

DAFTAR PUSTAKA

- Adler, B., dan de la Peña Moctezuma, A. (2010). Leptospira and leptospirosis. *Veterinary Microbiology*. 140(3-4): 287-296.
- Alashraf, A. R., Lau, S. F., Khairani-Bejo, S., Khor, K. H., Ajat, M., Radzi, R., Roslan, M. A., dan Abdul Rahman, M. S. (2020). First report of pathogenic Leptospira spp. isolated from urine and kidneys of naturally infected cats. *PLoS One*. 15(3): e0230048.
- Almazar, C. A., Montala, Y. B., dan Rivera, W. L. (2026). Leptospirosis in Southeast Asia: Investigating Seroprevalence, Transmission Patterns, and Diagnostic Challenges. *Tropical Medicine and Infectious Disease*. 11(1): 18.
- Andityas, M., Nuraini, D. M., Sota, P., Loong, S. K., Sripa, B., Sukon, P., Tangkawattana, P., dan Tangkawattana, S. (2024). Feline leptospirosis prevalence worldwide: A systematic review and meta-analysis of diagnostic approaches. *Veterinary World*. 17(2): 255.
- Arbour, J., Blais, M. C., Carioto, L., dan Sylvestre, D. (2012). Clinical leptospirosis in three cats (2001–2009). *Journal of the American Animal Hospital Association*. 48(4): 256-260.
- Astuti, A., dan Handayani, F. D. (2024). Optimizing Molecular Techniques For Accurate Examination Of Leptospira Species: A Comprehensive Primer For Researchers. *Journal of Vocational Health Studies*. 8(2): 108-115.
- Azocar-Aedo, L. (2022). Global prevalence and epidemiology of leptospirosis in domestic cats, a systematic review and meta-analysis. *Veterinaria México OA*. 9.
- Azócar-Aedo, L., Smits, H. L., dan Monti, G. (2014). Leptospirosis in Dogs and Cats: Epidemiology, Clinical Disease, Zoonotic Implications and Prevention. *Archivos de medicina veterinaria*. 46 (3): 337-348.
- Badan Pusat Statistik Kabupaten Sleman. (2026). *Kabupaten Sleman dalam Angka 2026*. Sleman: BPS Kabupaten Sleman.
- Benacer, D., Mohd Zain, S. N., Sim, S. Z., Mohd Khalid, M. K. N., Galloway, R. L., Souris, M., dan Thong, K. L. (2016). Determination of Leptospira borgpetersenii serovar Javanica and Leptospira interrogans serovar Bataviae as the persistent Leptospira serovars circulating in the urban rat populations in Peninsular Malaysia. *Parasites dan vectors*. 9(1): 117.
- Bharti, A. R., Nally, J. E., Ricaldi, J. N., Matthias, M. A., Diaz, M. M., Lovett, M. A., Levett, P.N., Gilrman, R. H., Willig, M.R., Gotuzzo, E., dan Vinetz, J.

