

REFERENCES

- Adams, B. and Boots, M. (2010) How important is vertical transmission in mosquitoes for the persistence of dengue? Insights from a mathematical model. *Epidemics*. 2(1), 1–10.
- Aldersley, A., Pongsiri, A., Bunmee, K., Kijchalao, U., Chittham, W., Fansiri, T., Pathawong, N., Qureshi, A., Harrington, L.C., Ponlawat, A. and Cator, L.J. (2019) Too “sexy” for the field ? Paired measures of laboratory and semi-field performance highlight variability in the apparent mating fitness of *Aedes aegypti* transgenic strains. *Parasites & Vectors*. 12(1), 357.
- Arredondo-García, J.L., Hadinegoro, S.R., Reynales, H., Chua, M.N., Rivera Medina, D.M., Chotpitayasunondh, T., Tran, N.H., Deseda, C.C., Wirawan, D.N., Cortés Supelano, M., Frago, C., Langevin, E., Coronel, D., Laot, T., Perroud, A.P., Sanchez, L., Bonaparte, M., Limkittikul, K., Chansinghakul, D., et al. (2018) Four-year safety follow-up of the tetravalent dengue vaccine efficacy randomized controlled trials in Asia and Latin America. *Clinical Microbiology and Infection*. 24(7), 755–763.
- Barreto, M.L. and Teixeira, M.G. (2008) Dengue fever: a call for local, national, and international action. *The Lancet*. 372(9634), 205.
- Basurko, C., Matheus, S., Hildéral, H., Everhard, S., Restrepo, M., Cuadro-Alvarez, E., Lambert, V., Boukhari, R., Duvernois, J.P., Favre, A., Nacher, M. and Carles, G. (2018) Estimating the risk of vertical transmission of dengue: A prospective study. *American Journal of Tropical Medicine and Hygiene*. 98(6), 1826–1832.
- Becker, N., Petrić, D., Zgomba, M., Boase, C., Dahl, C., Madon, M. and Kaiser, A. (2010) *Mosquitoes and Their Control*. 2nd edition. Berlin: Springer.
- Bhatt, S., W. Gething, P., Brady, O.J., Messina, J.P., Farlow, A.W., Moyes, C.L., Drake, J.M., Brownstein, J.S., Hoen, A.G., Sankoh, O., Myers, M.F., George, D.B., Jaenisch, T. and Wint, G.R. W, S.I. (2013) The global distribution and burden of dengue. *HHS Public Access*. 496(7446), 504–507.
- Bosio, C.F., Thomas, R.E., Grimstad, P.R. and Rai, K.S. (1992) Variation in the efficiency of vertical transmission of dengue-1 virus by strains of *Aedes albopictus* (Diptera: Culicidae). *Journal of medical entomology*. 29(6), 985–989.
- Braks, M.A.H., Honório, N.A., Lourenço-De-Oliveira, R., Juliano, S.A. and Lounibos, L.P. (2003) Convergent Habitat Segregation of *Aedes aegypti* and *Aedes albopictus* (Diptera: Culicidae) in Southeastern Brazil and Florida. *Journal of Medical Entomology*. 40(6), 785–794.

Buckner, E.A., Alto, B.W. and Lounibos, L.P. (2016) Larval temperature-food effects on adult mosquito infection and vertical transmission of dengue-1 virus. *Journal of Medical Entomology*. 53(1), 91–98.

Buckner, E.A., Alto, B.W. and Lounibos, L.P. (2013) Vertical transmission of Key West Dengue-1 virus by *Aedes aegypti* and *Aedes albopictus* (Diptera: Culicidae) mosquitoes from Florida. *Journal of Medical Entomology*.

Bustin, S.A. and Mueller, R. (2005) Real-time reverse transcription PCR (qRT-PCR) and its potential use in clinical diagnosis. *Clinical Science*

De Castro, M.G., Nogueira, R.M.R., Schatzmayr, H.G., Miagostovich, M.P. and Lourenço-de-Oliveira, R. (2004) Dengue virus detection by using reverse transcription-polymerase chain reaction in Saliva and progeny of experimentally infected *Aedes albopictus* from Brazil. *Memorias do Instituto Oswaldo Cruz*. 99(8), 809–814.

CDC (2020) *Dengue*. [Online] [online]. Available from: <https://www.cdc.gov/dengue/index.html>.

Clements, A.N. (2012) *The biology of mosquitoes, volume 3: Transmission of viruses and interactions with bacteria*. Oxfordshire: CABI.

da Costa, C.F., dos Passos, R.A., Lima, J.B.P., Roque, R.A., de Souza Sampaio, V., Campolina, T.B., Secundino, N.F.C. and Pimenta, P.F.P. (2017) Transovarial transmission of DENV in *Aedes aegypti* in the Amazon basin: a local model of xenomonitoring. *Parasites and Vectors*. 10(1), 1–9.

