

LEPTOSPIROSIS IN PRIMATES

ANIMAL GROUP AFFECTED	TRANSMISSION	CLINICAL SIGNS	FATAL DISEASE ?	TREATMENT	PREVENTION & CONTROL
<i>Macaca</i> spp. <i>Cercopithecus aethiops</i> , <i>Pongo pygmaeus</i> , <i>Saimiri sciureus</i> , <i>Saguinus oedipus</i> , <i>Galago senegalensis</i>	Percutaneous-ly (wounds) or via mucous membranes	Mostly asymptomatic, in fatal cases anaemia, facial edema, vomitus, jaundice, weakness, lethargy, fever.	Yes	Tetracycline, Doxycycline	<i>In houses</i> Inaccessibility of wild rodents, vaccination of dogs <i>in zoos</i> mice-/rat eradication programs, vaccination programs

Fact sheet compiled by Manfred Brack, formerly German Primate Center, Göttingen / Germany.	Last update September 2002
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Susceptible animal groups Macaques, African green monkeys, orang-utans, squirrel monkeys, tamarins, bush babies.	
Causative organism <i>Leptospira interrogans</i> subspecies.	
Zoonotic potential Yes.	
Distribution World – wide.	
Transmission Leptospire are urinally excreted, they can survive in fertilised soil or in slightly alkaline water. Infection of new hosts is via mucous membranes or cutaneous lesions.	
Incubation period 3 – 30 days.	
Clinical symptoms Most spontaneous infections produce antibodies without disease. In fatal cases, which occurred especially in squirrel monkeys and <i>M. arctoides</i> anaemia, facial edema, vomitus, melaena, jaundice, weakness, lethargy, and fever were observed.	
Post mortem findings In fatal cases: icterus, haemorrhages (skin, lymph nodes, viscera, heart), liver necrosis, fatty degeneration and necrosis of renal tubules. Haemorrhagic pneumonia	
Diagnosis Dark-field microscopy, electron microscopy, silver impregnation. Serology: agglutination tests.	
Material required for laboratory analysis Urine, tissues, serum.	
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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

Tetracycline, Doxycycline (200 mg / week).

Prevention and control in zoos

Control of wild mice and rats, vaccination programs.

Suggested disinfectant for housing facilities**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**

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