# Feline Immunodeficiency Virus

<table>
<thead>
<tr>
<th>Animal Group(s) Affected</th>
<th>Transmission</th>
<th>Clinical Signs</th>
<th>Severity</th>
<th>Treatment</th>
<th>Prevention and Control</th>
<th>Zoonotic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felids - most infections are species-specific, but some evidence for interspecific transmission in captive collections.</td>
<td>Horizontal transmission is the most prevalent route; prevalence suggests exposure occurs concurrent with sexual maturity. Vertical transmission can occur, but is the exception.</td>
<td>Asymptomatic to severe, depending on the strain of the virus and stage of the disease. Most often asymptomatic in non-domestic felids, but may include moderate to severe oral cavity disease, mild to progressive anemia, skin infections, weight loss, vomiting, diarrhea, and neurologic disease.</td>
<td>Usually asymptomatic but CD4⁺ cell depletion - depending on the strain – can present with increased morbidity and mortality. Infection is life-long.</td>
<td>No specific treatment, but supportive care indicated with clinical signs.</td>
<td>Testing all felids prior to introduction into a collection; controlling feral cat populations</td>
<td>No</td>
</tr>
</tbody>
</table>

**Fact Sheet compiled by:** Kristian J. Krause  
**Sheet completed on:** 3 August 2011; updated 25 February 2013  
**Fact Sheet Reviewed by:** Karen A. Terio, Susan VandeWoude, Winston Vickers  
**Susceptible animal groups:** Felids  
**Causative organism:** Feline Immunodeficiency Virus, a Lentivirus  
**Zoonotic potential:** None  
**Distribution:** Worldwide. In domestic cats, most commonly found in intact feral males. In non-domestic wild felids, an increase in seroprevalence correlates with sexual maturity.  
**Incubation period:** 3-6 months  
**Clinical signs:** In most non-domestic felids with naturally occurring disease, FIV positive cats are asymptomatic. However, in domestic cats and captive non-domestic felids infected with certain strains, especially older cats, signs can include mild to progressive anemia, moderate to severe oral disease, especially stomatitis, mild to significant weight loss, chronic or non-healing skin infections, vomiting, diarrhea, neurologic disease, and atypical lymphosarcoma.  
**Post mortem, gross, or histologic findings:** Findings correlate with associated diseases, if any, present.  
**Diagnosis:** Western blot and ELISA assays are the most commonly used method of diagnosing FIV. Western blot is available for domestic cats, cougars, and African lions and may be more sensitive than domestic cat FIV based ELISA. PCR is available, but is not as reliable because strain genetic variation is high.
**FELINE IMMUNODEFICIENCY VIRUS**

**Material required for laboratory analysis:** Serum, plasma or whole blood can be used for diagnosis.

**Relevant diagnostic laboratories:**
Any laboratory capable of running the FIV ELISA is able to diagnose FIV; however, this assay may be less sensitive than strain specific Western Blot.

**Treatment:** Most non-domestic felids do not need any treatment. Treatment is for any specific clinical signs that arise and is supportive.

**Prevention and control:** Felids should be tested by ELISA prior to introduction into a new facility with other felids. Special care should be taken to prevent interaction with feral cats.

**Suggested disinfectant for housing facilities:** FIV is labile outside the host animals. It is easily inactivated by detergents and routine disinfectants. Routine cleaning procedures will prevent transmission. Dental and surgical instruments, anesthesia circuits, endotracheal tubes, and other items potentially contaminated with body fluids should be thoroughly cleaned and sterilized between uses. Fluid lines, multi-dose medication containers, and food can become contaminated with body fluids (especially blood or saliva) and should not be shared.

**Notification:** Receiving institutions should be notified of an infected animal.

**Measures required under the Animal Disease Surveillance Plan:** Currently none

**Measures required for introducing animals to infected animal:** No specific measures need to be taken. Whether or not to introduce infected and non-infected animals should be based on a population management decision, knowing that non-infected animals may become infected. Knowledge of the strain and likely clinical disease can assist with these decisions.

**Conditions for restoring disease-free status after an outbreak:** Not applicable as infection is life-long

**Experts who may be consulted:**

Sue VandeWoude, DVM (Western blot testing)  
Professor of Comparative Medicine  
Department of Microbiology, Immunology, Pathology  
Director, Laboratory Animal Resources  
Colorado State University  
1619 Campus Delivery  
Fort Collins CO 80523-1619  
Phone: (970) 491-7162  
Fax: (970) 491-0523  
suev@lamar.colostate.edu

**References:**


