Citation Information for: Can existing data on WNV infection in birds and mosquitos explain strain replacement?

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Notes on methodological decisions and oddities found in data extraction and full citation list sorted by data type

Titer and Survival

Brault et al. 2004

Brault, Aaron C, Langevin, Stanley A, Bowen, Richard A, Panella, Nicholas A, Biggerstaff, Brad J, Miller, Barry R, & Komar, Nicholas. (2004). Differential virulence of West Nile strains for American crows. Emerging infectious diseases, 10(12), 2161.

* An error bar on titer when there appeared to be only one surviving bird

* Overlapping error bars due to a lack of jitter. Measured carefully to connect error to the appropriate means

* No dates given for host capture (or dates overlooked if given). Publication date - years used as a placeholder.

Brault et al. 2007

Brault, Aaron C, Huang, Claire YH, Langevin, Stanley A, Kinney, Richard M, Bowen, Richard A, Ramey, Wanichaya N, . . . Miller, Barry R. (2007). A single positively selected West Nile viral mutation confers increased virogenesis in American crows. Nature genetics, 39(9), 1162-1166.

Brault et al. 2011

Brault, Aaron C, Langevin, Stanley A, Ramey, Wanichaya N, Fang, Ying, Beasley, David WC, Barker, Christopher M, . . . Bowen, Richard A. (2011). Reduced avian virulence and viremia of West Nile virus isolates from Mexico and Texas. The American Journal of Tropical Medicine and Hygiene, 85(4), 758-767.

* An error bar on titer when there appeared to be only one surviving bird

* Overlapping error bars due to a lack of jitter. Measured carefully to connect error to the appropriate means

* No dates given for host capture (or dates overlooked if given). Publication date - years used as a

placeholder.

Clark et al. 2006

Clark, Larry, Hall, Jeffrey, McLean, Robert, Dunbar, Michael, Klenk, Kaci, Bowen, Richard, & Smeraski, Cynthia A. (2006). Susceptibility of greater sage-grouse to experimental infection with West Nile virus. Journal of Wildlife Diseases, 42(1), 14-22.

Duggal et al. 2014

Duggal, N. K., Bosco-Lauth, A., Bowen, R. A., Wheeler, S. S., Reisen, W. K., Felix, T. A., ... & Brault, A. C. (2014). Evidence for co-evolution of West Nile Virus and house sparrows in North America. PLoS Negl Trop Dis, 8(10), e3262.

* Infection profiles of individual birds received from Dr. Nisha Duggal

* SW03 genotypes treated as genotypes of WN02 and NY2001 treated as NY99 (see main text)

Fang et al. 2006

Fang, Ying, & Reisen, William K. (2006). Previous infection with West Nile or St. Louis encephalitis viruses provides cross protection during reinfection in house finches. The American Journal of Tropical Medicine and Hygiene, 75(3), 480-485.

* An error bar on titer when there appeared to be only one surviving bird

* Range given for titer dose. Used center of range in analysis.

* Death of birds from days 6-7 given as a total. Assumed 1/2 died each day

Grubaugh et al. 2015

Grubaugh, Nathan D, Smith, Darci R, Brackney, Doug E, Bosco-Lauth, Angela M, Fauver, Joseph R, Campbell, Corey L, . . . Dietrich, Elizabeth A. (2015). Experimental evolution of an RNA virus in wild birds: evidence for host-dependent impacts on population structure and competitive fitness. PLoS Pathog, 11(5), e1004874.

* An error bar on titer when there appeared to be only one surviving bird

* No dates given for host capture (or dates overlooked if given). Publication date - years used as a placeholder.

Guerrero-Sanchez et al. 2011

Guerrero-SÃąnchez, Sergio, Cuevas-Romero, Sandra, Nemeth, Nicole M, Trujillo-Olivera, MT, Worwa, Gabriella, Dupuis, Alan, . . . Estrada-Franco, Jose Guillermo. (2011). West Nile virus infection of birds, Mexico. Emerg Infect Dis, 17(12), 2245-2252.

* Overlapping error bars due to a lack of jitter. Measured carefully to connect error to the appropriate means

* Some instances of data description in text not matching appropriately to data depicted in figure. Used data from figure

* No dates given for host capture (or dates overlooked if given). Publication date - years used as a placeholder.