- M. (2003). Leptospirosis: a zoonotic disease of global importance. *The Lancet infectious diseases*. 3(12): 757-771.
- Bilung, L. M., Tahar, A. S., Pui, C. F., Bakeri, M. K. S., Su'ut, L., Ngui, R., Kira, R., dan Apun, K. (2026). *Leptospira* and Leptospirosis: A Review of Species Classifications, Genomes, Morphological Structures, Antimicrobial Resistances, Transmissions, and Clinical Manifestations. *Current Microbiology*. 83 (2): 122.
- Bonhomme, D., dan Werts, C. (2020). Purification of LPS from *Leptospira*. In *Leptospira spp. Methods and Protocols*. New York: Springer US.
- Chan, Y.Y., Fornace, K., Wu, L., Arnold, B. F., Priest, J. W., Martin, D. L., Chang, M.A., Cook, J., Stresman, G., dan Drakeley, C. (2021). Determining seropositivity—a review of approaches to define population seroprevalence when using multiplex bead assays to assess burden of tropical diseases. *PLoS neglected tropical diseases*. 15(6): 1-16.
- Cordonin, C., Turpin, M., Bringart, M., Bascands, J. L., Flores, O., Dellagi, K., Mavingui, P., Roche, M., dan Tortosa, P. (2020). Pathogenic *Leptospira* and their animal reservoirs: testing host specificity through experimental infection. *Scientific Reports*: 10(1): 7239.
- Cullen, P. A., Xu, X., Matsunaga, J., Sanchez, Y., Ko, A. I., Haake, D. A., dan Adler, B. (2005). Surfaceome of *Leptospira* spp. *Infection and immunity*. 73(8): 4853-4863.
- de Oliveira, D., Airam Querino, V., Sara Lee, Y., Cunha, M., Nery Jr, N., Wessels Perelo, L., Alva, J.C.R., Ko, A.I, Casanovas-Massana dan Costa, F. (2020). Relationship between physicochemical characteristics and pathogenic *Leptospira* in urban slum waters. *Tropical Medicine and Infectious Disease*. 5(3): 146.
- Donato, G., Masucci, M., Hartmann, K., Goris, M. G., Ahmed, A. A., Archer, J., Alibrandi, A., dan Pennisi, M. G. (2022). *Leptospira* spp. prevalence in cats from southern Italy with evaluation of risk factors for exposure and clinical findings in infected cats. *Pathogens*. 11(10): 1129.
- Ellis, W. A. (1994). Leptospirosis as a cause of reproductive failure. *Veterinary Clinics of North America: Food Animal Practice*. 10(3): 463-478.
- Faine, S., Adler, B., Bolin, C., dan Perolat, P. (1999). *Leptospira and Leptospirosis Second Edition*. Meobourne: MediSci.
- Ganoza, C. A., Matthias, M. A., Saito, M., Cespedes, M., Gotuzzo, E., dan Vinetz, J. M. (2010). Asymptomatic renal colonization of humans in the peruvian Amazon by *Leptospira*. *PLoS neglected tropical diseases*. 4(2): e612.

- Gasem, M. H., Hadi, U., Alisjahbana, B., Tjitra, E., Hapsari, M. M. D. E. A. H., Lestari, E. S., Aman, U.H., Lokida, D., Salim, G., Kosasih, H., Merati, K.T.P., Laras, K., Arif, M., Lukman, N., Sudarmono, P., Lau, V.L.C., Neal, A., dan Karyana, M. (2020). Leptospirosis in Indonesia: diagnostic challenges associated with atypical clinical manifestations and limited laboratory capacity. *BMC infectious diseases*. 20(1): 179.
- Goldstein, R. E. (2010). Canine leptospirosis. *Veterinary Clinics: Small Animal Practice*. 40(6): 1091-1101.
- Goris, M. G., dan Hartskeerl, R. A. (2014). Leptospirosis serodiagnosis by the microscopic agglutination test. *Current protocols in microbiology*. 32(1): 12E-5.
- Haake, D. A., dan Matsunaga, J. (2010). Leptospira: a spirochaete with a hybrid outer membrane. *Molecular microbiology*. 77(4): 805-814.
- Hall, C. M., Bryant, K. A., Haskard, K., Major, T., Bruce, S., dan Calver, M. C. (2016). Factors determining the home ranges of pet cats: A meta-analysis. *Biological Conservation*. 203: 313-320.
- Hartmann, K., Egberink, H., Pennisi, M. G., Lloret, A., Addie, D., Belák, S., Boucraut-Baralon, C., Frymus, T., Gruffydd-Jones, T., Hosie, M.J., Lutz, H., Marsilio, F., Möstl, K., Radford, A.D., Thiry, E., Truyen, U., dan Horzinek, M. C. (2013). Leptospira species infection in cats: ABCD guidelines on prevention and management. *Journal of feline medicine and surgery*. 15(7): 576-581.
- Jayasundara, D., Gamage, C., Senavirathna, I., Warnasekara, J., Matthias, M. A., Vinetz, J. M., dan Agampodi, S. (2021). Optimizing the microscopic agglutination test (MAT) panel for the diagnosis of Leptospirosis in a low resource, hyper-endemic setting with varied microgeographic variation in reactivity. *PLoS neglected tropical diseases*. 15(7): e0009565.
- Koizumi, N., Wada, T., Morita, M., Mu, J. J., dan Ohnishi, M. (2020). Comparative genomic analysis of *Leptospira borgpetersenii* serogroup Javanica isolated from *Rattus* species in Southern Japan, Philippines, and Taiwan. *Infection, Genetics and Evolution*. 85: 104447.
- Kusmiyati, Noor, S.M., dan Supar. (2005). Leptospirosis pada Hewan dan Manusia di Indonesia. *WARTAZOA*. 15(4): 213-220.
- Levett, P.N. (2001). Leptospirosis. *Clinical Microbiology Reviews*. 4(2): 296-326.
- Manyullei, S., Amqam, H., dan Rahmadanti, S. I. (2021). Identification of *Leptospira* Serovar in Leptospirosis Suspect Serum in Manggala

