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## Comparing the effectiveness of different strains of *Wolbachia* for controlling Chikungunya, Dengue fever, and Zika

Mosquitoes infected with *Wolbachia* bacteria are less capable of transmitting dengue fever, Zika, and chikungunya and have shorter lifespan. In this talk, I present the mathematical model developed to quantify the impact of infecting wild *Aedes aegypti* and *Aedes albopictus* mosquitoes with wAlbB and wMel strains of *Wolbachia* in reducing the transmission of these diseases. The model accounts for the behaviour changes of the infectious population created by differences in the malaise caused by these diseases. The differences among the diseases, mosquitoes, and *Wolbachia* strains are captured by the model parameters for the mosquito-human transmission cycle.

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