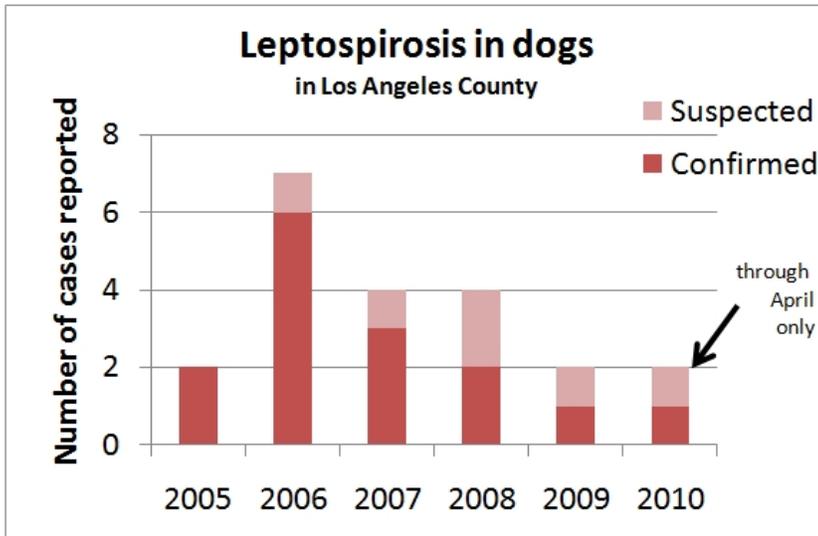
<p><b>EMERGENCY CONDITIONS</b></p> <p>Report to AHB or VS Employee within 24 Hours of Discovery</p>	<p><b>REGULATORY CONDITIONS</b></p> <p>Report to AHB or VS Employee within Two Days of Discovery</p>	<p><b>MONITORED CONDITIONS</b></p> <p>Report by Monthly Summaries from Diagnostic Facilities</p>
<p><b>MULTIPLE SPECIES</b></p> <ul style="list-style-type: none"> <li>Anthrax (<i>Bacillus anthracis</i>)</li> <li>Crimean Congo haemorrhagic fever</li> <li>Foot-and-mouth disease</li> <li>Heartwater [<i>Ehrlichia ruminantium</i> (formerly <i>Cowdria ruminantium</i>)]</li> <li>Livestock exposed to toxic substances that may threaten public health</li> <li>Screwworm myiasis (<i>Cochliomyia hominivorax</i> or <i>Chrysomya bezziana</i>)</li> <li><b>Unexplained increase in dead or diseased animals</b></li> </ul> <p><b>BOVINE</b></p> <ul style="list-style-type: none"> <li>African trypanosomiasis (Tsetse fly diseases)</li> <li>Bovine babesiosis (Cattle Tick Fever)</li> <li>Bovine spongiform encephalopathy</li> <li>Contagious bovine pleuropneumonia (<i>Mycoplasma mycoides mycoides</i> small colony)</li> <li>Foot-and-mouth disease</li> <li>Heartwater [<i>Ehrlichia ruminantium</i> (formerly <i>Cowdria ruminantium</i>)]</li> <li>Hemorrhagic septicemia (<i>Pasteurella multocida</i> serotypes B/Asian or E/African)</li> <li>Lumpy skin disease</li> <li>Malignant catarrhal fever (African type)</li> <li>Rift Valley fever</li> <li>Rinderpest</li> <li>Theileriosis (<i>Theileria parva parva</i> or <i>T. annulata</i>)</li> <li>Vesicular stomatitis</li> </ul> <p><b>CAPRINE/OVINE</b></p> <ul style="list-style-type: none"> <li>Contagious agalactia (<i>Mycoplasma agalactiae</i>)</li> <li>Contagious caprine pleuropneumonia (<i>Mycoplasma capricolum capripneumoniae</i>)</li> <li>Foot-and-mouth disease</li> <li>Heartwater [<i>Ehrlichia ruminantium</i> (formerly <i>Cowdria ruminantium</i>)]</li> <li>Nairobi sheep disease</li> <li>Peste des petits ruminants (Goat plague)</li> <li>Rift Valley fever</li> <li><i>Salmonella abortus ovis</i></li> <li>Sheep and goat pox</li> </ul> <p><b>PORCINE</b></p> <ul style="list-style-type: none"> <li>African swine fever</li> <li>Classical swine fever</li> <li>Foot-and-mouth disease</li> <li>Japanese encephalitis</li> <li>Nipah virus</li> <li>Swine vesicular disease</li> <li>Vesicular exanthema of swine virus (VESV)</li> <li>Vesicular stomatitis</li> </ul> <p><b>AVIAN SPECIES</b></p> <ul style="list-style-type: none"> <li>Avian influenza (H5 or H7)</li> <li>Exotic Newcastle disease</li> <li>Turkey rhinotracheitis (Avian metapneumovirus)</li> </ul> <p><b>EQUINE</b></p> <ul style="list-style-type: none"> <li>African horse sickness</li> <li>Dourine (<i>Trypanosoma equiperdum</i>)</li> <li>Equine infectious anemia</li> <li>Equine piroplasmiasis [<i>Babesia caballi</i> or <i>Theileria equi</i> (formerly <i>Babesia equi</i>)]</li> <li>Glanders (Farcy) [<i>Burkholderia mallei</i> (formerly <i>Pseudomonas mallei</i>)]</li> <li>Hendra virus (Equine morbillivirus)</li> <li>Japanese encephalitis</li> <li>Surra (<i>Trypanosoma evansi</i>)</li> <li>Venezuelan equine encephalomyelitis</li> <li>Vesicular stomatitis</li> </ul> <p><b>OTHER SPECIES</b></p> <ul style="list-style-type: none"> <li>Chronic wasting disease in cervids</li> <li>Viral hemorrhagic disease of rabbits (calicivirus)</li> </ul>	<p><b>MULTIPLE SPECIES</b></p> <ul style="list-style-type: none"> <li>Rabies of livestock</li> <li>Tularemia</li> </ul> <p><b>BOVINE</b></p> <ul style="list-style-type: none"> <li>Bovine brucellosis (<i>Brucella abortus</i>)</li> <li>Bovine tuberculosis (<i>Mycobacterium bovis</i>)</li> <li>Cattle scabies (multiple types)</li> <li>Trichomonosis (<i>Trichomonas fetus</i>)</li> </ul> <p><b>CAPRINE/OVINE</b></p> <ul style="list-style-type: none"> <li>Caprine and ovine brucellosis (excluding <i>Brucella ovis</i>)</li> <li>Scrapie</li> <li>Sheep scabies (Body mange) (<i>Psoroptes ovis</i>)</li> </ul> <p><b>PORCINE</b></p> <ul style="list-style-type: none"> <li>Porcine brucellosis (<i>Brucella suis</i>)</li> <li>Pseudorabies (Aujeszky's disease)</li> </ul> <p><b>AVIAN SPECIES</b></p> <ul style="list-style-type: none"> <li>Ornithosis (Psittacosis or avian chlamydiosis) (<i>Chlamydia psittaci</i>)</li> <li>Pullorum disease (Fowl typhoid) (<i>Salmonella gallinarum</i> and <i>S. pullorum</i>)</li> </ul> <p><b>EQUINE</b></p> <ul style="list-style-type: none"> <li>Contagious equine metritis (<i>Taylorella equigenitalis</i>)</li> <li>Eastern equine encephalomyelitis</li> <li>Western equine encephalomyelitis</li> </ul> <p><b>OTHER SPECIES</b></p> <ul style="list-style-type: none"> <li>Brucellosis in cervids</li> <li>Tuberculosis in cervids</li> </ul> <div data-bbox="685 1849 1330 2703" style="background-color: #e0ffe0; padding: 10px; text-align: center;"> <p><b>WHERE TO REPORT:</b></p> <p><b>CA Department of Food and Agriculture Animal Health Branch (AHB) District Offices:</b></p> <p><b>Redding 530-225-2140</b> <b>Modesto 209-491-9350</b> <b>Tulare 559-685-3500</b> <b>Ontario 909-947-4462</b></p> <p><b>AHB Headquarters 1220 N Street, Room A-107 Sacramento, CA 95814 Telephone 916-654-1447</b></p> <p><b>OR</b></p> <p><b>US Department of Agriculture Animal and Plant Health Inspection Services Veterinary Services (VS) 10365 Old Placerville Road, Suite 210 Sacramento, CA 95827-2518</b></p> <p><b>Toll free at 1-877-741-3690</b></p> </div> <div data-bbox="685 2719 1330 2999" style="background-color: #d3d3d3; padding: 10px; text-align: center;"> <p><b>In LOS ANGELES COUNTY, these conditions are also reportable to Veterinary Public Health at: (213) 989-7060</b></p> </div>	<p><b>MULTIPLE SPECIES</b></p> <ul style="list-style-type: none"> <li>Avian tuberculosis of livestock (<i>Mycobacterium avium</i>)</li> <li>Echinococcosis/Hydatidosis (<i>Echinococcus</i> species)</li> <li>Johne's disease (Paratuberculosis) (<i>Mycobacterium avium paratuberculosis</i>)</li> <li>Leishmaniosis</li> <li>Leptospirosis</li> <li>Novel H1N1<sup>†</sup></li> </ul> <p><sup>†</sup>To be reported within 2 days (due to human health concerns)</p> <p><b>BOVINE</b></p> <ul style="list-style-type: none"> <li>Anaplasmosis (<i>Anaplasma marginale</i> or <i>A. centrale</i>)</li> <li>Bluetongue</li> <li>Bovine genital campylobacteriosis (<i>Campylobacter fetus venerealis</i>)</li> <li>Bovine viral diarrhea</li> <li>Enzootic bovine leukosis (Bovine leukemia virus)</li> <li>Infectious bovine rhinotracheitis (Bovine herpesvirus-1)</li> <li>Johne's disease (Paratuberculosis) (<i>Mycobacterium avium paratuberculosis</i>)</li> <li>Malignant catarrhal fever (North American)</li> <li>Q Fever (<i>Coxiella burnetii</i>)</li> </ul> <p><b>CAPRINE/OVINE</b></p> <ul style="list-style-type: none"> <li>Bluetongue</li> <li><i>Brucella ovis</i> (Ovine epididymitis)</li> <li>Caprine arthritis/encephalitis</li> <li>Enzootic abortion of ewes (Ovine chlamydiosis) (<i>Chlamydia psittaci</i>)</li> <li>Johne's disease (Paratuberculosis) (<i>Mycobacterium avium paratuberculosis</i>)</li> <li>Maedi-Visna (Ovine progressive pneumonia)</li> <li>Ovine pulmonary adenomatosis</li> <li>Q Fever (<i>Coxiella burnetii</i>)</li> </ul> <p><b>PORCINE</b></p> <ul style="list-style-type: none"> <li>Porcine cysticercosis (<i>Taenia solium</i> in humans)</li> <li>Porcine reproductive and respiratory syndrome</li> <li>Transmissible gastroenteritis (coronavirus)</li> <li>Trichinellosis (<i>Trichinella spiralis</i>)</li> </ul> <p><b>AVIAN SPECIES</b></p> <ul style="list-style-type: none"> <li>Avian infectious bronchitis</li> <li>Avian infectious laryngotracheitis</li> <li>Avian mycoplasmosis (<i>Mycoplasma synoviae</i>)</li> <li>Duck viral hepatitis</li> <li>Fowl cholera (<i>Pasteurella multocida</i>)</li> <li>Infectious bursal disease (Gumboro disease)</li> <li>Marek's disease</li> <li>Mycoplasmosis (<i>Mycoplasma gallisepticum</i>)</li> </ul> <p><b>EQUINE</b></p> <ul style="list-style-type: none"> <li>Equine influenza</li> <li>Equine rhinopneumonitis (Equine herpesvirus 1 or 4)</li> <li>Equine viral arteritis</li> <li>West Nile Virus</li> </ul> <p><b>OTHER SPECIES</b></p> <ul style="list-style-type: none"> <li>Camelpox in camels</li> <li>Hemorrhagic diseases of deer (bluetongue, adenovirus, and epizootic hemorrhagic disease)</li> <li>Myxomatosis in commercial rabbits</li> <li>VESV-related caliciviruses</li> </ul> <p><b>FISH, AMPHIBIAN, CRUSTACEAN, BEE, AND MOLLUSK</b></p> <ul style="list-style-type: none"> <li>The list is compatible with the OIE list for these species and a copy of the reportable conditions for fish, amphibian, crustacean, bee, and mollusk species may be obtained by contacting the Animal Health Branch Headquarters Office in Sacramento.</li> </ul>

# Rabies 2000-2009



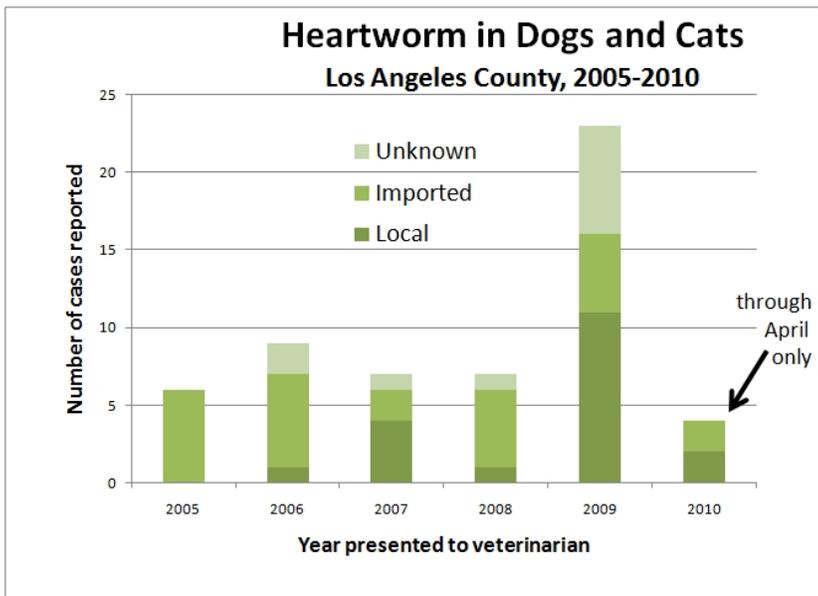
- Rabid bats have been detected throughout most of the county over the last 10 years.
- **2010 Rabies update through April.** Two rabid bats have been found so far. One was found hanging on a wall at a golf course (Van Nuys 3/26/10). The second was clinging to side of house for 4 days before falling to the ground (Santa Clarita 4/2/10).