Subdistrict, Makassar City. *Open Access Macedonian Journal of Medical Sciences*. 9(B): 407-410.

- Markey, B., Leonard, F., Archambault, M., Cullinane, A., dan Maguire, D. (2013). *Clinical Veterinary Microbiology Second Edition*. Edinburgh: Elsevier.
- Mazzotta, E., De Zan, G., Cocchi, M., Boniotti, M. B., Bertasio, C., Furlanello, T., Lucchese, L., Ceglie, L., Bellinati, L. dan Natale, A. (2023). Feline susceptibility to leptospirosis and presence of immunosuppressive co-morbidities: first European report of *L. interrogans* serogroup Australis sequence type 24 in a cat and survey of *Leptospira* exposure in outdoor cats. *Tropical Medicine and Infectious Disease*. 8(1): 54.
- Md-Lasim, A., Mohd-Taib, F. S., Abdul-Halim, M., Mohd-Ngesom, A. M., Nathan, S., dan Md-Nor, S. (2021). Leptospirosis and coinfection: should we be concerned?. *International journal of environmental research and public health*. 18(17): 9411.
- Mendes, J., Aymée, L., dan Lilenbaum, W. (2025). A scoping review of antimicrobial therapy in *Leptospira* infections in domestic animals. *Animals*. 15(20): 3045.
- Minter, A., Diggle, P. J., Costa, F., Childs, J., Ko, A. I., dan Begon, M. (2017). Evidence of multiple intraspecific transmission routes for *Leptospira* acquisition in Norway rats (*Rattus norvegicus*). *Epidemiology dan Infection*. 145(16): 3438-3448.
- Miotto, B. A., Camelo, Q. C., Grolla, A. C. M. M., de Oliveira, A. B. M., Silva, M. M. B., Hagiwara, M. K., dan Esteves, S. B. (2024). Current knowledge on leptospirosis in cats: A systematic review with metanalysis on direct detection, serological response, and clinical data. *Research in veterinary science*. 174: 105292.
- Miotto, B. A., Tozzi, B. F., Penteadó, M. D. S., Guilloux, A. G. A., Moreno, L. Z., Heinemann, M. B., Moreno, A.M., Lilenbaum, W., dan Hagiwara, M. K. (2018). Diagnosis of acute canine leptospirosis using multiple laboratory tests and characterization of the isolated strains. *BMC veterinary research*. 14(1): 22.
- Moinet, M., Wilkinson, D. A., Aberdein, D., Russell, J. C., Vallée, E., Collins-Emerson, J. M., Heuer, C. dan Benschop, J. (2021). Of mice, cattle, and men: A review of the eco-epidemiology of *Leptospira borgpetersenii* serovar Ballum. *Tropical Medicine and Infectious Disease*. 6(4): 189.

