

YELLOW FEVER

ANIMAL GROUP AFFECTED	TRANSMISSION	CLINICAL SIGNS	FATAL DISEASE ?	TREATMENT	PREVENTION & CONTROL
Primary Hosts: Cercopithecidae, Foreign Hosts: Cebidae	Arthropode-vector- bites (mosquitoes)	Haemorrhages, fever, leukopenia,	Yes: in New World monkeys and man	None	<i>In houses</i> <i>in zoos</i> 17 D-vaccine

Fact sheet compiled by Manfred Brack, formerly German Primate Center, Göttingen / Germany.	Last update 22.11.2008
Susceptible animal groups Reservoir hosts in Africa : <i>Colobus badius</i> , <i>Cercopithecus aethiops</i> , <i>C. ascanius schmidti</i> , <i>C. diana</i> , <i>C. mona</i> , <i>Cercocebus</i> spp., <i>Papio</i> spp., <i>Galago</i> spp., <i>Pan</i> spp.. Reservoir hosts in South-/ Central America : <i>Alouatta</i> spp., <i>Aotus trivirgatus</i> , <i>Saguinus</i> spp., <i>Ateles</i> spp., <i>Saimiri</i> spp., <i>Cebus</i> spp., <i>Callicebus</i> spp.	
Causative organism Yellow fever virus (Arboviruses, Flaviviridae) with two different genotypes in East- and West Africa and two other topotypes in the Americas.	
Zoonotic potential Yes. Yellow fever exists in two different cycles, a sylvatic one with monkeys being the reservoir host and an urban cycle with only man and mosquitoes involved.	
Distribution Originally in Africa between 15 ° North and 10 ° South, in the Americas: Argentina, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Peru, Venezuela, Trinidad.	
Transmission Via arthropode vector bites : Africa: <i>Aedes aegypti</i> , <i>Ae. africanus</i> , <i>Ae. simpsoni</i> , <i>Ae. furcifer</i> , <i>Ae. furcifer taylori</i> , <i>Ae. vittalus</i> , <i>Ae. luteocephalus</i> , <i>Ae. bromeliae</i> , <i>Ae. keniensis</i> . South-/ Central America: <i>Ae. aegypti</i> , <i>Ae. albopictus</i> , <i>Haemagogus janthinomys</i> , <i>Sabethes chloropterus</i> .	
Incubation period South American monkeys : 60 hs; man: 3 – 6 days.	
Clinical symptoms In Old World nonhuman primates usually none. Exception: In <i>Galago crassicaudatus</i> fatal with mortality rates up to 50%. In New World monkeys : fever, leukopenia, death.	
Post mortem findings New World monkeys: haemorrhagic diathesis, fatty liver degeneration, extensive hepatocellular necrosis.	
Diagnosis Virology: tissue culture, RT-PCR, mass tag PCR, radioimmunoassays Serology: ELISA- tests.	
Material required for laboratory analysis Altered organs, whole blood, serum.	
Relevant diagnostic laboratories Nationales Referenzzentrum für tropische Infektionserreger am Bernhard-Nocht –Institut für Tropenmedizin Robert-Koch-Str. 17 D 20359 Hamburg, Germany Phone: 040 – 42818 – 401 Fax: “ “ - 400 e-mail: MZD@uni-hamburg.de	
Treatment	



Prevention and control in zoos Personnel: vaccination.
Suggested disinfectant for housing facilities
Notification Yellow fever is subject to official notification of the WHO through the national authorities
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 1. Prof. Dr. B.Fleischer, NRZ, Hamburg 2. Prof. Dr. H. Schmitz, “ “
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