Kilpatrick et al. 2010

Kilpatrick, A Marm, Dupuis, Alan P, Chang, Gwong-Jen J, & Kramer, Laura D. (2010). DNA vaccination of American robins (Turdus migratorius) against West Nile virus. Vector-Borne and Zoonotic Diseases, 10(4), 377-380.

Kilpatrick et al. 2013

Kilpatrick, A Marm, Peters, Ryan J, Dupuis, Alan P, Jones, Matthew J, Daszak, Peter, Marra, Peter P, & Kramer, Laura D. (2013). Predicted and observed mortality from vector-borne disease in wildlife: West Nile virus and small songbirds. Biological conservation, 165, 79-85.

* An error bar on titer when there appeared to be only one surviving bird

Kinney et al. 2006

Kinney, Richard M, Huang, Claire Y-H, Whiteman, Melissa C, Bowen, Richard A, Langevin, Stanley A, Miller, Barry R, & Brault, Aaron C. (2006). Avian virulence and thermostable replication of the North American strain of West Nile virus. Journal of general virology, 87(12), 3611-3622.

* No dates given for host capture (or dates overlooked if given). Publication date - years used as a placeholder.

Kipp et al. 2006

Kipp, Aaron M, Lehman, Jennifer A, Bowen, Richard A, Fox, Patricia E, Stephens, Michael R,

Klenk, Kaci, . . . Bunning, Michel L. (2006). West Nile virus quantification in feces of experimentally infected American and fish crows. The American Journal of Tropical Medicine and Hygiene, 75(4), 688-690.

* No dates given for host capture (or dates overlooked if given)

Komar et al. 2003

Komar, Nicholas, Langevin, Stanley, Hinten, Steven, Nemeth, Nicole, Edwards, Eric, Hettler, Danielle, . . . Bunning, Michel. (2003). Experimental infection of North American birds with the New York 1999 strain of West Nile virus. Emerging infectious diseases, 9(3), 311-322.

* Some oddities in the calculation of ranges.

Komar et al. 2005

Komar, Nicholas, Panella, Nicholas A, Langevin, Stanley A, Brault, Aaron C, Amador, Manuel, Edwards, Eric, & Owen, Jennifer C. (2005). Avian hosts for West Nile virus in St. Tammany Parish, Louisiana, 2002. The American Journal of Tropical Medicine and Hygiene, 73(6), 1031-1037.

Langevin et al. 2005

Langevin, Stanley A, Bowen, Richard A, Reisen, William K, Andrade, Christy C, Ramey, Wanichaya N, Maharaj, Payal D, . . . Romo, Hannah. (2014). Host competence and helicase activity differences exhibited by West Nile viral variants expressing NS3-249 amino acid polymorphisms. PloS one, 9(6), e100802.

* No dates given for host capture (or dates overlooked if given). Publication date - years used as a placeholder.

Langevin et al. 2014

Langevin, Stanley A, Brault, Aaron C, Panella, Nicholas A, Bowen, Richard A, & Komar, Nicholas. (2005). Variation in virulence of West Nile virus strains for house sparrows (Passer domesticus). The American Journal of Tropical Medicine and Hygiene, 72(1), 99-102.

* An error bar on titer when there appeared to be only one surviving bird

* Overlapping error bars due to a lack of jitter. Measured carefully to connect error to the appro-

priate means

Melian et al. 2015

Melian, Ezequiel Balmori, Hall-Mendelin, Sonja, Du, Fangyao, Owens, Nick, Bosco-Lauth, Angela M, Nagasaki, Tomoko, . . . Hall, Roy A. (2014). Programmed ribosomal frameshift alters expression of west nile virus genes and facilitates virus replication in birds and mosquitoes. PLoS Pathog, 10(11), e1004447.

* No dates given for host capture (or dates overlooked if given). Publication date - years used as a placeholder.

Nemeth et al. 2006

Nemeth, Nicole M, Hahn, D Caldwell, Gould, Daniel H, & Bowen, Richard A. (2006). Experimental West Nile virus infection in eastern screech owls (Megascops asio). Avian diseases, 50(2), 252-258.

* No dates given for host capture (or dates overlooked if given). Publication date - years used as a placeholder.

* Range given for titer dose. Used center of range in analysis.

* Most birds needle injected while a single bird was orally injected. Removed orally injected bird because it was at odds with the rest of the experiment.

