

RISING TEMPERATURES REDUCE *Aedes* MOSQUITOES' ABILITY TO TRANSMIT ZIKA VIRUS



Aedes aegypti



Aedes albopictus

Aedes MOSQUITOES

Two species of mosquito carry and transmit Zika virus: *Aedes aegypti* and *Aedes albopictus*. They are vectors of Zika.

Populations of both mosquitoes were raised under baseline temperatures (average temperatures from where the mosquitoes were taken). Experimental groups lived in temperatures 2°C above baseline.

MOSQUITO LONGEVITY

Ae. aegypti lifespan decreased in warmer temperatures

BLOOD-FEEDING EFFECTS

Ae. albopictus mosquitoes fed less frequently under warmer temperatures.

VECTOR COMPETENCE & CAPACITY

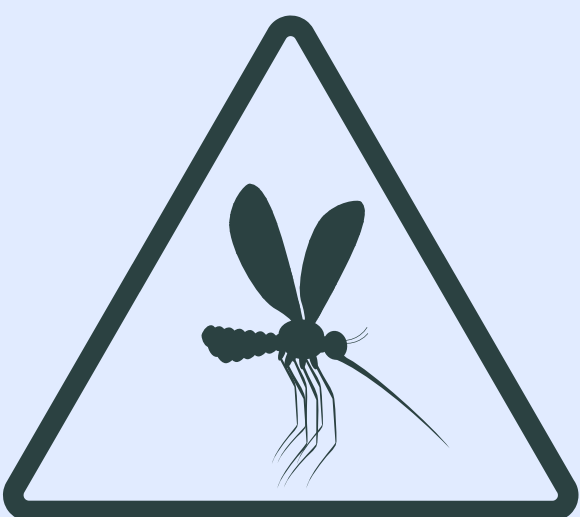
Higher temperatures led to a decreased ability to transmit Zika among *Ae. aegypti*.

Vector competence measures the mosquito's ability to carry and transmit a pathogen--Zika virus in this instance.

***Aedes* mosquitoes were less likely to transmit Zika in warmer temperatures.**

Vectorial capacity is the likelihood that a mosquito will transmit a disease. In this study, vectorial capacity decreased for both mosquito species.

THE FUTURE OF ZIKA RISK



Findings suggest that warmer temperatures could lead to negative biological effects on *Aedes* mosquitoes.

Further research must be done in order to better understand how changing temperatures will impact Zika virus transmission risk.