Vector-borne diseases are on the rise globally. Diseases such as dengue, chikungunya, and zika are surging in incidence and severity in parts of the world where their mosquito vectors thrive. Despite the very real threat of mosquito-borne viral disease outbreak, local transmission parameters in Southern Louisiana are not well characterized. The presentation will describe ongoing research studies aiming to better understand the transmission dynamic of potential mosquito-borne diseases in New Orleans.