Coudeville, L. and Garnett, G.P. (2012) Transmission Dynamics of the Four Dengue Serotypes in Southern Vietnam and the Potential Impact of Vaccination. *PLoS ONE*. 7(12), .

Faridah, L., Rinawan, F.R., Fauziah, N., Mayasari, W., Dwiartama, A. and Watanabe, K. (2020) Evaluation of health information system (HIS) in the surveillance of dengue in Indonesia: Lessons from case in Bandung, West Java. *International Journal of Environmental Research and Public Health*. 17(5), .

Ferreira-de-Lima, V.H., Andrade, P. dos S., Thomazelli, L.M., Marrelli, M.T., Urbinatti, P.R., Almeida, R.M.M. de S. and Lima-Camara, T.N. (2020) Silent circulation of dengue virus in *Aedes albopictus* (Diptera: Culicidae) resulting from natural vertical transmission. *Scientific Reports*. 10(1), 1–8.

Ferreira-De-Lima, V.H. and Lima-Camara, T.N. (2018) Natural vertical transmission of dengue virus in *Aedes aegypti* and *Aedes albopictus*: A systematic review. *Parasites and Vectors*. 11(1), 1–8.

Le Goff, G., Revollo, J., Guerra, M., Cruz, M., Barja Simon, Z., Roca, Y., Vargas Florès, J. and Hervé, J.P. (2011) Natural vertical transmission of dengue viruses by

Aedes aegypti in Bolivia. *Parasite*. 18(3), 277–280.

Goncalves, D.D.S., Hue, K.D.T., Thuy, V.T., Tuyet, N.V., Thi, G.N., Thi Thuy, V.H., Xuan, T.H.T., Thi, D. Le, Vo, L.T., Le Anh Huy, H., Van Thuy, N.T., Wills, B.A., Thanh, P.N., Simmons, C.P. and Carrington, L.B. (2020) Assessing the vertical transmission potential of dengue virus in field-reared *Aedes aegypti* using patient-derived blood meals in Ho Chi Minh City, Vietnam. *Parasites and Vectors*. 13(1), 1–9.

Grunnill, M. and Boots, M. (2016) How important is vertical transmission of dengue viruses by mosquitoes (Diptera: Culicidae)? *Journal of Medical Entomology*. 53(1), 1–19.

Günther, J., Martínez-Muñoz, J.P., Pérez-Ishiwara, D.G. and Salas-Benito, J. (2007) Evidence of vertical transmission of dengue virus in two endemic localities in the state of Oaxaca, Mexico. *Intervirology*. 50(5), 347–352.

Gutiérrez-Bugallo, G., Rodríguez-Roche, R., Díaz, G., Vázquez, A.A., Alvarez, M., Rodríguez, M., Bisset, J.A. and Guzman, M.G. (2017) First record of natural vertical transmission of dengue virus in *Aedes aegypti* from Cuba. *Acta Tropica*. 174:146–148.

Hutadjulu, G.B., Umniyati, S.R. and Thobari, J.A. (2012) Laboratory Testing of Transovarial Transmission in *Aedes Aegypti* Mosquito. *Tropical Medicine Journal*. 2(1), 12–19.

Joshi, V., Mourya, D.T. and Sharma, R.C. (2002) Persistence of dengue-3 virus through transovarial transmission passage in successive generations of *Aedes aegypti* mosquitoes. *American Journal of Tropical Medicine and Hygiene*. 67(2), 158–161.

Jousset, F.-X. (1981) Geographic *Aedes aegypti* strains and dengue-2 virus: Susceptibility, ability to transmit to vertebrate and transovarial transmission. *Annales de l'Institut Pasteur / Virologie*. 132(3), 357–370.

Kow, C.Y., Koon, L.L. and Yin, P.F. (2001) Detection of dengue viruses in field caught male *Aedes aegypti* and *Aedes albopictus* (Diptera: Culicidae) in Singapore by type-specific PCR. *Journal of Medical Entomology*. 38(4), 475–479.

Lambrechts, L., Scott, T.W. and Gubler, D.J. (2010) Consequences of the expanding global distribution of *aedes albopictus* for dengue virus transmission. *PLoS Neglected Tropical Diseases*

Luz, P.M., Vanni, T., Medlock, J., Paltiel, A.D. and Galvani, A.P. (2011) Dengue vector control strategies in an urban setting: an economic modelling assessment. *Lancet*. 377(9778), 1673–1680.