- Monahan, A. M., Callanan, J. J., dan Nally, J. E. (2009). Host-pathogen interactions in the kidney during chronic leptospirosis. *Veterinary pathology*. 46(5): 792-799.
- Mulyani, G. T., Hartati, S., Santoso, Y., Kurnia, P. A., dan Wirapratwi, D. K. (2017). Kejadian leptospirosis pada anjing di Daerah Istimewa Yogyakarta. *Jurnal Veteriner*. 18(3): 403-408.
- Mulyani, G. T., Raharjo, S., Purnomo, A. B., Santoso, Y., dan Kurnia, D. K. W. (2018). Leptospirosis pada kucing di Yogyakarta dan sekitarnya. *Jurnal Veteriner*. (4): 1-5.
- Mulyani, G. T., Sumiarto, B., Artama, W. T., Hartati, S., Putra, H. R. C., dan Widodo, E. (2016). Kajian Leptospirosis Pada Sapi Potong Di Daerah Aliran Sungai Progo Daerah Istimewa Yogyakarta (The Study of Bovine Leptospirosis in Progo Watershed, Yogyakarta). *Jurnal Kedokteran Hewan-Indonesian Journal of Veterinary Sciences*. 10(1): 68-71.
- Mulyani, G.T., Hartati, S., Wuryastuti, H., Tjahajati, I., Widiyono, I., Yanuartono, Purnamaningsih, S., Raharjo, S., Nururozi, A., Ganapragasam, A., dan Jiao, Y. S. (2019). Identifikasi Serovar Penyebab Leptospirosis pada Anjing di Yogyakarta Identification of Serovar that Caused Canine Leptospirosis in Yogyakarta. *Jurnal Sain Veteriner*. 37(2).
- Murillo, A., Goris, M., Ahmed, A., Cuenca, R., dan Pastor, J. (2020). Leptospirosis in cats: Current literature review to guide diagnosis and management. *Journal of feline medicine and surgery*. 22(3): 216-228.
- Nally, J. E., Ahmed, A. A., Putz, E. J., Palmquist, D. E., dan Goris, M. G. (2020). Comparison of real-time PCR, bacteriologic culture and fluorescent antibody test for the detection of *Leptospira borgpetersenii* in urine of naturally infected cattle. *Veterinary sciences*. 7(2): 66.
- Notobroto, H. B., Mirasa, Y. A., dan Rahman, F. S. (2021). Sociodemographic, behavioral, and environmental factors associated with the incidence of leptospirosis in highlands of Ponorogo Regency, Province of East Java, Indonesia. *Clinical Epidemiology and Global Health*. 12: 100911.
- Ojeda, J., Salgado, M., Encina, C., Santamaria, C., dan Monti, G. (2018). Evidence of interspecies transmission of pathogenic *Leptospira* between livestock and a domestic cat dwelling in a dairy cattle farm. *Journal of Veterinary Medical Science*, 80(8): 1305-1308.
- Padaga, M. C., Setianingrum, A., dan Fatmawati, M. (2018). *Penyakit Zoonosa Strategis di Indonesia: Aspek Kesehatan Masyarakat Veteriner*. Malang: Universitas Brawijaya Press.