# Lepto Update



- Top serovars: autumnalis, pomona, bratislava, caniola, ictero.
- Many cases were locally-acquired.

# Heartworm Update



- In 2009, a cluster of six cases was detected in the western end of the San Gabriel Valley.
- March and April 2010, the San Gabriel Valley Mosquito and Vector Control district noted a large increase in Treehole Mosquitoes (*Aedes sierrensis*) which are an ideal vector for heartworms.

**Los Angeles County Veterinary Public Health  
and Rabies Control**

877-747-2243 [publichealth.lacounty.gov/vet](http://publichealth.lacounty.gov/vet)

**Selected Animal Disease Reports**

<b>Disease</b>	<b>Species</b>	<b>All of 2009</b>	<b>2010 to 5/13</b>
Canine influenza*		5	0
Coccidioidomycosis*	dogs and cats	2	0
Distemper*	dogs	42	2
	raccoons	94	92
	foxes	0	3
	skunks	6	7
	coyotes	5	0
Ehrlichiosis* - dogs		0	1
Heartworm Disease - dogs		25	4
Leptospirosis* - dogs		2	2
Lyme Disease* - dogs		0	0
MRSA, MRSP, MRSS	dogs, cats, bird	16	4
Panleukopenia* - cats		16	2
Parvovirus* - dogs		210	22
Rabid bats		12	2
Spotted Fever Rickettsiosis* - dogs		2	0
Salmon Poisoning Disease - dogs		1	2
West Nile Virus - dead birds		82	3
Cases listed by year of presentation to veterinarian			
* indicates that both confirmed and probable cases are included. Otherwise totals include only confirmed cases.			
Reported cases are primarily locally-acquired, although totals include imported cases as well. These and other animal diseases are reportable in LA County. For more information, see website or call. Totals as of 5/13/10.			

This table is updated and published monthly in *Pulse*, the journal of the Southern California Veterinary Medical Association.

- No confirmed canine influenza (Influenza A H3N8) cases have been reported in LA County since 2007
- Influenza A (H1N1) was confirmed in an LA County cat. The cat had very mild illness. Diagnosis was confirmed by a PCR positive result on combined pharyngeal and conjunctival swabs. The owner had been ill earlier and had had a confirmed case of influenza A (H1N1).
- Systemic histoplasmosis was reported in 4 cats. Two cats were in one home and were “indoor only.”
- In winter 2008-2009 Hemorrhagic gastroenteritis (HGE) surged again in West Valley area. The cause of this clustering is unknown.
- Systemic, fatal *Mesocestoides* was diagnosed in a West LA dog.
- A large, countywide outbreak of distemper in wildlife began in 2009 and is continuing into 2010. The outbreak involves primarily raccoons, with cases involving skunks and foxes.
- Distemper and parvovirus are being tracked more closely in Los Angeles County dogs.
- Foreign Puppy Mills continue to be a problem. **Remember to report any ill animal seen in your clinic when you suspect the animal was recently imported.** Each year, millions of animals and thousands of dogs are imported into the United States, and many are not inspected on entry. Often puppies are shipped before they are 8 weeks old, and many become ill after they are sold to unsuspecting buyers. This constant flow of puppies poses a public health threat, as these animals may bring in diseases (such as canine rabies) that are not found locally.
- In 2008 and 2009, the Veterinary Public Health program participated in multi-agency surveys of animals imported through the Los Angeles International Airport. During both surveys, dogs were examined and found to be much younger than was noted on their health certificate, some dogs appeared to be sick, and some had external parasites. By listing a dog's age as over 4 months old, even when they are only 6 - 8 weeks old, the dog importer is able to avoid the federally-required rabies confinement and sell the puppies immediately. The most common breeds seen were Bulldogs, Yorkies, German Shepherds and Labradors, but over 50 breeds were represented in the 5 weeks of inspections. So, checking out a newly purchased purebred or small mixed breed puppy, remember it may have just arrived in our country a few days ago. *Don't rule out diseases just because they are not normally seen in our county.*

**BASED ON ACTUAL EVENTS!**

# RABIES TALES

from Los Angeles County

ONE MORNING IN THE SAN GABRIEL VALLEY.

THANKS FOR HELPING ME WITH THE GARDENING, ANNIE!

SURE, MOM.

HMMM... SOMETHING'S MOVING IN HERE.

Dr. Emily Becker, DVM

WHAT IS THIS?

AAAAGHH!!! IT'S A BAT!!!

IT'S NOT MOVING. IT MUST BE SICK. DID YOU TOUCH IT?

YES, I DID! IT'S KINDA CUTE! MAYBE I SHOULD TRY TO FEED IT.

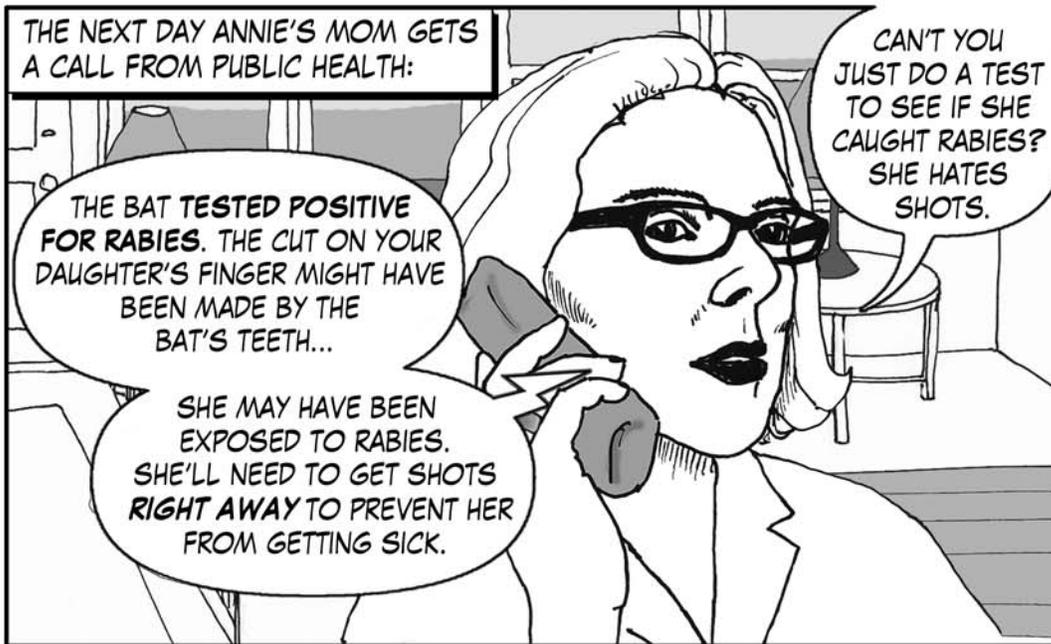
NO, ANNIE. WE CAN'T KEEP IT. BATS CAN CARRY RABIES. RABIES CAN KILL YOU! YOU GET IT WHEN A RABID ANIMAL BITES YOU.

RABIES?! I DIDN'T KNOW BATS COULD HAVE RABIES! I DID GET A LITTLE CUT ON MY FINGER. MAYBE IT BIT ME.

WE DON'T WANT ANY PEOPLE OR ANIMALS TO TOUCH IT! LET'S COVER IT WITH A BUCKET AND CALL ANIMAL CONTROL.

GENTLY! DON'T HURT IT!

WE'LL HAVE THEM COME AND TAKE THE BAT AND CHECK IT FOR RABIES.



THE NEXT DAY ANNIE'S MOM GETS A CALL FROM PUBLIC HEALTH:

THE BAT TESTED POSITIVE FOR RABIES. THE CUT ON YOUR DAUGHTER'S FINGER MIGHT HAVE BEEN MADE BY THE BAT'S TEETH...

SHE MAY HAVE BEEN EXPOSED TO RABIES. SHE'LL NEED TO GET SHOTS RIGHT AWAY TO PREVENT HER FROM GETTING SICK.

CAN'T YOU JUST DO A TEST TO SEE IF SHE CAUGHT RABIES? SHE HATES SHOTS.



UNFORTUNATELY NO. TESTS FOR RABIES ONLY WORK AFTER THE SYMPTOMS BEGIN... AND THEN IT IS TOO LATE!



AND SO ANNIE'S MOM TAKES HER TO THE DOCTOR IMMEDIATELY...

I HATE SHOTS! I HEARD THAT YOU GET RABIES SHOTS IN THE BELLY!!! AND THEY HURT A LOT!



NO, ANNIE. THE SHOTS DO NOT GO IN THE BELLY. YOU'LL GET ONE SHOT TODAY IN THE UPPER ARM.

YOU GET ANOTHER SHOT IN YOUR HAND WHERE THE BAT MIGHT HAVE BITTEN YOU.



AFTER THIS YOU'LL COME BACK FOR THREE MORE SHOTS IN YOUR ARM OVER THE NEXT TWO WEEKS. YOU DON'T TAKE ANY CHANCES WITH RABIES!



FOUR WEEKS LATER...

WELL, I MADE IT THROUGH, NO RABIES FOR ME! I GOT YOU SOMETHING...

WHAT IS IT, ANNIE?



GARDENING GLOVES! I GOT A PAIR FOR ME, TOO. NO MORE PICKING UP SICK BATS FOR US!

- Never touch a bat!
- Most bats do not have rabies.
- Bats eat insects. They are good for the environment, and bats are protected by state and federal law.
- Bats that are active in daylight or found on the ground are more likely to have rabies.
- If a person or pet has direct contact with a bat, cover the bat with a bucket and call your Animal Control Agency.

# Rabies Law Quiz

1. What is the legal age for rabies vaccination of dogs in California?
  - a. 2 months
  - b. 3 months
  - c. 4 months
2. California state law allows veterinarians to write exemptions for rabies vaccination. TRUE or FALSE
3. California State Law does not recognize rabies-positive titers as a substitute for vaccination. TRUE or FALSE
4. A cat is seen playing with a bat in a front yard. The bat flew away. This cat is considered exposed to rabies. TRUE or FALSE.
5. An unvaccinated 5-month old puppy carries a bat in its mouth into the house. The bat tests positive for rabies. The owner elects to quarantine the puppy (rather than euthanize) to monitor for the development of rabies. The puppy is immediately vaccinated. The length of the quarantine would be:
  - a. 10 days
  - b. 30 days
  - c. 180 days
6. A stray, healthy-looking Chihuahua rescued from the streets of Tijuana bites the new owner the same day as it is being seen by you for a wellness exam. There are no medical records on the dog. You report the bite to Rabies Control. Then you explain to the client:
  - a. The dog will be under quarantine at home for 10 days, and you will vaccinate it after that if the dog remains healthy.
  - b. You will vaccinate it right away and then it will be under home quarantine for 30 days.
  - c. The dog must immediately be euthanized for rabies testing because it came from a country that has dog rabies.
7. Puppies imported from most other countries must be quarantined at their home until one month after their rabies vaccination. TRUE or FALSE.
8. A 5-year-old Lab (who is up-to-date on rabies vaccination) had a fight with and killed a raccoon. The dog is brought in to see you the next day. You (check all that apply):
  - Ask the client where the raccoon body is right now, making sure that the raccoon body is saved for rabies testing.
  - Revaccinate the dog against rabies
  - Report the encounter to Rabies Control
  - Tell the owner that if the raccoon cannot be tested for rabies, or if it tests positive, her dog must be quarantined for 30 days.