Maia, L.M.S., Bezerra, M.C.F., Costa, M.C.S., Souza, E.M., Oliveira, M.E.B.,

- Ribeiro, A.L.M., Miyazaki, R.D. and Shlessarenko, R.D. (2019) Natural vertical infection by dengue virus serotype 4, Zika virus and Mayaro virus in *Aedes (Stegomyia) aegypti* and *Aedes (Stegomyia) albopictus*. *Medical and Veterinary Entomology*. 33(3), 437–442.
- Mansor, S.M., Ummu, H.A., Lacroix, R., Angamuthu, C., Ravindran, T., Vasan, S.S., Shamala Devi, S., Lee, H.L., Murad, S., Nam, W.S., Alphey, L. and Nazni, W.A. (2016) Similar vertical transmission rates of dengue and chikungunya viruses in a transgenic and a non-transformed *Aedes aegypti* (L.) laboratory strain. *Tropical Biomedicine*. 33(1), 120–134.
- Morales, I., Salje, H., Saha, S. and Gurley, E.S. (2016) Seasonal distribution and climatic correlates of dengue disease in Dhaka, Bangladesh. *American Journal of Tropical Medicine and Hygiene*. 94(6), 1359–1361.
- Mosesa, L.P., Sorisi, A. and Pijoh, V.D. (2016) Deteksi transmisi transovarial virus dengue pada *Aedes aegypti* dengan teknik imunositokimia di Kota Manado. *Jurnal e-Biomedik*. 4(1), .
- Murillo, D., Murillo, A. and Lee, S. (2019) The role of vertical transmission in the control of dengue fever. *International Journal of Environmental Research and Public Health*. 16(5), .
- Ooi, E.E. and Gubler, D.J. (2011) 'Dengue and Dengue Hemorrhagic Fever', in Richard L. Guerrant, David H. Walker, & Peter F. Weller (eds.) *Tropical Infectious Diseases: Principles, Pathogens and Practice*. 3rd edition [Online]. Elsevier. p.
- Pacidônio, E.C., Caragata, E.P., Alves, D.M., Marques, J.T. and Moreira, L.A. (2017) The impact of Wolbachia infection on the rate of vertical transmission of dengue virus in Brazilian *Aedes aegypti*. *Parasites and Vectors*. 10(1), 1–6.
- Phanitchat, T., Zhao, B., Haque, U., Pientong, C., Ekalaksananan, T., Aromseree, S., Thaewongiew, K., Fustec, B., Bangs, M.J., Alexander, N. and Overgaard, H.J. (2019) Spatial and temporal patterns of dengue incidence in northeastern Thailand 2006-2016. *BMC Infectious Diseases*. 19(1), 1–12.
- Putri, D.F., Widiani, N. and Arivo, D. (2019) Penyebaran virus dengue secara transovarial pada vektor demam berdarah dengue nyamuk *Aedes aegypti*. *Holistik Jurnal Kesehatan*. 12(4), 216–223.
- Ross, P.A., Endersby, N.M. and Ary, H. (2018) A comprehensive assessment of inbreeding and laboratory adaptation in *Aedes aegypti* mosquitoes. *Evolutionary Applications*. 12(3), 572–586.
- Ruiz-Guzmán, G., Ramos-Castañeda, J., Hernández-Quintero, A. and Contreras-Garduño, J. (2016) Costs and benefits of vertical and horizontal transmission of dengue virus. *Journal of Experimental Biology*. 219(22), 3665–3669.

Sánchez-Vargas, I., Harrington, L.C., Doty, J.B., Black, W.C. and Olson, K.E. (2018) Demonstration of efficient vertical and venereal transmission of dengue virus type-2 in a genetically diverse laboratory strain of *Aedes aegypti*. *PLoS neglected tropical diseases*. 12(8), .

Satari, H.I. and Adilla, S.F. (2019) Keamanan Vaksin Dengue pada Anak. *Sari Pediatri*. 21(2), 129.

Satoto, T.B.T., Alvira, N., Wibawa, T. and Diptyanusa, A. (2017) Controlling factors that potentially against transmission of dengue hemorrhagic fever at state elementary schools in Yogyakarta. *Kesmas*. 11(4), 178–184.

Satoto, T.B.T., Listyantanto, A., Agustjahjani, S.D., Josef, H.K. and Widartono, B.S. (2018) Vertical transmission of dengue virus in the Yogyakarta airport area. *Environmental Health and Preventive Medicine*. 23(1), 1–7.

