# LEPTOSPIROSIS

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<th>ANIMAL GROUP AFFECTED</th>
<th>TRANSMISSION</th>
<th>CLINICAL SIGNS</th>
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<tr>
<td>All mammal species</td>
<td>Per wounds or via intact mucous membranes</td>
<td>Often asymptomatic, in fatal cases fever, jaundice, weakness, lethargy, icterus, anaemia, abortions</td>
<td>Yes</td>
<td>Tetracycline, Doxycycline</td>
<td><em>In houses</em> Control of wild rodents, <em>in zoos</em> vaccination programs</td>
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**Fact sheet reviewed by**  
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**Susceptible animal groups**  
All mammal species, reptiles, (birds only serological )

**Causative organism**  
*Leptospiira interrogans* subspecies

**Zoonotic potential**  
Yes.

**Distribution**  
World - wide.

**Transmission**  
The bacteria is dispersed by urine of rodents, especially rats. The germ can survive many weeks in a slightly alkaline moisture enviroment.  
The infection is percutaneously via wounds or through intact mucous membranes

**Incubation period**  
3 – 30 days.

**Clinical symptoms**  
In many cases the infection is asymptomatic. In fatal cases anaemia, icterus, haemorrhagia of mucous membranes, haemoglobinuria, weakness, jaundice, fever, lethargy were observed. In chronic infected animals, abortions may be the only symptom.

**Post mortem findings**  
Icterus, haemorrhages (skin, lymph modes, viscera, heart, mucous membranes), liver necrosis, fatty degeneration and necrosis of renal tubules.

**Diagnosis**  
Serological (Micro Agglutination Test MAT, ELISA), PCR, dark field microscopy, silver impregnation.

**Material required for laboratory analysis**  
Urine, tissues (kidneys, urinary bladder), serum

**OIE Reference Laboratories**

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Relevant diagnostic laboratories
1. Local veterinary or medical laboratories
2. Institut für Veterinär-Bakteriologie der Universität Zürich, Winterthurerstrasse 270, CH-8057 Zürich, Switzerland

Treatment
Tetraccline, Doxycycline

Prevention and control in zoos
Control of wild rodents especially rats, disinfection, avoidance of wet floors in the animal enclosures

Suggested disinfectant for housing facilities
Most disinfectants are effective

Notification

Guarantees required under EU Legislation

Guarantees required by EAZA Zoos

Measures required under the Animal Disease Surveillance Plan

Measures required for introducing animals from non-approved sources

Measures to be taken in case of disease outbreak or positive laboratory findings

Conditions for restoring disease-free status after an outbreak

Experts who may be consulted

References
Melbourne, Australia


8. Planc; R.; Dean, D.: Overview of the epidemiology, microbiology and pathogenesis of Leptospira in humans. Microbes and infection 2 (2000); 1265-1276