Nemeth et al. 2009

Nemeth, Nicole M, Oesterle, Paul T, & Bowen, Richard A. (2009). Humoral immunity to West Nile virus is long-lasting and protective in the house sparrow (Passer domesticus). The American Journal of Tropical Medicine and Hygiene, 80(5), 864-869.

* Error bar on titer when there appeared to be only one surviving bird

* Range given for titer dose. Used center of range in analysis.

* Death of birds from days 5-9 given as a total. Assumed even mortality

Nemeth et al. 2011

Nemeth, NM, Thomsen, BV, Spraker, TR, Benson, JM, Bosco-Lauth, AM, Oesterle, PT, . . . Gidlewski, TL. (2011). Clinical and pathologic responses of American crows (Corvus brachyrhyn-

chos) and fish crows (C ossifragus) to experimental West Nile virus infection. Veterinary Pathology Online, 48(6), 1061-1074.

Oesterel et al. 2009

Oesterle, Paul T, Nemeth, Nicole M, VanDalen, Kaci, Sullivan, Heather, Bentler, Kevin T, Young, Ginger R, . . . Hall, Jeffrey S. (2009). Experimental infection of cliff swallows (Petrochelidon pyrrhonota) with varying doses of West Nile virus. The American Journal of Tropical Medicine and Hygiene, 81(6), 1159-1164.

Owen et al. 2006

Owen, Jennifer, Moore, Frank, Panella, Nicholas, Edwards, Eric, Bru, Rachel, Hughes, Megan, & Komar, Nicholas. (2006). Migrating birds as dispersal vehicles for West Nile virus. EcoHealth, 3(2), 79-85.

* No mention of mortality. Activity levels were listed as not being affected, and given other language assumed no birds died.

* Combined all data from migrant and control birds because of no direct manipulation by the authors

Owen et al. 2012

Owen, Jennifer C, Nakamura, Ayaka, Coon, Courtney AC, & Martin, Lynn B. (2012). The effect of exogenous corticosterone on West Nile virus infection in Northern Cardinals (Cardinalis cardinalis). Veterinary research, 43(1), 34.

Reisen and Fang 2007

Reisen, William K, & Fang, Ying. (2007). Does feeding on infected mosquitoes (Diptera: Culicidae) enhance the role of song sparrows in the transmission of arboviruses in California? Journal of Medical Entomology, 44(2), 316-319.

Reisen and Hahn 2007

Reisen, William K, & Hahn, D Caldwell. (2007). Comparison of immune responses of brown-headed cowbird and related blackbirds to West Nile and other mosquito-borne encephalitis viruses. Journal of Wildlife Diseases, 43(3), 439-449.

* No dates given for host capture (or dates overlooked if given). Publication date - years used as a placeholder.

Reisen et al. 2005

Reisen, WK, Fang, Y, & Martinez, VM. (2005). Avian host and mosquito (Diptera: Culicidae) vector competence determine the efficiency of West Nile and St. Louis encephalitis virus transmission. Journal of Medical Entomology, 42(3), 367-375.

* Death of House Finches in Figure 3B given as a total over the whole study duration. Due to too large of a time window left these data out. For sample size weighting for titer model death assumed to take place in the last 3 days of data, where the lack of data past certain day taken as complete mortality

* Death of some birds from days 4-7 given as a total. Assumed even mortality

* < 0.3 log10 titer units given. Used 0.3

* No dates given for host capture (or dates overlooked if given). Publication date - years used as a placeholder.

VanDalen et al. 2014

VanDalen, Kaci K, Hall, Jeffrey S, Clark, Larry, McLean, Robert G, & Smeraski, Cynthia. (2013). West Nile virus infection in American robins: new insights on dose response. PloS one, 8(7), e68537.

Worwa et al. 2015

Worwa, Gabriella, Wheeler, Sarah S, Brault, Aaron C, & Reisen, William K. (2015). Comparing Competitive Fitness of West Nile Virus Strains in Avian and Mosquito Hosts. PloS one, 10(5), e0125668.

Ziegler et al. 2013

Ziegler, Ute, Angenvoort, Joke, Fischer, Dominik, Fast, Christine, Eiden, Martin, Rodriguez, Ariel V, . . . Lierz, Michael. (2013). Pathogenesis of West Nile virus lineage 1 and 2 in experimentally infected large falcons. Veterinary microbiology, 161(3), 263-273.

* No dates given for host capture (or dates overlooked if given). Publication date - years used as a

placeholder.