Satoto, T.B.T., Pascawati, N.A., Wibawa, T., Frutos, R., Maguin, S., Mulyawan, I.K. and Wardana, A. (2020) Entomological index and home environment contribution todengue hemorrhagic fever in Mataram City, Indonesia. *Kesmas*. 15(1), 32–39.

Satoto, T.B.T., Umniyati, S., Suardipa, A. and Sintorini, M. (2013) Effects of Temperature, Relative Humidity, and DEN-2 Virus Transovarial Infection on Viability of *Aedes aegypti*. *Kesmas: National Public Health Journal*. 7(7), 331.

Satoto, T.B.T., Umniyati, S.R., Astuti, F.D., Wijayanti, N., Gavotte, L., Devaux, C. and Frutos, R. (2014) Assessment of vertical dengue virus transmission in *Aedes aegypti* and serotype prevalence in Bantul, Indonesia. *Asian Pacific Journal of Tropical Disease*. 4(S2), S563–S568.

Sharp, T.M., Perez-Padilla, J. and Waterman, S.H. (2019) 'Travel-Related Infectious Diseases: Dengue', in *CDC Yellow Book 2020*. [Online]. New York: Oxford University Press. p.

Shroyer, D.A. (1990) Vertical maintenance of dengue-1 virus in sequential generations of *Aedes albopictus*. *Journal of the American Mosquito Control Association*. 6(2), 312–314.

Simmons, C.P., Farrar, J.J., van Vinh Chau, N. and Wills, B. (2012) Dengue. *The New England Journal of Medicine*. 366(15), 1423–1432.

Soni, M., Khan, S.A., Bhattacharjee, C.K. and Dutta, P. (2020) Experimental study of dengue virus infection in *Aedes aegypti* and *Aedes albopictus*: A comparative analysis on susceptibility, virus transmission and reproductive success. *Journal of Invertebrate Pathology*. 175(March), 107445.

Sorisi, A.M.H., Umniyati, S.R. and Satoto, T.B.T. (2014) Transovarial Transmission Index of Dengue Virus on *Aedes aegypti* and *Aedes albopictus*

Mosquitoes in Malalayang District in Manado, North Sulawesi, Indonesia. *Tropical Medicine Journal*. 1(2), 87–95.

Sridhar, S., Luedtke, A., Langevin, E., Zhu, M., Bonaparte, M., Machabert, T., Savarino, S., Zambrano, B., Moureau, A., Khromava, A., Moodie, Z., Westling, T., Mascareñas, C., Frago, C., Cortés, M., Chansinghakul, D., Noriega, F., Bouckenoghe, A., Chen, J., et al. (2018) Effect of Dengue Serostatus on Dengue Vaccine Safety and Efficacy. *New England Journal of Medicine*. 327–340.

Thenmozhi, V., Hiriyani, J.G., Tewari, S.C., Samuel, P.P., Paramasivan, R., Rajendran, R., Mani, T.R. and Tyagi, B.K. (2007) Natural vertical transmission of dengue virus in *Aedes albopictus* (Diptera: Culicidae) in Kerala, a Southern Indian State. *Japanese Journal of Infectious Diseases*. 60(5), 245–249.

Thongrunkiat, S., Wasinpiyamongkol, L., Maneekan, P., Prummongkol, S. and Samung, Y. (2012) Natural transovarial dengue virus infection rate in both sexes of dark and pale forms of *aedes aegypti* from an urban area of Bangkok, Thailand. *Southeast Asian Journal of Tropical Medicine and Public Health*. 43(5), 1146–1151.

Wasinpiyamongkol, L., Thongrunkiat, S., Jirakanjanakit, N. and Apiwathnasorn, C. (2003) Susceptibility and transovarial transmission of dengue virus in *Aedes aegypti*: a preliminary study of morphological variations. *The Southeast Asian journal of tropical medicine and public health*. 34 Suppl 2(February), 131–135.

WHO (2009) Dengue: guidelines for diagnosis, treatment, prevention and control. *World Health Organization*.

WHO (2020) *Dengue and severe dengue*. [Online] [online]. Available from: <https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue>.

WHO (2012) Global Strategy for Dengue Prevention and Control 2012–2020. *World Health Organization*.

Yacoub, S. and Farrar, J. (2014) 'Dengue', in Jeremy Farrar, Peter J. Hotez, Thomas Junghanss, Gagandeep Kang, David Lalloo, & Nicholas J. White (eds.) *Manson's Tropical Diseases*. 23rd edition [Online]. New York: Elsevier. pp. 162–170.

Yacoub, S., Mongkolsapaya, J. and Screaton, G. (2013) The pathogenesis of dengue. *Current Opinion in Infectious Diseases*. 26(3), 284–289.