COUNTY OF LOS ANGELES

# Public Health

Veterinary Public Health & Rabies Control

[publichealth.lacounty.gov/vet](http://publichealth.lacounty.gov/vet)



## Quiz answers:

- |          |                   |
|----------|-------------------|
| 1. c     | 5. c              |
| 2. False | 6. a              |
| 3. True  | 7. True           |
| 4. True  | 8. Check all four |

# Reporting Forms



# VETERINARY PUBLIC HEALTH-RABIES CONTROL PROGRAM

TEL: (213)-989-7060 or (877) 747-2243 FAX: (213) 481-2375

[publichealth.lacounty.gov/vet](http://publichealth.lacounty.gov/vet)



COUNTY OF LOS ANGELES  
**Public Health**

## BITE REPORTING FORM - VETERINARY CLINICS

PERSON BITTEN			
Victim name (last and first)		Date of Birth	Address (number, street, city and zip)
Victim phone number		Reported by:	Reporter phone number
Date bitten	Time bitten	Address where bitten (if no address make sure to put city and zip code)	Body location bitten
How bite occurred (explain)			
Date Treated	Hospitalized <input type="checkbox"/> Yes <input type="checkbox"/> No	Treated by	Phone number
Type of treatment			
ANIMAL			
Owner Name (last and first)		Address (number, street city and zip)	
Phone Number	Type of animal <input type="checkbox"/> Dog Breed _____ <input type="checkbox"/> Cat Breed _____ <input type="checkbox"/> Other _____	Description of animal (sex, color)	
Animal vaccinated for rabies? <input type="checkbox"/> Yes <input type="checkbox"/> No	Date last vaccinated:	Animal sterilized? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Was animal euthanized? <input type="checkbox"/> YES <input type="checkbox"/> NO Date _____	Reason euthanized: <input type="checkbox"/> Injured <input type="checkbox"/> Sick <input type="checkbox"/> other Please explain:	Specimen prepared for rabies testing? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	
CLINIC			
Clinic Information		Contact person	
Name:			
Address (include number, street, city, state and zip)		Phone Number	
Remarks			
Clinic Taking Report:			
Date	Time	Faxed: <input type="checkbox"/> yes <input type="checkbox"/> No	Initials



# VETERINARY PUBLIC HEALTH – RABIES CONTROL PROGRAM

Tel. (213) 987-7060 OR (877) 747-2243 Fax: (213) 481-2375

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## DOMESTIC ANIMAL VS. WILD MAMMAL INCIDENT REPORT FORM

DOMESTIC ANIMAL – PET INFORMATION				
Owner last name		Owner first name		Owner address. Number and street City and zip code
Owner area code & phone		Species <input type="checkbox"/> Dog <input type="checkbox"/> Cat		Breed Sex Age
Date bitten	Time bitten	Reported by		Reporter area code & phone number
Address where bitten. Number and street		City and zip code		Type of injury to domestic animal
Animal vaccinated prior to contact with wildlife? <input type="checkbox"/> Yes <input type="checkbox"/> No		Date vaccinated prior to contact with wildlife:		Animal vaccinated after coming into contact with wildlife? <input type="checkbox"/> Yes <input type="checkbox"/> No
Date vaccinated after coming into contact with wildlife:		Domestic animal impounded? <input type="checkbox"/> Yes <input type="checkbox"/> No		Animal Shelter Impound # Was animal euthanized? <input type="checkbox"/> Yes <input type="checkbox"/> No
Was animal taken to vet? <input type="checkbox"/> Yes <input type="checkbox"/> No		Name of Veterinarian Hospital		Address, city and zip
Current location of animal: <input type="checkbox"/> Home address		<input type="checkbox"/> Veterinary clinic listed above		<input type="checkbox"/> Other _____
WILD LIFE INFORMATION (animals other than dog or cat)				
Type of wild animal <input type="checkbox"/> Coyote <input type="checkbox"/> Skunk <input type="checkbox"/> Raccoon <input type="checkbox"/> Bat <input type="checkbox"/> Other (explain)			Wild animal disposition: <input type="checkbox"/> Left area/not located <input type="checkbox"/> Appeared sick <input type="checkbox"/> Captured/destroyed/died	
Wild animal specimen prepared for rabies testing? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable		Location of wild animal specimen (clinic or shelter)		Date euthanized Time
Veterinary Clinic or Animal Control Agency taking report:			Impound# of wild animal (if applicable)	
Comments:				
Report by:		Date taken:		Initials Faxed by: Date:





**VETERINARY PUBLIC HEALTH-RABIES CONTROL PROGRAM**

TEL: (213)-989-7060 or (877) 747-2243 FAX: (213) 481-2375

publichealth.lacounty.gov/vet



**BAT SUBMISSION FORM**

**INSTRUCTION:**

- All bats submitted to animal shelters must be reported to the Health Department immediately.
- Please FAX all information to (213) 481-2375
- Fill out as much information as possible.
- DO NOT DECAPITATE specimen.
- DO NOT FREEZE specimen.

1. Bat Impound # \_\_\_\_\_ Date \_\_\_\_\_

Shelter \_\_\_\_\_ ACO \_\_\_\_\_

Phone Number \_\_\_\_\_

2. Name of person who captured bat \_\_\_\_\_

3. Name of owner/business where bat was found \_\_\_\_\_

4. Address (where found) \_\_\_\_\_

Phone Number of premise \_\_\_\_\_

5. Capture location of bat  Home  Garage  Business  Outdoors  
 Other \_\_\_\_\_

Time of capture or pickup \_\_\_\_\_

6. Method used to capture bat \_\_\_\_\_

1. State of bat when captured (check one)  Live or  Dead

2. Did any people or animals have any physical contact with bat?  Yes  No

If so, explain: \_\_\_\_\_

Names:	Addresses:	Phone:
_____	_____	_____
_____	_____	_____
_____	_____	_____



**5. Clinical Findings**

Highest body temperature measured \_\_\_\_\_

Physical Examination

	<b>Normal</b>	<b>Comments</b>
General:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Skin:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Head Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Respiratory:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Cardiovascular:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Abdomen/digestive:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Urogenital:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Musculoskeletal:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Nervous:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Lymph nodes:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____
Other:	<input type="checkbox"/> Yes <input type="checkbox"/> No	_____

**6. Treatment.** Please describe treatment given, particularly antibacterial, antiviral, antifungal, antiparasitic.

Treatment Date	Describe Treatment
1. _____	_____
2. _____	_____
3. _____	_____

**7. Laboratory results** Please fax all laboratory results to us along with this form.

**8. Additional comments.** Please use an additional sheet if needed.



## Canine Brucellosis Reporting Form

Date form completed \_\_\_\_\_

### 1. Dog

Name \_\_\_\_\_ Breed \_\_\_\_\_ Sex/Neut \_\_\_\_\_ Age \_\_\_\_\_

### 2. Dog Owner

Name(s) \_\_\_\_\_

Street : \_\_\_\_\_

City, ZIP \_\_\_\_\_

Telephone: \_\_\_\_\_

Is it okay for Public Health to call the owner(s) to ask more about the history? YES NO

### 3. Reporting Veterinarian

Name of veterinarian or technician: \_\_\_\_\_

Vet Clinic Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, ZIP: \_\_\_\_\_

Telephone \_\_\_\_\_

Fax \_\_\_\_\_

E-mail: \_\_\_\_\_

### 4. Exposure History

- How long has the owner had the dog? \_\_\_\_\_
- Where did the owner get the dog? Please list name and address of animal shelter/rescue group/breeder/private party. \_\_\_\_\_
- If this dog is spayed/neutered, please note the approximate date of the procedure \_\_\_\_\_
- Are there any other dogs in the household? .....  YES  NO  
If YES, how many other dogs are in the home? \_\_\_\_\_
- Do any other dogs in the household have the same clinical signs? .....  YES  NO
- Has the dog ever mated with another dog (intentional breeding or not)? .....  YES  NO  
(If YES, please fill out another form for the dog with which it mated.)
- Has this dog ever been in contact with cattle, goats, sheep, pigs, deer, or rodents? .....  YES  NO  
If YES, please describe \_\_\_\_\_
- Is there any known illness in humans that handled the dog? .....  YES  NO

### 5. Clinical Findings

Date of onset of first symptoms \_\_\_\_\_ Date of presentation \_\_\_\_\_

Date of death (if applicable) \_\_\_\_\_

Highest body temperature measured \_\_\_\_\_

Check all that apply:

- |  |  |   |   |
|--|--|---|---|
| <input type="checkbox"/> no clinical signs       | <input type="checkbox"/> fever                                       | <input type="checkbox"/> lethargy         | <input type="checkbox"/> exercise intolerance |
| <input type="checkbox"/> urinary tract infection | <input type="checkbox"/> abortion                                    | <input type="checkbox"/> diskospondylitis | <input type="checkbox"/> epididymitis         |
| <input type="checkbox"/> ocular lesions          | <input type="checkbox"/> enlarged lymph nodes. Node locations: _____ |   |   |
| <input type="checkbox"/> other _____             |  |   |   |

### 6. Laboratory results. Please fax all laboratory results to us along with this form.



## Coccidioidomycosis Reporting Form

Date form completed \_\_\_\_\_

**1. Pet**  Dog  Cat  Other  
 Name \_\_\_\_\_ Breed \_\_\_\_\_ Sex/Neut \_\_\_\_\_ Age \_\_\_\_\_

### 2. Pet Owner

Name(s) :

Street :

City, ZIP

Telephone:

Is it okay for Public Health to call the owner(s) to ask more about the history?  YES  NO

### 3. Reporting Veterinarian

Name of veterinarian or technician:

Vet Clinic Name:

Address:

City, ZIP:

Telephone

Fax

E-mail:

### 4. Exposure History

(fill in as known)

Dog lives primarily outdoors (more than 50% of time).  Yes  No

Dog likes to dig in soil frequently.  Yes  No

Dog/family live within site of earth excavation.  Yes  No

Dog/family live on a dirt road  Yes  No

Dog has been in dust storm within 2 months before illness.  Yes  No

Dog has been to the following locations within 2 months before illness:

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Mojave Desert Area | <input type="checkbox"/> Central Valley/San Joaquin Valley | <input type="checkbox"/> Arizona                  |
| <input type="checkbox"/> New Mexico         | <input type="checkbox"/> Southern Nevada                   | <input type="checkbox"/> Southwestern Texas       |
| <input type="checkbox"/> Southern Utah      | <input type="checkbox"/> Northern Mexico                   | <input type="checkbox"/> Central or South America |

### 5. Clinical Findings

Date of onset of first symptoms \_\_\_\_\_ Date of presentation \_\_\_\_\_

Date of death (if applicable) \_\_\_\_\_

Highest body temperature measured \_\_\_\_\_

Check all that apply:

- |  |  |
|--|--|
| <input type="checkbox"/> Cough   | <input type="checkbox"/> Fever   |
| <input type="checkbox"/> Weight loss                                     | <input type="checkbox"/> Lameness                                      |
| <input type="checkbox"/> Enlarged lymph node(s) (node location(s) _____) |  |
| <input type="checkbox"/> Eye lesions                                     | <input type="checkbox"/> Pneumonia/Pulmonary lesion seen on radiograph |
| <input type="checkbox"/> Bone lesion seen on radiograph                  | <input type="checkbox"/> Other: _____                                  |

**6. Laboratory results.** Please fax all laboratory results to us along with this form.



# VETERINARY PUBLIC HEALTH-RABIES CONTROL PROGRAM

Tel. (213) 989-7060 or (877) 747-2243 Fax (213) 481-2375

publichealth.lacounty.gov/vet



## Heartworm Reporting Form

Date form completed \_\_\_\_\_

### 1. Pet Dog Cat

Name \_\_\_\_\_ Breed \_\_\_\_\_ Sex/Neut \_\_\_\_\_ Age \_\_\_\_\_

### 2. Pet Owner

Name(s) :

Street :

City, ZIP

Telephone:

Is it okay for Public Health to call the owner(s) to ask more about the history? YES NO

### 3. Reporting Veterinarian

Name of veterinarian or technician:

Vet Clinic Name:

Address:

City, ZIP:

Telephone

Fax

E-mail:

### 4. Exposure History

Exposure/travel outside of LA County  Yes  No

If yes, please note location and date: \_\_\_\_\_

Other exposure \_\_\_\_\_

### 5. Clinical Findings

Date of onset of first symptoms \_\_\_\_\_ Date of presentation \_\_\_\_\_

Date of death (if applicable) \_\_\_\_\_

Clinical Signs (check all that apply)

None  Cough  Fatigue  Heart failure

Other \_\_\_\_\_

Thoracic radiographs taken?  Yes  No

If yes, please note date and comment on findings \_\_\_\_\_

### 6. Heartworm Tests and Treatment

Heartworm blood test date	Test type (Ag, Ab, microfilaria)	Test Result
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

Treatment Date	Describe Treatment
1. _____	_____
2. _____	_____
3. _____	_____

Fax to: (213) 481-2375

Rev 4/2010 EB



2010



## Canine Hemorrhagic Gastroenteritis (HGE) Reporting Form

**Overview:** In the winters of 2004, 2005, 2006, and 2008 seasonal outbreaks of mild to moderately severe bloody diarrhea in dogs in LA County were reported to this office. As of yet, no clear cause of the seasonality of this condition has been uncovered. Please continue to report cases.

Date form completed \_\_\_\_\_

### 1. Dog Information

Name \_\_\_\_\_ Breed \_\_\_\_\_ Sex \_\_\_\_\_  
Age \_\_\_\_\_ Color \_\_\_\_\_

### 2. Dog Owner

Name(s)

Address

City, ZIP

Telephone:

Is it okay for Public Health to call the owner(s) to ask more about the history?  YES  NO

### 3. Reporting Veterinarian

Name of veterinarian or technician:

Vet Clinic Name:

Address:

City, ZIP:

Telephone

Fax

E-mail:

### 4. Clinical Course

a. Date of onset of first symptoms \_\_\_\_\_ b. Date of presentation \_\_\_\_\_

c. Date of death(s), if applicable \_\_\_\_\_

d. Fever? YES NO If yes, highest temperature detected = \_\_\_\_\_

e. Clinical Signs (check all that apply):

Anorexia

Diarrhea-watery

Diarrhea - mucoid

Lethargy

Diarrhea - soft stool

Other clinical signs (list):

Vomiting

Diarrhea - bloody

Diarrhea - tarry/black stool

f. Already recovered as of date form filled out?  YES  NO  UNKNOWN

g. Rate of recovery if known (circle one):

Fast (1-2 days)

Slow (3-5 days)

Very Slow (6+ days)

Waxing and Waning - no clear recovery

No recovery - chronic illness or euthanized/died

## 5. Exposure/Possible Causes

- a. Did dog have any exposure to raw fish (especially Salmon or trout)?  YES  NO
- b. Did the ill dog tend to eat dropped fruit or berries from trees in the environment?  YES  NO
- c. Current brands of dry and canned dog food being fed: \_\_\_\_\_
- d. Current type, brands of treats (dry biscuits, jerky treats, rawhide, etc) \_\_\_\_\_
- e. Dietary indiscretion by dog in week before onset (i.e trash, swallowed a toy, etc)?  YES  NO
- f. Dog's regular diet changed in the week before onset?  YES  NO
- g. Any humans in the house have (or recently had) similar symptoms?  YES  NO
- h. Any other dogs, cats, or other pets in the home have similar symptoms?  YES  NO
- i. Any traveling with dog in the week before illness onset?  YES  NO
- j. Does dog leave its property regularly (walks, escapes)?  YES  NO
- k. Does dog have regular access to wildlife or feces/urine from wildlife?  YES  NO
- l. Does owner/veterinarian have any theories about the cause of the dog's illness?  YES  NO

m. EXPLAIN. If there was a YES answer to any of the above questions, please use the space below to explain:

## 6. Treatment.

- a. IV fluids administered?  YES  NO
- b. Subcutaneous fluids administered?  YES  NO
- c. Medications. Please **LIST** the names of all drugs (antibiotics, antiparasitics, antidiarrheals, etc.) used and route of administration (IV, PO, SQ etc). You do not need to note the dose or frequency of use.