Bird to Mosquito and Mosquito to Bird Transmission

Anderson et al. 2012

Anderson, John F, Main, Andy J, Cheng, Gong, Ferrandino, Francis J, & Fikrig, Erol. (2012). Horizontal and vertical transmission of West Nile virus genotype NY99 by Culex salinarius and genotypes NY99 and WN02 by Culex tarsalis. The American Journal of Tropical Medicine and Hygiene, 86(1), 134-139.

* Range given for titer dose. Used center of range in analysis.

* Virus retrieved from mosquitos by allowing them to feed on suckling mice

Bolling et al. 2012

Bolling, Bethany G, Olea-Popelka, Francisco J, Eisen, Lars, Moore, Chester G, & Blair, Carol D. (2012). Transmission dynamics of an insect-specific flavivirus in a naturally infected Culex pipiens laboratory colony and effects of co-infection on vector competence for West Nile virus. Virology, 427(2), 90-97.

* control used from control and coinfected

Ciota et al. 2013

Ciota, Alexander T, Chin, Pamela A, & Kramer, Laura D. (2013). The effect of hybridization of Culex pipiens complex mosquitoes on transmission of West Nile virus. Parasit Vectors, 6, 305.

* sample size given as 65-75. Used 70

* data from hybrids given. Just used non-hybrids

Danforth et al. 2015

Danforth, Mary E, Reisen, William K, & Barker, Christopher M. (2015). Extrinsic incubation rate is not accelerated in recent California strains of West Nile virus in Culex tarsalis (Diptera: Culicidae). Journal of Medical Entomology, 52(5), 1083-1089.

* Virus retrieved from mosquitos using capillary tube method (20 min of feeding)

Dodson et al. 2011

Dodson, Brittany L, Kramer, Laura D, & Rasgon, Jason L. (2011). Larval nutritional stress does not affect vector competence for West Nile virus (WNV) in Culex tarsalis. Vector-Borne and Zoonotic Diseases, 11(11), 1493-1497.

* Multiple studies averaged

* control used from control and nutritionally deprived

Dodson et al. 2014

Dodson, Brittany L, Hughes, Grant L, Paul, Oluwatobi, Matacchiero, Amy C, Kramer, Laura D, & Rasgon, Jason L. (2014). Wolbachia enhances West Nile virus (WNV) infection in the mosquito Culex tarsalis. PLoS Negl Trop Dis, 8(7), e2965.

* control used from control and coinfected

Dohm et al. 2002

Dohm, D. J., O'Guinn, M. L., & Turell, M. J. (2002). Effect of environmental temperature on the ability of Culex pipiens (Diptera: Culicidae) to transmit West Nile virus. Journal of medical entomology, 39(1), 221-225.

* Titer converted to transmission probability using the fitted relationship using the data in Moudy et al. 2007

* Reported transmission given as dissemination with the note that at least 90% of mosquitos with disseminated virus are able to transmit (Turell et al. 2000, 2001).

Ebel et al. 2005

Ebel, Gregory D, Rochlin, Ilia, Longacker, Jennifer, & Kramer, Laura D. (2005). Culex restuans (Diptera: Culicidae) relative abundance and vector competence for West Nile virus. Journal of Medical Entomology, 42(5), 838-843.

Goddard et al. 2002

Goddard, Laura B, Roth, Amy E, Reisen, William K, & Scott, Thomas W. (2002). Vector competence of California mosquitoes for West Nile virus. Emerging infectious diseases, 8(12), 1385-1391.

Goenaga et al. 2015

Goenaga, Silvina, Kenney, Joan L, Duggal, Nisha K, Delorey, Mark, Ebel, Gregory D, Zhang, Bo, . . . Brault, Aaron C. (2015). Potential for Co-Infection of a Mosquito-Specific Flavivirus, Nhumirim Virus, to Block West Nile Virus Transmission in Mosquitoes. Viruses, 7(11), 5801-5812.

* Virus retrieved by collecting saliva using capillary tube method

Hanley et al. 2005

Hanley, Kathryn A, Goddard, Laura B, Gilmore, Lara E, Scott, Thomas W, Speicher, James, Murphy, Brian R, & Pletnev, Alexander G. (2005). Infectivity of West Nile/dengue chimeric viruses for West Nile and dengue mosquito vectors. Vector-Borne & Zoonotic Diseases, 5(1), 1-10.

