

## LISTERIOSIS

ANIMAL GROUP AFFECTED	TRANSMISSION	CLINICAL SIGNS	FATAL DISEASE ?	TREATMENT	PREVENTION & CONTROL
Pongidae, Cercopithecidae, Cebidae, Prosimiae	Perorally, percutaneously	In nonhuman primates mainly neonatal sepsis, abortion.	Yes	Antibiotics	<i>In houses</i> No feeding of raw milk or milk products  <i>in zoos</i> no feeding of raw milk or milk products

<b>Fact sheet compiled by</b> Manfred Brack, formerly German Primate Center, Göttingen / Germany.	<b>Last update</b> 22.11.2008
<b>Susceptible animal groups</b> Pongidae, Cercopithecidae, Cebidae, Prosimiae .	
<b>Causative organism</b> <i>Listeria monocytogenes</i> . (Corynebacteriaceae)- serovars 1 - 4	
<b>Zoonotic potential</b> Yes.	
<b>Distribution</b> World-wide.	
<b>Transmission</b> Perorally. <i>L.monocytogenes</i> has been isolated from healthy domestic animals and from food, especially milk and milk products. In newborn monkeys intrauterine, diaplacental transmission, in man also percutaneous infection reported. Cave: Listeria multiply even at low temperatures (refrigerator) , low pH and high saline concentrations	
<b>Incubation period</b> 1 – 5 days after experimental infection of rodents, in man 7 –21days.	
<b>Clinical symptoms</b> In nonhuman primates primarily uterine infections with abortion or neonatal septicaemia, occasionally meningoencephalitis or hepatitis. Primary cutaneous listeriosis of man is potentially fatal.	
<b>Post mortem findings</b> Focal liver necroses, focal necrotic placentitis,adrenal abscesses, purulent pyelitis, proctitis, meningoencephalitis.	
<b>Diagnosis</b> Cultivation (sheep blood agar after cold enrichment, Serology: slide agglutination.	
<b>Material required for laboratory analysis</b> Altered tissues, serum, suspected food products.	
<b>Relevant diagnostic laboratories</b> 1. Local veterinary or medical laboratories. 2. Konsiliarlaboratorium für Listerien, Institut für Medizinische Mikrobiologie und Hygiene, Klinikum Mannheim GmbH Theodor-Kutzer-Ufer 1 – 3 D 68167 MANNHEIM Tel.: 0621 383 2224 Fax: “ “ 3816 e-mail: herbert.hot@imh.ma.uni-heidelberg.de	



<b>Treatment</b> Antibiotics ( Ampicillin in high concentrations: man: 4- 6 x 2 mg/day over 14 – 21 days. Gentamycin : 180 – 240 mg over 14 days)Penicillin, Tetracycline, Erythromycin).
<b>Prevention and control in zoos</b> No feeding of raw milk or milk products, good hygienic practices.
<b>Suggested disinfectant for housing facilities</b>
<b>Notification</b>
<b>Guarantees required under EU Legislation</b>
<b>Guarantees required by EAZA Zoos</b>
<b>Measures required under the Animal Disease Surveillance Plan</b>
<b>Measures required for introducing animals from non-approved sources</b>
<b>Measures to be taken in case of disease outbreak or positive laboratory findings</b>
<b>Conditions for restoring disease-free status after an outbreak</b>
<b>Experts who may be consulted</b> Prof. Dr. H. Hof, Konsiliarlaboratorium Mannheim
<b>References</b> <ol style="list-style-type: none"><li>1. Brack, M. 1987. Agents Transmissible from Simians to Man. Springer, Berlin.</li><li>2. Chalifoux, L. V., and E. Hajema. 1981. Septicemia and meningoencephalitis caused by <i>Listeria monocytogenes</i> in a neonatal <i>Macaca fascicularis</i>. J. Med. Primatol. 10 : 336 – 339.</li><li>3. Dalton, C. B., C. C. Austin, J. Sobel, P. S. Hayes, W. F. Bibb, L. M. Graves, B.,Swaminathan, M. E. Practor, and P. M. Griffin. 1997. An outbreak of gastroenteritis and fever due to <i>Listeria monocytogenes</i> in milk. N. Engl. J. Med. 336 : 100 – 105.</li><li>4. Kock, N. D., R. A. Kock, E. Wambua, and K. Mohan. 2003. Listeriosis in a fre – ranging colobus monkey (<i>Colobus guereza caudatus</i>) in Kenya. Vet. Rec. 152: 141 - 142.</li><li>5. Linnan, M. J., L. Mascola, X. D. Lou, V. Goulet, S. May, C. Salminen, D. W. Hird, M. L. Yonekura, P. Hayes, R. Weaver, A. Audurier, P. D. Plikatis, S. L. Fannin, A. Kleks, and C. V. Bromme. 1988.. Epidemic listeriosis associated with Mexican – style cheese. N. Engl. J. Med. 319 : 823 – 828.</li><li>6. McLauchlin, J. and J. C. Low . 1994. Primary cutaneous listeriosis in adults : an occupational disease of veterinarians and farmers. Vet. Rec. 135 : 615 – 617.</li><li>7. Paul – Murphy, J., J. E. Markovits, I. Wesley, and J. A. Roberts . 1990. Listeriosis causing stillbirths and neonatal septicemia in outdoor housed macaques. Lab. Anim. Sci. 40 : 547.</li><li>8. Regan, E. J., G. A. J. Harrison, S. Buler, J. McLauchlin, M. Thomas, and S. Mitchell. 2005. Primary cutaneous listeriosis in a veterinarian. Vet. Rec. 157 : 207.</li><li>9. Zwart, P., M. J. Kaashoek, M. van der Hage, unf G. M. Dorresteijn. 1989. Erkrankungen südamerikanischer Säugetiere aus niederländischen Tiergärten. Verh. ber. Erkr. Zootiere 31 : 7 – 14.</li></ol>