## 7. Laboratory results

- a. In-house Parvo SNAP test result:  Negative  Positive  Not done
- b. In-house fecal testing (type of test, result) \_\_\_\_\_
- c. Please FAX all laboratory results to us along with this form.



**VETERINARY PUBLIC HEALTH-RABIES CONTROL PROGRAM**  
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 publichealth.lacounty.gov/vet



## Imported Animal Illness or Death Reporting Form

Animals that were recently imported from another country may be ill from diseases that are not common in Los Angeles County. Your reports help us to detect and limit the spread of imported diseases. Many imported animals are not inspected on entry.

Date form completed \_\_\_\_\_

<b>1. Animal</b>					
Name _____	Species _____	Breed _____	Sex/Neut _____	Age _____	

<b>2. Animal Owner</b>	
Name(s): _____	
Address: _____	
City, ZIP: _____	
Telephone: _____	
Is it okay for Public Health to call the owner to ask more about the history? <input type="checkbox"/> Yes <input type="checkbox"/> No	

<b>3. Reporting Veterinarian</b>		
Name of veterinarian or technician _____		
Vet Clinic Name: _____		
Address: _____		
City, ZIP _____		
Tel _____	Fax _____	E-mail _____

<b>4. Importation History</b>		
Country of origin, if known: _____		
Date of importation, if known: _____		
Was owner also importer of animal? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If No, animal purchased from		
<input type="checkbox"/> Newspaper classified	<input type="checkbox"/> Online classified ad	
<input type="checkbox"/> Pennysaver ad	<input type="checkbox"/> Retail pet store	
<input type="checkbox"/> Swap meet	<input type="checkbox"/> Other _____	

<b>5. Clinical Findings</b>	
Date of onset of first symptoms _____	Date of presentation _____
Date of death (if applicable) _____	
Highest body temperature measured _____	
Suspected illness or condition being reported (please describe): _____ _____	

<b>6. Laboratory results.</b> Please fax all relevant laboratory results to us along with this form.
--



## Canine Influenza Reporting Form

Date form completed \_\_\_\_\_

**1. Dog** Name \_\_\_\_\_ Breed \_\_\_\_\_ Sex/Neut \_\_\_\_\_ Age \_\_\_\_\_

### 2. Dog Owner

Name(s) :

Street :

City, ZIP

Telephone:

Is it okay for Public Health to call the owner(s) to ask more about the history?  YES  NO

### 3. Reporting Veterinarian

Name of veterinarian or technician:

Vet Clinic Name:

Address:

City, ZIP:

Telephone

Fax

E-mail:

### 4. History

**DHLPP.** Date of last 2 – 3 DHPP or DHLPP vaccines if known \_\_\_\_\_

**Bordetella.** Date of last 2 Bordetella vaccines. \_\_\_\_\_  Intranasal  Injectable

\_\_\_\_\_  Intranasal  Injectable

#### Potential exposure history

Another sick dog in home

Dog show

Kennel visit

Exposure to stray

Pet store

Shelter visit

Dog park

Other \_\_\_\_\_

### 5. Clinical Findings

Date of onset of first symptoms \_\_\_\_\_ Date of presentation \_\_\_\_\_

Date of death (if applicable) \_\_\_\_\_

Highest body temperature measured: \_\_\_\_\_

#### Check all that apply:

Cough

Nasal discharge

Sneezing

Fever

Chest X-rays taken

Patient hospitalized

IV fluids given

Supplemental oxygen given

If nasal discharge present, please note: color, consistency, uni- or bilateral: \_\_\_\_\_

If chest radiographs were taken, please describe what was seen: \_\_\_\_\_

Name of medications used in treatment: \_\_\_\_\_

Amount of time it took dog to recover: \_\_\_\_\_

Date(s) serum drawn \_\_\_\_\_

Other comments \_\_\_\_\_

**6. Laboratory results** - Please fax all laboratory results to us along with this form.



## Leptospirosis Reporting Form

Date form completed \_\_\_\_\_

**1. Dog** Name \_\_\_\_\_ Breed \_\_\_\_\_ Sex/Neut \_\_\_\_\_ Age \_\_\_\_\_

### 2. Dog Owner

Name(s) \_\_\_\_\_

Address \_\_\_\_\_

City, ZIP \_\_\_\_\_

Telephone: \_\_\_\_\_

Is it okay for Public Health to call the owner(s) to ask more about the history?  YES  NO

### 3. Reporting Veterinarian

Name of veterinarian or technician: \_\_\_\_\_

Vet Clinic Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, ZIP: \_\_\_\_\_

Telephone \_\_\_\_\_

Fax \_\_\_\_\_

E-mail: \_\_\_\_\_

### 4. History

#### Vaccination

Date of last leptospirosis vaccine (if known): \_\_\_\_\_

Vaccine type (ex. DHLPP or 4-way Lepto vaccine): \_\_\_\_\_

#### Potential exposure history

Exposure/travel outside of Los Angeles County?  Yes  No

If yes, please note location and date: \_\_\_\_\_

Dog has/had local exposure to (check all that apply):

- Skunks       Opossums       Raccoons       Deer       Rats  
 Mice       Pigs       Cattle       Horses

Other potential exposure: \_\_\_\_\_

### 5. Clinical Findings

Date of onset of first symptoms \_\_\_\_\_ Date of presentation \_\_\_\_\_

Date of death (if applicable) \_\_\_\_\_

Highest body temperature measured \_\_\_\_\_

#### Check all that apply:

- Anorexia       Lethargy       Vomiting       Diarrhea  
 Visible jaundice/icterus       Polyuria       Polydipsia  
 Other (describe): \_\_\_\_\_

Were intravenous fluids given?  Yes  No

### 6. Laboratory results

Please fax all laboratory results to us along with this form.



## Animal Methicillin-Resistant *Staphylococcus* Reporting Form

Please report all Methicillin-resistant *Staphylococcus* species, including *S. aureus* (MRSA), *S. schleiferi* (MRSS), and *S. pseudintermedius* (MRSP).

Date form completed \_\_\_\_\_

<b>1. Animal</b>	<input type="checkbox"/> Dog	<input type="checkbox"/> Cat	<input type="checkbox"/> Horse	<input type="checkbox"/> Bird	<input type="checkbox"/> Other _____
Name _____	Breed _____			Sex/Neut _____	Age _____

<b>2. Animal Owner</b>
Name(s) _____
Address _____
City, ZIP _____
Telephone: _____
Is it okay for Public Health to call the owner(s) to ask more about the history?    YES                      NO

<b>3. Reporting Veterinarian</b>
Name of veterinarian or technician: _____
Vet Clinic Name: _____
Address: _____
City, ZIP: _____
Telephone _____                                      Fax _____                                      E-mail: _____

<b>4. Exposure History</b>
Any associated human illness? <input type="checkbox"/> YES <input type="checkbox"/> NO
Any other animals in family ill from bacteria? <input type="checkbox"/> YES <input type="checkbox"/> NO

<b>5. Clinical Findings</b>
Date of onset at home _____ Date of presentation _____ Date of death (if applicable) _____
<u>Check all that apply:</u>
<input type="checkbox"/> Fever (highest body temperature measured _____)
<input type="checkbox"/> Abscess <input type="checkbox"/> Skin lesions/dermatitis <input type="checkbox"/> Skin lesion/mass-like
<input type="checkbox"/> Otitis externa <input type="checkbox"/> Urinary tract infection <input type="checkbox"/> Post-operative infection
<input type="checkbox"/> Intravenous catheter <input type="checkbox"/> Surgical implant <input type="checkbox"/> Septic arthritis
<input type="checkbox"/> Other _____ Location of lesion(s) on body _____
Were any pictures taken of the lesion(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No

<b>6. Treatment.</b> Please comment on antibiotics administered and response to treatment.

<b>7. Laboratory results.</b> Please fax all bacterial cultures and other lab results in along with form.
---



# VETERINARY PUBLIC HEALTH-RABIES CONTROL PROGRAM

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publichealth.lacounty.gov/vet



## Avian Psittacosis Reporting Form

Date form completed \_\_\_\_\_

**1. Bird.** Name \_\_\_\_\_ Species \_\_\_\_\_ Sex(if known) \_\_\_\_\_ Age \_\_\_\_\_

**2. Bird Owner**  
Name(s)  
Address  
City, ZIP  
Telephone:  
Los Angeles County Public Health will contact the owner about the standard 45-day quarantine period.

**3. Reporting Veterinarian**  
Name of veterinarian or technician:  
Vet Clinic Name:  
Address:  
City, ZIP:  
Telephone \_\_\_\_\_ Fax \_\_\_\_\_ E-mail: \_\_\_\_\_

**4. History**  
a. How long has this person owned this bird? \_\_\_\_\_ Date bird obtained (if known) \_\_\_\_\_  
c. Store/Individual selling bird to owner (if within last 60 days) \_\_\_\_\_  
d. Are there other birds on owner's property?  No  Yes  
If yes, how many? \_\_\_\_\_  
Is there any known illness in these other birds?  No  Yes  
e. Were any new birds brought onto property recently?  No  Yes  
If yes, explain \_\_\_\_\_  
f. Type of housing of infected bird:  Indoor  Outdoor  
g. Is there any known human respiratory illness in people that handle the infected bird?  No  Yes  
If Yes, please explain \_\_\_\_\_

**5. Clinical Findings**  
a. Date of onset of first symptoms \_\_\_\_\_  
b. Date of presentation \_\_\_\_\_  
c. Date of death (if applicable) \_\_\_\_\_  
d. Check all that apply  
 No clinical signs  Lethargy  Anorexia  Diarrhea  Respiratory signs  
 Sudden death  Other \_\_\_\_\_  
 Other (explain): \_\_\_\_\_

**6. Diagnostics/Laboratory results.** Please fax all laboratory results to us along with this form.



## Canine Rocky Mountain Spotted Fever Reporting Form

Date form completed \_\_\_\_\_

**1. Dog** Name \_\_\_\_\_ Breed \_\_\_\_\_ Sex/Neut \_\_\_\_\_ Age \_\_\_\_\_

### 2. Dog Owner

Name(s)

Address

City, ZIP

Telephone:

May we call the owner(s) to ask more about the history?  YES  NO

### 3. Reporting Veterinarian

Name of veterinarian or technician:

Vet Clinic Name:

Address:

City, ZIP:

Telephone

Fax

E-mail:

### 4. Tick Exposure History

Type of neighborhood dog lives in:  Urban  Suburban  Rural

Ticks found on dog within 7 days before illness:  Yes  No

Ticks found on dog within past 3 months:  Yes  No

Is the dog walked outside of its own neighborhood:  Yes  No

Locations of trails/parks/other places in LA County the dog visits:

Does the dog visit places outside of LA County?  Yes  No

List locations outside of LA County the dog might have been exposed to ticks:

### 5. Clinical Findings

Date of onset of first symptoms \_\_\_\_\_ Date of presentation \_\_\_\_\_

Date of death (if applicable) \_\_\_\_\_ Highest body temperature measured \_\_\_\_\_

Check all that apply:

Fever  Anorexia  Petechiae/ecchymoses  Vomiting  Diarrhea

Cough  Enlarged peripheral lymph nodes  Conjunctivitis/scleral injection

Seizures/vestibular disease/neuro  Edema (body location \_\_\_\_\_)

Polyarthritis (joints involved \_\_\_\_\_)

**6. Treatments:** (Ex. antibiotics or corticosteroids, ectoparasite control)

**7. Laboratory results.** Please fax all laboratory results along with this form.



## Vaccine Preventable Disease Reporting Form

Date form completed \_\_\_\_\_

### SUSPECTED DISEASE BEING REPORTED:

Parvovirus     Canine distemper     Panleukopenia     Other \_\_\_\_\_

#### 1. Pet. Dog    Cat

Name \_\_\_\_\_ Breed \_\_\_\_\_ Sex/Neut \_\_\_\_\_ Age \_\_\_\_\_

#### 2. Pet Owner

Name(s) \_\_\_\_\_

Address \_\_\_\_\_

City, ZIP \_\_\_\_\_

Telephone: \_\_\_\_\_

Is it okay for Public Health to call the owner(s) to ask more about the history?    YES                      NO

#### 3. Reporting Veterinarian

Name of veterinarian or technician: \_\_\_\_\_

Vet Clinic Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, ZIP: \_\_\_\_\_

Telephone \_\_\_\_\_

Fax \_\_\_\_\_

E-mail: \_\_\_\_\_

#### 4. History

Relevant vaccine history, include dates of vaccine: \_\_\_\_\_

Is this case part of a cluster or outbreak? If yes, please explain: \_\_\_\_\_

##### Potential exposure history

Another sick animal in home

Dog show

Kennel visit

Exposure to stray

Pet store

Shelter visit

Dog park

Other \_\_\_\_\_

#### 5. Clinical Findings

Date of onset of first symptoms \_\_\_\_\_ Date of presentation \_\_\_\_\_

Date of death (if applicable) \_\_\_\_\_ Highest body temperature measured: \_\_\_\_\_