Johnson et al. 2003

Johnson, BW, Chambers, TV, Crabtree, MB, Arroyo, J, Monath, TP, & Miller, BR. (2003). Growth characteristics of the veterinary vaccine candidate ChimeriVaxâĎćâĂŘWest Nile (WN) virus in Aedes and Culex mosquitoes. Medical and veterinary entomology, 17(3), 235-243.

* Titer converted to transmission probability using the fitted relationship using the data in Moudy et al. 2007

Kilpatrick et al. 2008

Kilpatrick, A Marm, Meola, Mark A, Moudy, Robin M, & Kramer, Laura D. (2008). Temperature, viral genetics, and the transmission of West Nile virus by Culex pipiens mosquitoes. PLoS Pathog, 4(6), e1000092.

* Range given for titer dose. Used center of range in analysis.

* Transmission converted to Transmission | Infection

* Virus retrieved by collecting saliva using capillary tube method

Moudy et al. 2007

Moudy, Robin M, Meola, Mark A, Morin, Laura-Lee L, Ebel, Gregory D, & Kramer, Laura D. (2007). A newly emergent genotype of West Nile virus is transmitted earlier and more efficiently

by Culex mosquitoes. The American Journal of Tropical Medicine and Hygiene, 77(2), 365-370.

* Transmission converted to Transmission | Infection

* Data from intrathoracic inoculation of Culex pipiens excluded

* Virus retrieved by collecting saliva using capillary tube method

Moudy et al. 2009

Moudy, Robin M, Zhang, Bo, Shi, Pei-Yong, & Kramer, Laura D. (2009). West Nile virus envelope protein glycosylation is required for efficient viral transmission by Culex vectors. Virology, 387(1), 222-228.

* Range given for titer dose. Used center of range in analysis.

* Virus retrieved by collecting saliva using capillary tube method

Reisen et al. 2005

Reisen, WK, Fang, Y, & Martinez, VM. (2005). Avian host and mosquito (Diptera: Culicidae) vector competence determine the efficiency of West Nile and St. Louis encephalitis virus transmission. Journal of Medical Entomology, 42(3), 367-375.

* Range given for log10 dose. Used center of range

* Range given for sample size. Used center of range

Reisen et al. 2006

Reisen, William K, Fang, Ying, Lothrop, Hugh D, Martinez, Vincent M, Wilson, Jennifer, OâĂŹConnor, Paul, . . . Brault, Aaron C. (2006). Overwintering of West Nile virus in southern California. Journal of Medical Entomology, 43(2), 344-355.

* Range given for titer dose. âĂIJFed on sparrow at peak viremiaâĂİ. Taken as 6.5 (could be off and also more variableâĂę)

* Virus retrieved by collecting saliva using capillary tube method

Reisen et al 2006b

Reisen, William K, Fang, Ying, & Martinez, Vincent M. (2006). Vector competence of *Culiseta Incidens* and *Culex Thriambus* for West Nile Virus 1. Journal of the American Mosquito Control Association, 22(4), 662-665.

Richards et al. 2007

Richards, Stephanie L, Mores, Christopher N, Lord, Cynthia C, & Tabachnick, Walter J. (2007). Impact of extrinsic incubation temperature and virus exposure on vector competence of Culex pipiens quinquefasciatus Say (Diptera: Culicidae) for West Nile virus. Vector-Borne and Zoonotic Diseases, 7(4), 629-636.

Richards et al. 2014

Richards, Stephanie L, Anderson, Sheri L, & Lord, Cynthia C. (2014). Vector competence of Culex pipiens quinquefasciatus (Diptera: Culicidae) for West Nile virus isolates from Florida. Tropical Medicine & International Health, 19(5), 610-617.

Sardelis and Turell 2001

Sardelis, Michael R, & Turell, Michael J. (2001). Ochlerotatus j. japonicus in Frederick County, Maryland: discovery, distribution, and vector competence for West Nile virus. Journal-American Mosquito Control Association, 17(2), 137-141.

Sardelis et al. 2001

Sardelis, Michael R, Turell, Michael J, Dohm, David J, & O'Guinn, Monica L. (2001). Vector competence of selected North American Culex and Coquillettidia mosquitoes for West Nile virus. Emerging infectious diseases, 7(6), 1018.

