**Rabies**

Human rabies is an acute viral illness of the central nervous system. The disease almost always progresses to coma or death within ten days of the first symptom. Death is usually due to respiratory paralysis. Onset is often heralded by a sense of apprehension, headache, fever, malaise, and various sensory changes at the site of an rabies infected animal bite.

**Laboratory Criteria for Confirmation (Human):**
- Detection by direct fluorescent antibody of viral antigens in a clinical specimen (preferably the brain or the nerves surrounding hair follicles in the nape of the neck), **OR**
- Isolation (in cell culture or in a laboratory animal) of rabies virus from saliva, cerebrospinal fluid (CSF) or central nervous system tissue, **OR**
- Identification of a rabies-neutralizing antibody titer \( \geq 5 \) (complete neutralization) in the serum or CSF of an unvaccinated person.

**Case Classification**

*Confirmed:* A clinically compatible case that is laboratory confirmed.

**Comment**

Laboratory confirmation by all of the above methods is strongly recommended.

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**Laboratory Criteria for Confirmation (Animal):**
- Detection of rabies viral antigens by direct fluorescent antibody test performed on central nervous system tissue, **OR**
- Isolation of rabies virus in cell culture or an inoculated laboratory animal

**Case Classification**

*Confirmed:* A case that is laboratory confirmed.

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**Epidemiology**

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<thead>
<tr>
<th>Kentucky</th>
<th>Human Cases</th>
<th>Animal Cases</th>
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<tr>
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<td>39</td>
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The last human case in Kentucky was in 1996. The exposure for this South Central Kentucky woman was probably a bat bite. The investigation and report are summarized in the *MMWR*, May 9, 1997, Vol. 46/No. 18 and the Kentucky Epidemiologic Notes and Reports, April, 1997.
A total of 1217 animal specimens were received for rabies testing in 2002. There were 52 samples (4.3%) unsuitable for testing because of decomposition or traumatic damage to the brain tissue. Seven of the positive cases (17.9% of positives) were in domestic animals. There were five positive dogs, two of which were owned unvaccinated adults and three were pups less than twelve weeks. There was also one positive unvaccinated cat. To date the raccoon strain of rabies has not been detected in Kentucky. The rabies laboratories tested 128 raccoons in 2003 and all but one were negative. The positive raccoon was not strain typed.