##### Check all that apply

Cough

Nasal Discharge

Vomit

Diarrhea

Tremors

Seizures

Other neurological signs

Parvo snap test in-house - positive

Positive distemper titer with no prior vaccination

Positive distemper antigen IFA

Other (explain) : \_\_\_\_\_

#### 6. Laboratory results. Please fax all laboratory results to us along with this form.

Fax to: (213) 481-2375

**2010**

# Materials from 2008- 2009 binder



**REPORTED ANIMAL RABIES BY COUNTY AND SPECIES  
CALIFORNIA, ACCUMULATIVE 1997 - 2006**

LOCAL HEALTH JURISDICTION	Cat 15	Cattle 2	Dog 18	Goat 1	Horse 2	Sheep 1	Bat 1630	Coyote 0	Dog-Wolf 2	Fox 43	Opossum 5	Rabbit 1	Raccoon 3	Skunk 1065	TOTAL 2788	Human 6
Alameda	0	0	0	0	0	0	64	0	0	1	1	0	0	27	93	0
-Alameda HD	0	0	0	0	0	0	57	0	0	1	1	0	0	25	84	0
-Berkeley HD	0	0	0	0	0	0	7	0	0	0	0	0	0	2	9	0
Alpine	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Amador	0	1	0	1	0	0	17	0	0	1	0	0	0	5	25	1
Butte	1	0	1	0	0	0	89	0	0	0	0	0	0	125	216	0
Calaveras	1	0	0	0	0	0	8	0	0	0	0	0	0	2	11	0
Colusa	0	0	0	0	0	0	12	0	0	0	0	0	0	1	13	0
Contra Costa	1	0	0	0	0	0	66	0	0	0	0	0	0	44	111	0
Del Norte	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
El Dorado	1	0	0	0	0	1	14	0	0	3	0	0	1	77	97	0
Fresno	0	0	0	0	0	0	41	0	0	0	0	0	0	31	72	0
Glenn	1	0	2	0	0	0	53	0	0	1	1	0	0	37	95	1
Humboldt	3	0	0	0	0	0	17	0	0	15	0	0	0	14	49	0
Imperial	0	0	0	0	0	0	10	0	0	0	0	0	0	0	10	0
Inyo	0	0	0	0	0	0	19	0	0	0	0	0	0	0	19	0
Kern	0	0	0	0	0	0	50	0	0	0	0	0	0	0	50	0
Kings	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	0
Lake	1	0	0	0	0	0	2	0	0	0	0	0	0	6	9	0
Lassen	0	0	0	0	0	0	4	0	0	0	0	0	0	1	5	0
Los Angeles	0	0	0	0	0	0	90	0	0	0	0	0	0	0	90	1
-Los Angeles HD	0	0	0	0	0	0	86	0	0	0	0	0	0	0	86	1
-Long Beach HD	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0
-Pasadena HD	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Madera	0	0	0	0	0	0	2	0	0	0	0	0	0	14	16	0
Marin	0	0	0	0	0	0	89	0	0	0	0	0	0	3	92	0
Mariposa	1	0	1	0	0	0	7	0	0	2	0	0	0	23	34	0
Mendocino	0	1	2	0	0	0	5	0	0	5	0	0	1	15	29	0
Merced	0	0	0	0	0	0	9	0	0	0	0	0	0	1	10	0
Modoc	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5	0
Mono	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Monterey	0	0	0	0	0	0	29	0	0	2	0	0	0	34	65	0
Napa	0	0	0	0	0	0	17	0	0	3	0	0	0	2	22	0
Nevada	0	0	0	0	0	0	6	0	1	2	0	0	0	36	45	0
Orange	0	0	0	0	0	0	52	0	0	0	1	0	0	0	53	0
Placer	2	0	4	0	0	0	34	0	0	0	1	0	1	202	244	0
Plumas	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8	0
Riverside	0	0	0	0	0	0	44	0	0	0	0	0	0	0	44	0
Sacramento	0	0	1	0	0	0	58	0	0	0	0	0	0	34	93	0
San Benito	0	0	0	0	0	0	14	0	0	0	0	0	0	20	34	0
San Bernardino	0	0	0	0	0	0	65	0	0	1	0	0	0	0	66	0
San Diego	0	0	0	0	0	0	108	0	0	1	0	0	0	2	111	1
San Francisco	0	0	0	0	0	0	22	0	0	0	0	0	0	0	22	0
San Joaquin	0	0	0	0	0	0	56	0	0	0	0	0	0	0	56	1
San Luis Obispo	0	0	0	0	0	0	37	0	0	4	0	0	0	81	122	0
San Mateo	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0
Santa Barbara	1	0	1	0	0	0	30	0	0	0	0	0	0	97	129	0
Santa Clara	0	0	0	0	0	0	40	0	0	0	0	0	0	1	41	0
Santa Cruz	1	0	0	0	0	0	11	0	0	0	0	1	0	6	19	0
Shasta	0	0	2	0	1	0	15	0	1	0	0	0	0	28	47	0
Sierra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Siskiyou	1	0	0	0	1	0	3	0	0	1	0	0	0	0	6	0
Solano	0	0	0	0	0	0	31	0	0	0	0	0	0	2	33	0
Sonoma	0	0	1	0	0	0	11	0	0	0	0	0	0	3	15	0
Stanislaus	0	0	0	0	0	0	11	0	0	0	0	0	0	1	12	0
Sutter	0	0	0	0	0	0	37	0	0	0	0	0	0	9	46	0
Tehama	0	0	2	0	0	0	5	0	0	0	0	0	0	4	11	0
Trinity	0	0	0	0	0	0	2	0	0	0	0	0	0	4	6	1
Tulare	0	0	1	0	0	0	26	0	0	0	1	0	0	19	47	0
Tuolumne	0	0	0	0	0	0	7	0	0	0	0	0	0	33	40	0
Ventura	0	0	0	0	0	0	77	0	0	1	0	0	0	0	78	0
Yolo	0	0	0	0	0	0	65	0	0	0	0	0	0	10	75	0
Yuba	0	0	0	0	0	0	26	0	0	0	0	0	0	11	37	0



**COUNTY OF LOS ANGELES • DEPARTMENT OF PUBLIC HEALTH  
VETERINARY PUBLIC HEALTH - RABIES CONTROL PROGRAM**



## **Rabies Laws, Excerpts**

### **Reporting of animal bites required**

#### **State Law**

**17CCR2606(a). Reporting.** Any person having knowledge of the whereabouts of an animal known to have or suspected of having rabies shall report the facts immediately to the local health officer. The health officer shall likewise be notified of any person or animal bitten by a rabid or suspected rabid animal. In those areas declared by the Director of the State Department of Health Services to be rabies areas, the local health officer shall be notified when any person is bitten by an animal of a species subject to rabies, whether or not the animal is suspected of having rabies.

### **Confinement of biting animals required**

#### **County Ordinance**

##### **11.04.230 Owner of biting animal -- Report required -- Examination of confined animal.**

Whenever the owner or person having charge, custody or control of any animal observes or learns that such animal has bitten or otherwise exposed a human being, such owner or person having charge, custody or control of such animal shall report the incident at once to the director and shall confine such animal in an enclosure, or shall securely hold and restrain said animal, by chain or other device, for examination and observation by the director. No owner or person having charge, custody or control of such animal shall fail, refuse or neglect to allow the director to make an inspection or examination of such animal for the purpose of determining whether such animal has symptoms of rabies.

### **Length of quarantine for biting animal**

#### **County Ordinance**

**11.04.210 Confinement of biting animals -- Procedure generally.** The biting animal shall be quarantined, confined and observed for at least 14 days (dogs and cats, 10 days) after the day of infliction of the bite, ...

### **Biting animals can not be euthanized without permission**

#### **County Ordinance**

**11.04.250 Destroying quarantined animal prohibited -- Exception.** It is unlawful for any owner or person having charge, custody or control of any animal that has bitten or otherwise exposed a human being or is suspected of having rabies to destroy such animal, or have such animal destroyed, during the quarantine period, unless permission is granted by the director.

## **Animal in contact with suspect rabid animals (eg. wildlife) are quarantined**

### **County Ordinance**

**11.04.270 Quarantine of animals coming in contact with rabid animals.** Animal contacts of a known rabid or suspected rabid animal shall be quarantined in a place and manner, and for a period of time, designated by the director.

### **State Law**

**17CCR2606c. Animal Contacts.** Any animal of a species subject to rabies which has been bitten by a known rabid or suspected rabid animal or has been in intimate contact with a rabid or suspected rabid animal shall be quarantined in a place and manner approved by the local health officer,...

Note: wildlife in "rabies areas" are considered rabies suspects, unless proven otherwise by rabies testing.



## PUPPY MILLS GO GLOBAL BORDER PUPPIES AND PUBLIC HEALTH

**Background.** Thousands of puppies are smuggled annually into the United States for illegal sale and profit. Large numbers are sold in LA County. Generally these puppies are small purebred breeds, such as Maltese, Yorkies, and Shih-tzus, but may be of any breed. Some are sold as toy breeds, when in fact they are simply underage (4-5 weeks) and may have difficulty eating solid food. Sales often occur at swap meets and through classified ads and are usually cash-only. The parents are generally unavailable for observation.

**Health Risks.** These puppies come primarily from Mexico and parts of Asia, areas where canine rabies is still prevalent. Many are infected with parvovirus, dermatophytosis, internal parasites, and other infectious diseases.

**Surveillance.** LA County VPH is beginning to track illnesses in illegally imported "Border Puppies" due to the potential risks they pose for animal and human health in the County. Please inquire about the origins of all new puppies and report any illnesses in animals you suspect to be "Border Puppies". The relevant form can be found in the Reporting Forms section.

NOTE: Legally imported puppies that die during the quarantine period must be tested for rabies.

Thank you for your assistance  
in this effort!



Photos courtesy of Capt. Aaron Reyes, Border Puppy Task Force

**CALIFORNIA COMPENDIUM OF RABIES CONTROL AND PREVENTION, 2004**  
**CALIFORNIA DEPARTMENT OF HEALTH SERVICES**  
**VETERINARY PUBLIC HEALTH SECTION**  
**(916) 552-9740**

The purpose of these recommendations is to provide information on rabies to California's public health officials, medical professionals, practicing veterinarians, animal control officers, and other parties concerned with rabies control in the State. The recommendations below are reviewed and updated on a periodic basis to reflect the current status of rabies and rabies prevention activities in California. Updates are based on a review of current rabies research and scientific literature, and rabies prevention guidelines published by the Advisory Committee on Immunization Practices (ACIP)<sup>1</sup> and by the National Association of State Public Health Veterinarians, Inc.<sup>2</sup>.

## Part I.

# Rabies Control

**A. Principles of Rabies Control:**

**1. Human Rabies Prevention:**

Human rabies can be prevented by: (1) eliminating exposure to rabid animals, (2) providing appropriate rabies preexposure prophylaxis, and (3) prompt local treatment of wounds combined with appropriate rabies postexposure prophylaxis (PEP). Human rabies preexposure and postexposure prophylaxis is addressed in Part II of the compendium.

**2. Domestic Animal Rabies Control Program:**

The California Rabies Control Program is a multifaceted approach to the control of an age-old disease. The primary components of the California Rabies Control Program include companion animal immunization and licensing; stray animal control; animal bite reporting, investigation, and animal isolation; and public education. The California Health and Safety Code (HSC), Section 121690, mandates that the governing body of each city, city and county, or county shall maintain or provide a rabies control shelter system and a rabies control program. Animal shelters and animal control authorities should establish policies to ensure that adopted animals are vaccinated against rabies.

**3. Wildlife Rabies Control:**

Rabies is well-established in skunk and bat populations in California. Today, wildlife accounts for >90% of reported animal rabies cases<sup>3</sup>. Every opportunity should be taken to educate the public on the risks of trauma and infectious diseases associated with contact with wild animals. The control of rabies in bats and terrestrial mammals is very difficult. Selective population reduction may be useful in terrestrial rabies outbreaks, but the success of these efforts depend on the circumstances surrounding each rabies outbreak episode. It is generally not feasible or desirable to attempt wild carnivore or bat population reductions as a means of rabies control. Control efforts for bats should concentrate on exclusion from dwellings and other buildings. The Veterinary Public Health Section (VPHS) should be contacted for assistance with wildlife rabies control efforts in outbreak situations. Translocation of infected wildlife has contributed to the spread of rabies; therefore, the translocation or importation of a known rabies reservoir species should be prohibited.

**B. Rabies Control Methods in Domestic and Confined Animals:**

**1. Animal Bite Reporting (Title 17, California Code of Regulations [CCR], Section 2606):**

The local health officer or designee shall be immediately notified of any person or animal bitten by or potentially exposed to a rabid or suspected rabid animal. In addition, the local health officer or designee shall be notified when any person is bitten by a mammal. Potential human rabies exposures are then evaluated and rabies PEP recommendations made.

**2. Isolation of Biting Animals (17 CCR 2606):**

**(a) Dogs and Cats:**

Domestic dogs or cats that bite or otherwise expose humans must be isolated in strict confinement and in compliance with the local health officer's isolation order. The biting dog or cat must be observed daily for signs of rabies for **ten (10) days** following the exposure date regardless of the animal's vaccination status, or be euthanized immediately and tested for rabies in an approved public health laboratory. If an isolated dog or cat is healthy at the end of the ten-day period, there is no risk of a rabies exposure from the original bite wound.

**(b) Ferrets:**

While pet ferrets are currently illegal in California, bites from these animals do occur. If a ferret bites a human in California, it must be isolated in strict confinement and in compliance with the local health officer's isolation order. The biting ferret must be observed daily for signs of rabies for **ten (10) days** following the exposure date regardless of the animal's vaccination status, or be euthanized immediately and tested for rabies in an approved public health laboratory. Biting ferrets must be confiscated by the animal control agency and isolations conducted under the direction of the local health officer in an animal control shelter or veterinary hospital. If an isolated ferret is healthy at the end of the ten-day period, there is no risk of a rabies exposure from the original bite wound. Because pet ferrets are illegal, any ferret isolated for a human bite must be reported to the California Department of Fish and Game for disposition following the isolation.

**(c) Isolation Considerations:**

If the bite is judged by the local health officer to be unusual or to represent an increased risk for rabies (e.g., unprovoked attacks, bites to the face, or attacks on children), the animal should be euthanized and tested immediately. If an animal under isolation develops clinical signs suggestive of rabies, the animal should be humanely euthanized and the head immediately submitted for rabies testing through the local health department. Any unwanted or stray animal that bites a human may be euthanized and the head promptly submitted to the local health department for rabies testing. Protocols for submitting samples for rabies testing are available from the local health department. Rabies or other immunizations should **not** be administered to a dog, cat, or ferret during bite isolations since adverse reactions may be misinterpreted as clinical signs of rabies.