* Transmission converted to Transmission | Infection

Tiawsirisup et al. 2005

Tiawsirisup, Sonthaya, Platt, Kenneth B, Evans, Richard B, & Rowley, Wayne A. (2005). A comparision of West Nile Virus transmission by Ochlerotatus trivittatus (COQ.), Culex pipiens (L.), and Aedes albopictus (Skuse). Vector-Borne & Zoonotic Diseases, 5(1), 40-47.

* Transmission converted to Transmission | Infection

Turell et al. 2000

Turell, Michael J, O'Guinn, MONICA, & Oliver, JOANNE. (2000). Potential for New York mosquitoes to transmit West Nile virus. The American Journal of Tropical Medicine and Hygiene, 62(3), 413-414.

Turell et al. 2001

Turell, Michael J, OâĂŹGuinn, Monica L, Dohm, David J, & Jones, James W. (2001). Vector competence of North American mosquitoes (diptera: culicidae) for West Nile virus. Journal of Medical Entomology, 38(2), 130-134.

Vanlandingham et al. 2004

Vanlandingham, Dana L, Schneider, Bradley S, Klingler, Kimberly, Fair, Joseph, Beasley, David, Huang, Jing, . . . Higgs, Stephen. (2004). Real-Time reverse transcriptaseâĂŞpolymerase chain reaction quantification of West Nile virus transmitted by Culex pipiens quinquefasciatus. The American Journal of Tropical Medicine and Hygiene, 71(1), 120-123.

Vanlandingham et al. 2007

Vanlandingham, Dana L, McGee, Charles E, Klinger, Kimberly A, Vessey, Nathan, Fredregillo, Chris, & Higgs, Stephen. (2007). Relative susceptibilties of South Texas mosquitoes to infection with West Nile virus. The American Journal of Tropical Medicine and Hygiene, 77(5), 925-928.

Vanlandingham et al. 2008

Vanlandingham, Dana L, McGee, Charles E, Klingler, Kimberly A, Galbraith, Sareen E, Barrett, Alan DT, & Higgs, Stephen. (2008). Comparison of oral infectious dose of West Nile virus isolates representing three distinct genotypes in Culex quinquefasciatus. The American Journal of Tropical Medicine and Hygiene, 79(6), 951-954.

Worwa et al. 2015

Worwa, Gabriella, Wheeler, Sarah S, Brault, Aaron C, & Reisen, William K. (2015). Comparing Competitive Fitness of West Nile Virus Strains in Avian and Mosquito Hosts. PloS one, 10(5), e0125668.

* Transmission converted to Transmission | Infection

JEV

Gould et al 1962

Gould, Douglas J, Barnett, Herbert C, & Suyemoto, William. (1962). Transmission of Japanese

encephalitis virus by Culex gelidus Theobald. Transactions of the Royal Society of Tropical Medicine and Hygiene, 56(5), 429-435.

Mackenzie Impoinvil et al. 2014

Mackenzie Impoinvil, L, Impoinvil, DE, Galbraith, SE, Dillon, RJ, Ranson, Hilary, Johnson, N, . . . Baylis, M. (2015). Evaluation of a temperate climate mosquito, Ochlerotatus detritus (= Aedes detritus), as a potential vector of Japanese encephalitis virus. Medical and veterinary entomology, 29(1), 1-9.

Muangman et al. 1972

Muangman, Debhanom, Edelman, Robert, Sullivan, Michael J, & Gould, Douglas J. (1972). Experimental transmission of Japanese encephalitis virus by Culex fuscocephala. American Journal of Tropical Medicine and Hygiene, 21(4), 482-486.

Van Den Hurk et al. 2003

Van Den Hurk, AF, Nisbet, DJ, Hall, RA, Kay, BH, Mackenzie, JS, & Ritchie, SA. (2003). Vector competence of Australian mosquitoes (Diptera: Culicidae) for Japanese encephalitis virus. Journal of Medical Entomology, 40(1), 82-90.

Case Study data for mosquito to bird ratio, bird community composition, mosquito bite preference

Hamer et al. 2009

Hamer, Gabriel L, Kitron, Uriel D, Goldberg, Tony L, Brawn, Jeffrey D, Loss, Scott R, Ruiz, Marilyn O, . . . Walker, Edward D. (2009). Host selection by Culex pipiens mosquitoes and West Nile virus amplification. The American Journal of Tropical Medicine and Hygiene, 80(2), 268-278.