- Picardeau, M. (2017). Virulence of the zoonotic agent of leptospirosis: still terra incognita?. *Nature Reviews Microbiology*. 15(5): 297-307.
- Putz, E. J., dan Nally, J. E. (2020). Investigating the immunological and biological equilibrium of reservoir hosts and pathogenic *Leptospira*: balancing the solution to an acute problem?. *Frontiers in microbiology*. 11: 2005.
- Ramadhani, T., dan Yunianto, B. (2012). Reservoir dan Kasus Leptospirosis di Wilayah Kejadian Luar Biasa. *Kesmas*. 7(4): 162-168.
- Ricardo, T., Azócar-Aedo, L. I., Previtali, M. A., dan Monti, G. (2024). Seroprevalence of pathogenic *Leptospira* serogroups in asymptomatic domestic dogs and cats: systematic review and meta-analysis. *Frontiers in Veterinary Science*. 11: 1301959.
- Rodríguez-Rodriguez, V. C., Castro, A. M., Soto-Florez, R., Urango-Gallego, L., Calderon-Rangel, A., Agudelo-Flórez, P., dan Monroy, F. P. (2024). Evaluation of serological tests for different disease stages of leptospirosis infection in humans. *Tropical Medicine and Infectious Disease*. 9(11): 283.
- Schuller, S., Francey, T., Hartmann, K., Hugonnard, M., Kohn, B. J. E. N., Nally, J. E., dan Sykes, J. (2015). European consensus statement on leptospirosis in dogs and cats. *Journal of small animal practice*. 56(3): 159-179.
- Sefira, F. M., Beng, J. T., Tiatry, S., Zahro, T., Salsabila, T. M., Nurkholiza, R., Zheng, M., dan Dinatha, V. O. D. (2025). Model Descriptive Analytics Terhadap Data Iklim Menggunakan Sistem Informasi Berbasis Datafikasi Dan Tam. *Journal of Information Technology and Computer Science (INTECOMS)*. 8(3): 877-885.
- Silva Neto, I. S. (2021). *Medicina: Ciência da Saúde e Pesquisa Interdisciplinar 4*. Ponta Grossa: Atena Editors.
- Susanti, S., Rachmawati, F., Mulyadi, A., Sukatma, S., Purba, H. H. S., Anastasia, Y., Ariyanti, T., dan Prihandani, S. S. (2025). Serological Detection of Bovine Leptospirosis In Sukabumi and Cianjur Regions. *Jurnal Kedokteran Hewan*. 19(1): 29-34.
- Sykes, J. E., Hartmann, K., Lunn, K. F., Moore, G. E., Stoddard, R. A., dan Goldstein, R. E. (2011). 2010 ACVIM small animal consensus statement on leptospirosis: diagnosis, epidemiology, treatment, and prevention. *Journal of veterinary internal medicine*. 25(1): 1-13.
- Weis, S., Rettinger, A., Bergmann, M., Llewellyn, J. R., Pantchev, N., Straubinger, R. K., dan Hartmann, K. (2017). Detection of *Leptospira* DNA in urine and

presence of specific antibodies in outdoor cats in Germany. *Journal of Feline Medicine and Surgery*. 19(4): 470-476.

- Widiasih, D. A., Lindahl, J. F., Artama, W. T., Sutomo, A. H., Kutanegara, P. M., Mulyani, G. T., Widodo, E., Djohan, T.S., dan Unger, F. (2021). Leptospirosis in ruminants in Yogyakarta, Indonesia: A serological survey with mixed methods to identify risk factors. *Tropical Medicine and Infectious Disease*. 6(2): 84.
- Wijaya, I. P. W. A., Permana, T., Dwipayanti, N.M.U., Chandrakrisna, P.H., Putu-Suariyani, N.L., Sujaya, I.N., dan Subrata, I.M.(2023). Prevalensi *Leptospira* sp. Pada Tikus dan Ayam dari Permukiman Padat di Denpasar Selatan, Indonesia. *Jurnal Kesehatan Lingkungan Indonesia*. 22(3): 304-312.
- Wiyata, R. P. K. T., dan Nugroho, W. (2021). Leptospirosis pada anjing di Indonesia. *Veterinary Biomedical and Clinical Journal*. 3: 7-22.
- World Health Organization Indonesia. (2020). *Leptospirosis Prevention and Control in Indonesia*. Diakses pada 12 Mei 2026, dari <https://www.who.int/indonesia/news/detail/24-08-2020-leptospirosis-prevention-and-control-in-indonesia>
- World Health Organization. (2007). *Leptospirosis laboratory manual*. New Delhi: WHO.
- World Organisation for Animal Health (WOAH). (2021). *Leptospirosis In: Manual of Diagnostic Tests and Vaccines for Terrestrial Animals*. Paris: WOAH.
- Yamaguchi, T., Higa, N., Okura, N., Matsumoto, A., Hermawan, I., Yamashiro, T., Suzuki, T., dan Toma, C. (2018). Characterizing interactions of *Leptospira interrogans* with proximal renal tubule epithelial cells. *BMC microbiology*. 18(1): 64.