In the case of a dog, cat, or ferret bitten by another dog, cat, or ferret, the biting animal(s) may be placed in isolation for a period of at least 10 days. Should an isolated animal show signs clinically suggestive of rabies, that animal should be euthanized and tested for rabies. If the biting animal tests positive for rabies, the animal that was bitten must be placed in isolation as provided for in section B. 3. (a) below. If an isolated dog, cat, or ferret is healthy at the end of the ten-day period, there is no risk of a rabies exposure from the original bite wound.

(d) **Other Domestic and Nondomestic Species:**

There is little data on rabies incubation, clinical presentation, and viral shedding in domestic animal species other than dogs, cats, and ferrets. The period of virus shedding in the saliva of infected domestic, wild or nondomestic animals prior to showing clinical signs of rabies is generally not known. Therefore, isolation and observation of animal species other than dogs, cats and ferrets that bite humans is not appropriate. Biting domestic, wild, or nondomestic animals other than dogs, cats, and ferrets should be euthanized and tested for rabies immediately.

While isolation of biting animals other than dogs, cats and ferrets is not recommended for the reasons given above, local health officers have an alternative to euthanizing and testing the animal in special circumstances: In the situation where the biting animal has a comprehensive history that minimizes the potential for rabies infection, and the risk of rabies in the biting animal is judged by the health officer to be acceptably low, the health officer may offer the option of instituting a prolonged (30-day) isolation of the biting animal. Under the care of a physician, the bite victim could be started immediately on rabies postexposure prophylaxis. This special exemption can be considered due to the low risk for exposure, the high efficacy of rabies postexposure treatment, and the low incidence of serious adverse reactions with that treatment.

3. **Isolation of Animals Exposed to Rabies (17 CCR 2606):**

Any animal bitten by, scratched by, or having direct contact with a wild mammal (especially bats and skunks) that is not available for rabies testing should be regarded as having been exposed to rabies.

(a) **Dogs, Cats, and Ferrets:**

Unvaccinated dogs, cats, and ferrets exposed to a rabid or suspect rabid animal should be euthanized immediately. An alternative to euthanasia is immediate vaccination of the animal and placement in a strict isolation for **six months (180 days)**. Isolation provisions are at the discretion of the local health officer and must preclude contact between the isolated animal and other animals or the public. Euthanasia is strongly recommended for unvaccinated juvenile animals due to their higher susceptibility to rabies infection. Protocols for the postexposure vaccination of previously unvaccinated animals have not been validated, and there is evidence that the use of vaccine alone will not prevent the disease. Dogs, cats, and ferrets that are currently vaccinated should be revaccinated immediately and placed in strict isolation for **30 days**. Ferrets must be confiscated by the animal control agency and isolation conducted under the direction of the health officer in an animal control shelter or veterinary hospital. Since pet ferrets are illegal to possess in California without a permit, any ferret isolated must be reported to the California Department of Fish and Game for disposition following the isolation.

(b) **Livestock:**

All livestock species are susceptible to rabies infection. Cattle and horses are the most common livestock species diagnosed with rabies. Unvaccinated livestock bitten or exposed to a rabid or suspect rabid animal should be euthanized. If the animal is slaughtered within **seven days** after being exposed, the tissues may be consumed without risk of infection, provided liberal portions of the exposed area are discarded. However, the slaughtered animal cannot be used commercially as a source of food; federal (United States Department of Agriculture [USDA]) meat inspectors are required to reject for slaughter any animal known to have been exposed to rabies within the past **eight months**. Neither tissue nor milk from a rabid animal should be used for human or animal consumption. However, the virus is susceptible to heat inactivation, and drinking pasteurized milk or eating fully cooked meat does not constitute an exposure to rabies.

An alternative to euthanizing exposed livestock is to vaccinate the animal immediately and to place it in a strict isolation for **six months** during which time the animal may not be transported, sold, or slaughtered unless approved by the local health officer and the California Department of

Food and Agriculture. Livestock that are currently vaccinated should receive a rabies booster immediately and be placed in isolation for **30 days** under the same restrictions cited above. In general, an isolation order for the entire herd is not indicated unless the animals have been held in close confinement that would allow for multiple animals exposed to the same rabies source (e.g., a wild animal). It is unusual to have more than one rabid animal in a herd. In such cases, multiple animals were usually exposed by a single rabid wild animal or canine source rather than herbivore to herbivore transmission. Animals in a herd where a rabies death has occurred should be examined for evidence of bite exposures immediately.

(c) **Wildlife, Nondomestic and Other Species:**

Wild, nondomestic, and other animal species bitten by or exposed to a rabid or suspect rabid animal should be euthanized immediately.

**4. Animal Rabies Vaccination:**

(a) **Rabies Vaccine Administration (HSC 121690, 121700):**

All animal rabies vaccines shall be restricted to use by, or under the supervision of a California-licensed veterinarian. The level of supervision shall be consistent with Title 16, CCR, Sections 2034-2036.5 of the California Veterinary Medicine Practice Act (<http://www.calregs.com/>). The administration of rabies vaccinations is restricted to veterinarians or registered veterinary technicians (RVT) under direct or indirect supervision. Lay personnel are restricted to performing tasks in an “animal hospital setting.” Therefore, a lay person may only administer rabies vaccinations when working in an animal hospital setting under the direct or indirect supervision of a California-licensed veterinarian. Any veterinarian signing a rabies certificate should assure that the person administering the vaccine is identified on the certificate and is appropriately trained in vaccine storage, handling, administration, management of adverse events, etc. This practice ensures that a qualified and responsible person can be held accountable to assure that the animal has been properly vaccinated.

In addition, the sale of animal rabies vaccines is restricted to licensed veterinarians or government agencies conducting rabies control programs. Rabies vaccine should be administered in a new, previously unused, sterile needle and syringe. The use of cleaned, sterilized, recycled needles and syringes is strongly discouraged. The theoretical risk of chemical residues in recycled needles and syringes adversely affecting the immunogenicity of rabies vaccine makes it prudent to avoid even the potential for such a problem. Single use of the needle and syringe is consistent with vaccine manufacturers’ recommendations. Rabies vaccines must be administered in accordance with the specifications of the vaccine product label or package insert.

(b) **Accidental Human Exposure to Rabies Vaccine:**

Accidental human inoculation may occur during administration of an animal rabies vaccine. Such exposure to inactivated rabies vaccine does not constitute a risk for rabies infection.

(c) **Adverse Events:**

Currently, there is no epidemiologic association between a particular licensed vaccine product and adverse events including vaccine failure. Adverse reactions or rabies in a currently vaccinated animal should be reported to the USDA, Center for Veterinary Biologics (at <http://www.aphis.usda.gov/vs/cvb/ic/adverseeventreport.htm>, by telephone at 800-752-6255, or by e-mail to CVB@usda.gov).

(d) **Canine Rabies Vaccination (HSC 121690, 17 CCR 2606.4):**

The owner of every dog over the age of four months shall ensure that his or her pet is currently vaccinated for rabies by a licensed veterinarian and secure a license for the pet as provided by local city or county ordinance.

Within 28 days after primary vaccination, a peak rabies antibody level is reached and the animal can be considered immunized. Dogs less than four months of age must be confined at home or kept under close leash supervision by the owner. A current rabies vaccination certificate must accompany dogs over four months of age entering the State.

Regardless of the age of the animal at initial vaccination, a second rabies booster vaccination should be given one year later, and the three-year booster schedule followed thereafter. Because a rapid anamnestic response is expected, an animal is considered currently vaccinated immediately after a booster vaccination. An animal that is overdue for a rabies vaccine should receive a booster as soon as possible and then be placed on a three-year booster schedule.

Only canine rabies vaccines licensed by USDA and approved by the California Department of Health Services (DHS) can be used in the California Rabies Control Program (see Part III of the Compendium). There is no laboratory or epidemiologic data to support the annual or biennial administration of 3-year vaccines following the initial immunization series.

**(e) Feline Rabies Vaccination:**

Cats are now the most frequently reported domestic rabid animals in the United States (U.S.). Because of the rabies risk to cats and their owners, feline rabies vaccination is strongly recommended for ALL cats. A USDA licensed feline rabies vaccine should be administered according to the vaccine label instructions (see Part III of the Compendium). Feline licensing and identification programs at the local level and the use of triennial vaccines are strongly endorsed by VPHS.

In recent years, epidemiologic studies have suggested that the administration of various vaccines may be a risk factor for the development of cancer (sarcoma) in some cats. However, this risk appears to be extremely low. The public health significance of rabies far outweighs the extremely low risk of a sarcoma developing at a vaccination site. Therefore, feline rabies immunization in California is strongly indicated and may be mandatory according to local ordinances.

**(f) Ferret Rabies Vaccination:**

Although possession of pet ferrets is currently illegal in California, DHS is aware that owners of illegally kept ferrets may seek veterinary care in some situations. As a public health measure, these animals should be vaccinated against rabies when encountered using a USDA licensed rabies vaccine administered according to vaccine label instructions (see Part III of the Compendium).

**(g) Livestock Rabies Vaccination:**

There are limited economic or public health justifications to vaccinate all livestock against rabies. However, vaccination of horses and livestock with a USDA licensed vaccine (see Part III of the Compendium) should be considered in areas where wildlife rabies is highly endemic, especially for valuable animals, for horses kept in boarding stables or racetracks, or for other animals having frequent contact with humans. Horses traveling interstate should be currently vaccinated against rabies.

**(h) Rabies Serologic Testing:**

Rabies serologic testing is **not** a substitute for rabies vaccination. Several laboratories offer rabies virus neutralizing antibody titer testing for animals. Such titers measure the animal's response to vaccine or infection and is not an indicator of protection. Several studies have shown that sometimes animals with high serologic titers will succumb to rabies, and sometimes animals with low or undetectable serologic titers will be protected. An ability to measure and interpret the other immunologic factors that play a role in protecting against rabies is not well developed.

Therefore, serologic evidence of rabies neutralizing antibodies in an animal cannot substitute for current rabies vaccination in managing rabies exposures or determining the need for booster vaccinations.

**(i) Wildlife Vaccination and "Hybrids":**

Vaccination of nondomestic animals or wildlife is not routinely recommended since there are no rabies vaccines licensed for use in animal species other than dogs, cats, cattle, horses, sheep, and ferrets in the U.S. The effectiveness of rabies vaccination in other species is unknown. Because of their susceptibility to rabies, wild or nondomestic carnivores, and bats should not be kept as pets. Newly imported exhibit animals that are susceptible to rabies should be strictly isolated for at least 180 days since wild animals may be incubating rabies when captured. Due to the special rabies risk, the trapping, transport, sale, or exchange of skunks in California is prohibited. Bats and certain carnivore species representing a high risk for rabies may not enter California without an importation permit from DHS (17 CCR, Sections 30070-86). Carnivores and bats must be housed in a manner that precludes direct contact with the public. Zoos or research institutions may establish vaccination programs, which attempt to protect valuable animals, but these should not replace appropriate public health activities that protect humans.

The effectiveness of rabies vaccination of the offspring of domestic dogs or cats bred to wild animals (e.g., wolf-dog hybrids, civet-cat hybrids) and their subsequent generations is unknown. Vaccination may afford some rabies protection to the animal; however, there are no rabies vaccines currently licensed for use in wild animals or in wild-domestic animal hybrids. Complete rabies vaccine challenge and viral shedding studies have not been conducted with these animals. There is no definitive evidence that the vaccine is protective in these animals. Vaccination of these animals is considered an extra label use of a biologic.

State law does not prohibit the use of rabies vaccines in domestic-wild animal hybrids. However, it is illegal to license domestic dog-wild animal hybrids **as dogs** under the California Rabies Control Program. A rabies vaccine certificate issued for a vaccinated hybrid must identify the animal as a "domestic-wild animal hybrid." Local jurisdictions are free to institute domestic dog-wolf hybrid permitting programs and issue such permits in order to identify these animals in the community. Canine or feline hybrids previously rabies vaccinated cannot be recognized as "rabies immunized" in the event of a human bite or contact with a rabid or suspect rabid animal. The hybrid will be considered a "wild animal" under these circumstances, and managed accordingly.

**(j) Canine Licensing and Vaccination Procedure (17 CCR 2606.4):**

The vaccination of all dogs four months of age or older is a prerequisite to licensing. Completion of the licensing procedure consists of issuing a license tag or vaccination tag bearing the license data only after presentation of a current valid official rabies vaccination certificate. Official rabies vaccination certificates must show the following:

- (a) Name, address and phone number of the dog's owner;
- (b) description of the dog, including breed, color, age, and sex;
- (c) date of immunization;
- (d) type of rabies vaccine administered;
- (e) name of the manufacturer, product, and lot number of the rabies vaccine used.

Each certificate must bear the signature of the veterinarian administering the vaccination or a signature authorized by him or her. The certificate must be stamped, printed or typed with the vaccinating veterinarian's name, address and telephone number.

**6. Rabies Immunization Exemptions:**

A rabies immunization exemption may be issued by the local health officer upon the written recommendation of a California-licensed veterinarian where illness or a veterinary medical condition in a

dog warrants. The exempted animal shall be maintained in strict rabies isolation, under conditions that are at the discretion of the local health officer, until such time as the medical condition has resolved, and the animal can be rabies immunized.

**7. "Actual Cost" Rabies Vaccination Clinics (HSC 121690):**

Each city, city and county, or county shall provide or arrange for canine rabies vaccination clinics in the community. No charge in excess of the actual cost may be made for vaccination administration. The current DHS approved "Actual Cost" vaccination fee has been increased to \$6.00.

## Part II. Human Rabies Prevention

### A. Rabies Postexposure Prophylaxis (PEP):

The essential components of rabies PEP are immediate local wound cleaning and treatment, and the appropriate administration of human rabies immune globulin (HRIG) and rabies vaccine. Persons who are bitten by, or have significant exposure to the saliva or nervous system tissue of a confirmed rabid animal should begin rabies PEP immediately. Persons exposed to a *suspected* rabid animal should begin treatment if rabies testing on the animal is not immediately available. To appropriately manage *potential* human exposure to rabies, the risk of infection must be accurately assessed. It is important to remember that administration of rabies PEP is a medical urgency, not a medical emergency. There is time for assessment, but a decision on whether or not to start rabies PEP should not be delayed. Rabies PEP is occasionally complicated by adverse reactions, but these reactions are rarely severe.