* Odd confidence intervals given binomial error distribution

Simpson et al. 2012

Simpson, Jennifer E, Hurtado, Paul J, Medlock, Jan, Molaei, Goudarz, Andreadis, Theodore G,

Galvani, Alison P, & Diuk-Wasser, Maria A. (2012). Vector host-feeding preferences drive transmission of multi-host pathogens: West Nile virus as a model system. Proceedings of the Royal Society of London B: Biological Sciences, 279(1730), 925-933.

* Some oddities with confidence intervals

Loss et al. 2009

Loss, S. R., Hamer, G. L., Walker, E. D., Ruiz, M. O., Goldberg, T. L., Kitron, U. D., & Brawn, J. D. (2009). Avian host community structure and prevalence of West Nile virus in Chicago, Illinois. Oecologia, 159(2), 415-424.

Ruiz et al. 2010

Ruiz, M. O., Chaves, L. F., Hamer, G. L., Sun, T., Brown, W. M., Walker, E. D., ... & Kitron, U. D. (2010). Local impact of temperature and precipitation on West Nile virus infection in Culex species mosquitoes in northeast Illinois, USA. Parasit Vectors, 3(1), 19.

Newman et al. 2011

Newman, C. M., Cerutti, F., Anderson, T. K., Hamer, G. L., Walker, E. D., Kitron, U. D., ... & Goldberg, T. L. (2011). Culex flavivirus and West Nile virus mosquito coinfection and positive ecological association in Chicago, United States. Vector-Borne and Zoonotic Diseases, 11(8), 1099-1105.

Seroprevalence Data

Using the search algorithm <West Nile Virus Seroprevalence> in google scholar we located 12 studies within the first 80 hits that presented seroprevalence data for WNV. These studies included:

Bell et al 2006: North Dakota and Minnesota, 2003-2005

Bell, J. A., Brewer, C. M., Mickelson, N. J., Garman, G. W., & Vaughan, J. A. (2006). West Nile virus epizootiology, central Red River Valley, North Dakota and Minnesota, 2002âĂŞ2005. Emerg Infect Dis, 12(8), 1245-1247.

Bernard et al. 2001: New York, 2000

Bernard, K. A., Maffei, J. G., Jones, S. A., Kauffman, E. B., Ebel, G., Dupuis 2nd, A. P., ... & Kulasekera, V. L. (2001). West Nile virus infection in birds and mosquitoes, New York State, 2000. Emerging infectious diseases, 7(4), 679.

Beveroth et al 2006: Illinois, 2002-2004

Beveroth, T. A., Ward, M. P., Lampman, R. L., Ringia, A. M., & Novak, R. J. (2006). Changes in seroprevalence of West Nile virus across Illinois in free-ranging birds from 2001 through 2004. The American journal of tropical medicine and hygiene, 74(1), 174-179.

Chaves et al. 2016: Mexico, 2012

Chaves, A., Sotomayor-Bonilla, J., Monge, O., RamÃŋrez, A., Galindo, F., Sarmiento-Silva, R. E., ... & SuzÃąn, G. (2016). West Nile Virus in Resident Birds from Yucatan, Mexico. Journal of wildlife diseases, 52(1), 159-163. Chicago

Dusek et al. 2009: 2001-2003, Many locations along east coast and midwest

Dusek, R. J., McLean, R. G., Kramer, L. D., Ubico, S. R., Dupuis, A. P., Ebel, G. D., & Guptill, S. C. (2009). Prevalence of West Nile virus in migratory birds during spring and fall migration. The American journal of tropical medicine and hygiene, 81(6), 1151-1158.

Komar et al. 2001: New York, 2000

Komar, N. (2001). West Nile virus surveillance using sentinel birds. Annals of the New York Academy of Sciences, 951(1), 58-73.

Komar et al. 2005: Louisiana, 2002

Komar, N., Panella, N. A., Langevin, S. A., Brault, A. C., Amador, M., Edwards, E., & Owen, J. C. (2005). Avian hosts for West Nile virus in St. Tammany Parish, Louisiana, 2002. The American journal of tropical medicine and hygiene, 73(6), 1031-1037.

Loss et al. 2009: Illinois, 2005-2006

Loss, S. R., Hamer, G. L., Walker, E. D., Ruiz, M. O., Goldberg, T. L., Kitron, U. D., & Brawn, J. D. (2009). Avian host community structure and prevalence of West Nile virus in Chicago, Illinois. Oecologia, 159(2), 415-424.

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