Extensive field experience from many parts of the world indicate that prompt wound treatment, passive immunization, and vaccination are uniformly effective when administered appropriately. However, rabies has developed in humans where key elements of the rabies PEP were omitted or incorrectly administered according to the World Health Organization (WHO) recommendations (<http://www.who.int/emc-documents/rabies/whoemczoo966c.htm>). Rabies PEP should not be denied due to a prolonged time interval between exposure and starting treatment. There have been many instances in which rabies PEP was not initiated until months after exposure due to delays in recognition of the exposure. Incubation periods well in excess of one year have been reported.

- 1. Rabies Exposure:** In addition to the classic bite exposure (teeth penetrating the skin), nonbite exposure (contamination of open wounds, abrasions, mucous membranes, or scratches) to saliva or nervous system tissue of a rabid animal resulting in human rabies has been documented. Therefore, such nonbite exposures constitute sufficient reason to consider rabies PEP. Other contact (e.g., petting a rabid animal with no saliva contact; or contact with blood, urine, feces, or skunk spray) does not constitute an exposure. Rabies virus is inactivated by exposure to ultraviolet radiation and by desiccation, though the exact time required in different environmental conditions is not fully known. Dried saliva or neurologic tissue is generally considered noninfectious.
- 2. Bats and Human Rabies Exposure:** Bats are increasingly implicated as important reservoirs for rabies transmitted to humans. Epidemiologic data suggest that transmission of rabies virus can occur from very minor or even unrecognized bites from bats. The limited injury inflicted by a bat bite (in contrast to lesions caused by carnivores), and limited recall of the exact exposure history can hinder a health-care provider's ability to assess the risk of rabies resulting from an encounter with a bat. Bite marks may not be evident even on close examination. Human and domestic animal contact with bats should be prevented.

On the basis of the available information from the 28 bat rabies variant associated cases of human rabies reported in the U.S. from 1990-2003, only 3 cases had a history of a definite bat bite, 11-13 cases had

apparent bat contact but no bite was detected, and in 10-12 cases, no exposure to bats was reported but an undetected or unreported bat bite remains the most plausible hypothesis<sup>3</sup>.

In all instances of potential human exposures involving bats, the bat in question should be safely collected, if possible, and submitted for rabies testing. Rabies PEP is recommended for all persons with bite, scratch, or mucous membrane exposure to a bat, unless the bat is available for testing and is negative for evidence of rabies. Rabies PEP may be appropriate even if a bite, scratch, or mucous membrane exposure is not apparent when there is reasonable probability that such exposure might have occurred.

Rabies PEP should be considered when direct contact between a bat and a human has occurred, unless the exposed person can be certain a bite, scratch, or mucous membrane exposure did not occur. In instances in which a bat is found indoors and there is no history of bat-human contact, the likely effectiveness of rabies PEP must be balanced against the low risk such exposures appear to present. In this setting, rabies PEP can be considered for persons who were in the same room as the bat and who might be unaware that a bite or direct contact had occurred (e.g., a sleeping person awakens to find a bat in the room or an adult witnesses a bat in the room with a previously unattended child, mentally disabled person, or intoxicated person) and rabies cannot be ruled out by testing the bat. Rabies PEP would not be warranted for other household members.

3. **Local Treatment of Wounds:** Immediate and thorough washing 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. Tetanus and antibiotic prophylaxis should be given as indicated.
4. **Active Immunization - Vaccine:** Human Diploid Cell Vaccine (HDCV), Purified Chick Embryo Cell Vaccine (PCEC), or Rabies Vaccine Adsorbed (RVA) is administered in conjunction with HRIG at the beginning of postexposure treatment. A regimen of five 1-ml doses of HDCV, PCEC, or RVA is given intramuscularly. The first dose should be given as soon as possible following an exposure (day 0). The other doses are given on days 3, 7, 14 and 28 after the first dose. Vaccine should always be administered by the IM route in the deltoid area (lateral aspect of the upper arm). For pediatric patients, intramuscular administration in the anterolateral aspect of the thigh is recommended. It is important that the needle length be adequate to ensure intramuscular delivery of vaccine<sup>4</sup>. **Rabies vaccine should never be administered in the gluteal region.** Administration in the gluteal area may result in lower or inadequate neutralizing antibody titers.

Rabies PEP should always include both vaccine and HRIG except in persons who have previously received complete prophylaxis regimens (pre- or postexposure prophylaxis) with a cell culture vaccine, or persons previously vaccinated with other types of vaccine that have documented and adequate rabies virus neutralization antibody titers. These persons should immediately receive a 1-ml booster vaccination of HDCV, PCEC, or RVA administered intramuscularly, and a second booster three days later.

Because antibody response in persons receiving the currently recommended rabies PEP schedule has been universally satisfactory, post-treatment serologic testing is not routinely recommended. Serology testing may be indicated in unusual circumstances, such as when the patient is known to be immunosuppressed. Immunosuppressive agents should not be administered during rabies PEP unless essential for the treatment of other conditions. The DHS Division of Communicable Disease Control [(916) 552-9740, (510) 540-2566, or (510) 540-2308 after hours] may be contacted for recommendations in these cases.

5. **Passive Immunization - HRIG:** HRIG is administered only once (i.e., at the beginning of rabies PEP) to previously unvaccinated persons to provide immediate antibodies until the patient responds to rabies vaccination by actively producing antibodies. If HRIG is not given with the first dose of vaccine, it can be given through the **seventh day** following administration of the first vaccine dose. Beyond the seventh

day, HRIG is not indicated since an antibody response to cell culture vaccine is presumed to have occurred. HRIG should be administered at a dose of 20 IU/kg body weight for all age groups. No more than the recommended dose should be used due to a potential partial suppression of active immunization by HRIG. If anatomically feasible, the full dose of HRIG should be infiltrated into the subcutaneous tissue and/or muscle around the wound site(s), and any remaining volume administered intramuscularly at an anatomical site distant from vaccine administration. HRIG should never be administered in the same syringe or at the same anatomical site as vaccine and should never be administered in the gluteal area unless that is the site of exposure.

The combination of HRIG and vaccine is recommended for both bite and nonbite exposures in persons not previously rabies immunized regardless of the interval between exposure and initiation of PEP.

## **B. Preexposure Prophylaxis:**

In California, preexposure vaccination should be offered to persons at increased risk of rabies exposure. This "frequent risk" category includes veterinarians, animal handlers, animal control officers, laboratory workers potentially exposed to rabies virus, and persons traveling to and spending time (e.g., >1 month) in foreign countries where canine rabies is endemic. Preexposure vaccination should be considered for other persons, such as wild mammal rehabilitators, whose vocations or avocations bring them into frequent contact with potentially rabid dogs, cats, skunks, bats or other species at risk of having rabies.

Preexposure vaccination for persons at risk has several potential advantages. Most importantly, it may protect persons with unrecognized exposures to rabies. Second, it simplifies and saves money on required treatment following a rabies exposure by eliminating the need for HRIG and decreasing the number of vaccine doses to be given. Finally, preexposure vaccination may protect persons exposed in areas where immunizing products are not available, carry a high risk of adverse reactions, or where treatment may be delayed (e.g., travelers).

### **1. Primary Preexposure Vaccination:**

**Intramuscular Primary Immunization:** Three 1.0 ml injections of HDCV, PCEC, or RVA should be given intramuscularly in the deltoid area (lateral aspect of the upper arm) on days 0, 7, and 21 *or* 28. Development of antibodies in patients vaccinated using this regimen has been 100 percent successful in several studies conducted. Based on results of these studies, routine post-primary immunization serologic testing is not necessary except for persons suspected of being immunosuppressed. Persons who are immunosuppressed due to medication or illness should postpone preexposure vaccination if possible. Immunosuppressed persons who are at risk of rabies exposure can be vaccinated and should have their antibody titers measured following completion of the regimen.

**Intradermal Primary Immunization:** Three 0.1 ml intradermal (ID) injections of HDCV have also been recommended as an alternative to the intramuscular primary immunization regimen. Injections of Imovax<sup>®</sup> Rabies I.D. are accurately administered intradermally (i.e., raising a visible bleb within the epidermis) in the area over the deltoid (lateral aspect of the upper arm) on days 0, 7 and 21 *or* 28. The 1.0 ml HDCV vial is not approved for multi-dose ID use and **should not be administered in this way**. RVA and PCEC are **not** to be given by the ID route.

Chloroquine phosphate used for malaria chemoprophylaxis (and possibly related antimalarial drugs - e.g., mefloquine) can interfere with the antibody response to Imovax<sup>®</sup> Rabies I.D. HDCV should not be administered by the intradermal route to persons receiving such drugs for malaria chemoprophylaxis. For further information, please refer to the Recommendations on Human Rabies Prevention published by the Advisory Committee on Immunizations Practices [*MMWR* January 8, 1999;48(RR-1):1-21].

## 2. **Booster Vaccination:**

Persons classified as having "frequent risk" for rabies exposure include rabies diagnostic laboratory workers, spelunkers, veterinarians and their staff, animal control officers, wildlife officers and international travelers visiting areas where canine rabies is endemic. Such persons should receive preexposure immunization and have a serum sample tested for rabies antibody every two years (every six months for laboratory workers). If the titer is less than complete neutralization at 1:5 or 1:8 (depending on dilution method used by the testing laboratory) by the Rapid Fluorescent Focus Inhibition Test (RFFIT), the person should receive a booster dose of rabies vaccine.

Several commercial sources for RFFIT testing are currently (Jan. 2004) available at a cost of approximately \$25-\$35 per sample (RFFIT testing through other laboratories may be available). Instructions for submission of samples and pricing are available by calling the numbers below.

Department of Veterinary Diagnostics  
Veterinary Clinical Science Building  
Kansas State University  
Manhattan, KS 66506-5600  
(785) 532-4483 Phone, (785) 532-4474 Fax  
<http://www.vet.ksu.edu/depts/rabies/>

Atlanta Health Associates, Inc.  
309 Pirkle Ferry Road, Suite D300  
Cumming, GA 30040  
(770) 205-9091, (800) 717-5612  
(770) 205-9021 Fax  
<http://www.atlantahealth.net/>

Maryland State Rabies Laboratory  
Maryland Department of Health  
201 W. Preston Street  
Baltimore, MD 21201  
(410) 767-6177

## C. **Rabies Immunizing Products Available in the United States:**

1. **Human Rabies Vaccine:** Produces an active immune response including production of neutralizing antibodies. This antibody develops in approximately 7-10 days and usually persists for at least 2 years.

(a) **Human Diploid Cell Vaccine (HDCV) - Intramuscular (Imovax<sup>®</sup> Rabies) and Intradermal (Imovax<sup>®</sup> Rabies I.D.)**

HDCV is prepared from the Pitman-Moore rabies virus strain grown in MRC-5 human diploid cell culture. The vaccine is concentrated by ultrafiltration and inactivated with beta-propiolactone. Imovax<sup>®</sup> Rabies and Imovax<sup>®</sup> Rabies I.D. are manufactured and distributed by Aventis Pasteur, Inc., phone [(800) VAC-CINE {822-2463}].

**Intramuscular (IM) Administration:**

A single dose vial containing lyophilized vaccine (Imovax<sup>®</sup> Rabies) that is reconstituted with diluent to a volume of 1.0 ml just before administration.

[http://www.vaccineshoppe.com/US\\_PDF/LE4733\\_Imovax\\_IM\\_VS.pdf](http://www.vaccineshoppe.com/US_PDF/LE4733_Imovax_IM_VS.pdf)

**Intradermal (ID) Administration:**

A single dose syringe containing lyophilized vaccine (Imovax<sup>®</sup> Rabies I.D.) that is reconstituted to a volume of 0.1 ml just before administration. The manufacturer discontinued sales of this product in 2001.

(b) **Purified Chick Embryo Cell Culture (PCEC)**

PCEC is prepared by growing the Flury LEP fixed-virus strain in primary culture of chicken embryonic fibroblasts. The virus is inactivated with beta-propiolactone, and further processed

with zonal centrifugation in a sucrose density-gradient to separate the final product from media and cell culture antigens. The vaccine is then lyophilized after addition of a stabilizer solution. RabAvert<sup>®</sup> is manufactured and distributed by Chiron Vaccines, phone [(800) CHI-RON8 {244-7668}]. <http://www.rabavert.com/>

(c) **Rabies Vaccine Adsorbed (RVA)**

RVA is prepared from the Kissling strain of Challenge Virus Standard rabies virus adapted to fetal rhesus lung diploid cell culture. The vaccine is inactivated with beta-propiolactone and concentrated by adsorption to aluminum phosphate to form a final 1.0 ml liquid dose. RVA is manufactured and distributed by BioPort Corporation, phone (877) BIO-THRAX {246-8472}. <http://www.bioportcorp.com/default.asp>

All three types of vaccine are considered equally efficacious and safe when used as indicated. The 1.0 ml dose of either HDCV, PCEC, or RVA can be used for both preexposure and postexposure prophylaxis. Imovax<sup>®</sup> Rabies I.D. has been approved for intradermal administration for **preexposure vaccination only**, and is not to be used in postexposure rabies prophylaxis. The intramuscular dose (Imovax<sup>®</sup> Rabies) should **NOT** be split into multiple doses for intradermal administration.

The safety and efficacy of RVA and PCEC administered by the intradermal route have not been studied; therefore, RVA and PCEC are not to be used intradermally.

2. **Rabies Immune Globulin - Human:** Provides immediate passive immunity that persists for only a limited time (half-life of approximately 21 days).

**BayRab<sup>™</sup>, Imogam<sup>®</sup> Rabies-HT**

Human rabies immune globulin (HRIG) is available from Aventis Pasteur, Inc., (Imogam<sup>®</sup> Rabies-HT), phone (800) VAC-CINE {822-2463}, [http://www.vaccineshoppe.com/US\\_PDF/190-10\\_4125.pdf](http://www.vaccineshoppe.com/US_PDF/190-10_4125.pdf), and Bayer Corporation, Pharmaceutical Division, Biological Products (BayRab<sup>™</sup>), phone (800) 288-8370, [http://www.bayerbiologicalsusa.bayerhealthcare.com/prod\\_hype\\_brab.asp](http://www.bayerbiologicalsusa.bayerhealthcare.com/prod_hype_brab.asp). HRIG is an antirabies gamma globulin concentrated by cold ethanol fractionation from plasma of hyperimmunized human donors. Rabies neutralizing antibody content is standardized to 150 international units (IU) per ml. HRIG is supplied in 2 ml and 10 ml vials for pediatric and adult use, respectively. Imogam<sup>®</sup> Rabies-HT is heat treated but has no preservatives. It must be administered within an hour once the seal is broken. Both HRIG preparations are considered equally efficacious and safe when used as indicated.

**D. Adverse Reactions to Rabies Immunizing Products:**

**1. Vaccine:**

Reactions after vaccination with HDCV, PCEC, and RVA are less serious and common than with previously available vaccines. Local reactions such as pain, erythema, and swelling or itching at the injection site were reported in approximately 30-75% of patients receiving HDCV or PCEC. Mild systemic reactions such as headache, malaise, dizziness, muscle aches, nausea, and abdominal pain have been reported in 5-50% of recipients. Anaphylactic, encephalitic or neuromuscular events are extremely rare, but have been reported.

An "immune complex-like" reaction has been reported to occur in approximately 6% of persons receiving booster doses of HDCV. The illness, characterized by onset 2-21 days postbooster, presents with a generalized urticaria and may also include arthralgia, arthritis, angioedema, nausea, vomiting, fever, and malaise. In no cases were the illnesses life-threatening. This reaction occurs much less frequently in persons receiving primary immunization. The reaction appears to be associated with the presence of betapropiolactone-altered human serum albumin in HDCV and the development of IgE to this allergen. This reaction appears to be less common in persons immunized with RVA, and has not been reported in

persons immunized with PCEC. An alternative vaccine product should be considered for patients with a history of adverse reactions following administration of one of the licensed vaccines. Please refer to the package insert or the manufacturers for more information on vaccine safety and adverse reactions.

**2. Rabies Immune Globulin, Human:**

Local pain and low-grade fever may follow receipt of HRIG. Although not reported specifically for HRIG, angioneurotic edema, nephrotic syndrome, and anaphylaxis have been reported after injections of immune globulin (IG). These reactions have occurred predominantly in persons receiving large and frequent doses of IG for various dysgammaglobulinemias. These reactions occur so rarely that the causal relationship between IG and these reactions is not clear.

BayRab™ and Imogam® Rabies-HT undergo multiple viral clearance procedures during preparation. There is no evidence that hepatitis B virus, human immunodeficiency virus or other viruses have ever been transmitted by commercially available HRIG in the U.S.

**3. Management of Adverse Reactions:**

Once initiated, rabies PEP should not be interrupted or discontinued because of local or mild systemic adverse reactions to rabies vaccine. Usually such reactions can be successfully managed with non-steroidal anti-inflammatory and antipyretic agents (ibuprofen or acetaminophen, for example). For more severe reactions, consideration should be given to switching from one product to another. When a person with a history of hypersensitivity must be given rabies vaccines, antihistamines may be given; epinephrine should be readily available to counteract anaphylactic reactions, and the person should be carefully observed immediately after immunization.

Systemic anaphylactic or neuroparalytic reactions occurring during the administration of rabies vaccines, though rare, pose a serious dilemma for the attending physician. A patient's risk of developing rabies must be carefully considered before deciding to discontinue vaccination. The use of corticosteroids in the treatment of life-threatening neuroparalytic reactions carries the risk of inhibiting the development of active immunity to rabies. It is especially important in these cases that the serum of the patients be tested for rabies antibodies following vaccination.

All serious systemic, neuroparalytic, or anaphylactic reactions to a rabies vaccine should be immediately reported to the DHS Division of Communicable Disease Control ([510] 540-2566 during working hours or [510] 540-2308 at other times), the Vaccine Adverse Event Reporting System (VAERS) via a 24-hour toll-free telephone number ([800] 822-7967), or the Division of Viral and Rickettsial Diseases, Center for Infectious Diseases, CDC ([404] 639-1050 during working hours, or [404] 639-2888 at other times).

**4. Precautions and Contraindications:**

**Immunosuppression**

Corticosteroids, other immunosuppressive agents, antimalarials, and immunosuppressive illnesses can interfere with the development of active immunity after vaccination. For persons with immunosuppression, preexposure prophylaxis should be administered with the awareness that the immune response might be inadequate (see Primary or Preexposure Vaccination). Patients who are immunosuppressed by disease or medications should postpone preexposure vaccinations and consider avoiding activities for which rabies preexposure prophylaxis is indicated. When this course is not possible, immunosuppressed persons who are at risk for rabies should be vaccinated by the IM route and their antibody titers checked. Failure to seroconvert after the third dose should be managed in consultation with appropriate public health officials (see Preexposure Vaccination and Serologic Testing). Immunosuppressive agents should not be administered during rabies PEP unless essential for the treatment of other conditions. When rabies PEP is administered to an immunosuppressed person, it is

especially important that a serum sample be tested for rabies antibody (by the RFFIT method) to ensure that an acceptable antibody response has developed.

### **Pregnancy**

Because of the potential consequences of inadequately treated rabies exposure, and because there is no indication that fetal abnormalities have been associated with rabies vaccination, pregnancy is not considered a contraindication to rabies PEP. If the risk of exposure to rabies is substantial, preexposure prophylaxis might also be indicated during pregnancy.

### **Allergies**

Persons who have a history of serious hypersensitivity to rabies vaccine should be revaccinated with caution (see Management of Adverse Reactions).

#### References:

- <sup>1</sup> Human Rabies Prevention - United States, 1999, Recommendations of the Advisory Committee on Immunization Practices (ACIP), *MMWR*, January 8, 1999; 48(RR-1):1-23. <http://www.cdc.gov/epo/mmwr/preview/mmwrhtml/00056176.htm> or <ftp://ftp.cdc.gov/pub/Publications/mmwr/RR/RR4801.pdf>
- <sup>2</sup> Jenkins SR et al, Compendium of Animal Rabies Prevention and Control, 2004., *JAVMA* 2004; 224(2):216-222. <http://www.avma.org/pubhlth/default.asp>
- <sup>3</sup> Krebs JW, Wheeling JT, Childs JE, Rabies surveillance in the United States during 2002., *JAVMA* 2003; 223(12):1736-1748. <http://www.electronicipc.com/JournalEZ/detail.cfm?code=04290022231204&CFID=385656&CFTOKEN=582651D3-397B-4F79-AA6B378E5E6975D0>
- <sup>4</sup> Poland GA et al, Determination of deltoid fat pad thickness. Implications for needle length in adult immunization., *JAMA* 1997 Jun 4; 277(21):1709-11.

**California Department of Health Services  
Division of Communicable Disease Control  
Veterinary Public Health Section  
MS 7308  
P.O. Box 997413  
Sacramento, CA 95899-7413**

**Phone (916) 552-9740, Fax (916) 552-9725**  
<http://www.dhs.ca.gov/ps/dcdc/disb/disbindex.htm>

**California Department of Public Health  
Compendium of U. S. Licensed Animal Rabies Vaccines - 2008,  
and Their Application in Animals Under the California Rabies Control Program**

**A) MONOVALENT - INACTIVATED**

Product Name	Produced By	Marketed By	For Use In	Dosage/Route*	Age at Primary Vaccination <sup>†</sup>	Booster Recommendation
RABVAC 1	Fort Dodge Animal Health License No. 112	Fort Dodge Animal Health	Dogs Cats	1 ml IM or SC	3 months	<b>NOT APPROVED FOR USE IN CALIFORNIA</b> Annually
RABVAC 3	Fort Dodge Animal Health License No. 112	Fort Dodge Animal Health	Dogs Cats Horses	1 ml IM or SC 1 ml IM or SC 2 ml IM	4 months 3 months 3 months	1 year later & triennially 1 year later & triennially Annually
RABVAC 3 TF	Fort Dodge Animal Health License No. 112	Fort Dodge Animal Health	Dogs Cats Horses	1 ml IM or SC 1 ml IM or SC 2 ml IM	4 months 3 months 3 months	1 year later & triennially 1 year later & triennially Annually
DEFENSOR 1	Pfizer, Incorporated License No. 189	Pfizer, Incorporated	Dogs Cats	1 ml SC	3 months	<b>NOT APPROVED FOR USE IN CALIFORNIA</b> Annually
DEFENSOR 3	Pfizer, Incorporated License No. 189	Pfizer, Incorporated	Dogs Cats Sheep Cattle	1 ml IM or SC 1 ml SC 2 ml IM 2 ml IM	4 months 3 months 3 months 3 months	1 year later & triennially 1 year later & triennially Annually Annually
RABDOMUN	Pfizer, Incorporated License No. 189	Schering-Plough	Dogs Cats Sheep Cattle	1 ml IM or SC 1 ml SC 2 ml IM 2 ml IM	4 months 3 months 3 months 3 months	1 year later & triennially 1 year later & triennially Annually Annually
RABDOMUN 1	Pfizer, Incorporated License No. 189	Schering-Plough	Dogs Cats	1 ml SC	3 months	<b>NOT APPROVED FOR USE IN CALIFORNIA</b> Annually
CONTINUUM RABIES	Intervet, Incorporated License No. 286	Intervet, Incorporated	Dogs Cats	1 ml SC 1 ml SC	4 months 3 months	1 year later & triennially 1 year later & quadriennially
PRORAB-1	Intervet, Incorporated License No. 286	Intervet, Incorporated	Dogs Cats Sheep	1 ml IM or SC 2 ml IM	3 months 3 months	<b>NOT APPROVED FOR USE IN CALIFORNIA</b> Annually Annually
IMRAB Large Animal	Merial, Incorporated License No. 298	Merial, Incorporated	Cattle Horses Sheep	2 ml IM or SC 2 ml IM or SC 2 ml IM or SC	3 months 3 months 3 months	Annually Annually 1 year later & triennially
IMRAB 1	Merial, Incorporated License No. 298	Merial, Incorporated	Dogs Cats	1 ml SC	3 months	<b>NOT APPROVED FOR USE IN CALIFORNIA</b> Annually
IMRAB 1 TF	Merial, Incorporated License No. 298	Merial, Incorporated	Dogs Cats	1 ml SC	3 months	<b>NOT APPROVED FOR USE IN CALIFORNIA</b> Annually
IMRAB 3	Merial, Incorporated License No. 298	Merial, Incorporated	Dogs Cats Sheep Cattle Horses Ferrets	1 ml IM or SC 1 ml IM or SC 2 ml IM or SC 2 ml IM or SC 2 ml IM or SC 1 ml SC	4 months 3 months 3 months 3 months 3 months 3 months	1 year later & triennially 1 year later & triennially 1 year later & triennially Annually Annually Annually
IMRAB 3 TF	Merial, Incorporated License No. 298	Merial, Incorporated	Dogs Cats Ferrets	1 ml IM or SC 1 ml IM or SC 1 ml SC	4 months 3 months 3 months	1 year later & triennially 1 year later & triennially Annually

**B) MONOVALENT - RABIES GLYCOPROTEIN, LIVE CANARY POX VECTOR**

PUREVAX FELINE RABIES	Merial, Incorporated License No. 298	Merial, Incorporated	Cats	1 ml SC	8 weeks	Annually
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ROUTES AND SITES OF INOCULATION IN DOGS: California specifies sites and routes indicated to be effective in efficacy trials. Administration via other sites or routes may reduce effectiveness or be unsafe. Approved canine vaccines must be administered to dogs according to the manufacturer's recommendations either intramuscularly (IM) at one site in the thigh, or subcutaneously (SC) just behind the upper shoulder. For species other than dogs, refer to the product label.

Adapted from the Compendium of Animal Rabies Prevention and Control, 2008, National Association of State Public Health Veterinarians, Incorporated

**California Department of Public Health  
Compendium of U. S. Licensed Animal Rabies Vaccines - 2008,  
and Their Application in Animals Under the California Rabies Control Program**

**C) COMBINATION - INACTIVATED RABIES**

Product Name	Produced By	Marketed By	For Use In	Dosage/Route*	Age at Primary Vaccination <sup>†</sup>	Booster Recommendation
CONTINUUM DAP-R	Intervet, Incorporated License No. 286	Intervet, Incorporated	Dogs	1 ml SC	4 months	1 year later & triennially
CONTINUUM FELINE HCP-R	Intervet, Incorporated License No. 286	Intervet, Incorporated	Cats	1 ml SC	3 months	1 year later & quadriennially <sup>‡</sup>
EQUINE POTOMAVAC + IMRAB	Merial, Incorporated License No. 298	Merial, Incorporated	Horses	1 ml IM	3 months	Annually

**D) COMBINATION - RABIES GLYCOPROTEIN, LIVE CANARY POX VECTOR**

PUREVAX FELINE 3/ RABIES	Merial, Incorporated License No. 298	Merial, Incorporated	Cats	1 ml SC	8 weeks	Annually
PUREVAX FELINE 4/ RABIES	Merial, Incorporated License No. 298	Merial, Incorporated	Cats	1 ml SC	8 weeks	Annually

\* Intramuscularly (IM) at one site in the thigh.  
Subcutaneously (SC) just behind the upper shoulder.

<sup>†</sup> Minimum age (or older) and revaccinated one year later. A month = 28 days.

<sup>‡</sup> Non-rabies fractions have 3 year duration (see label)

Source: California Department of Public Health, Veterinary Public Health Section