The World Mosquito Program has partnered with the Indonesian Government to bring our Wolbachia method to local communities in Yogyakarta City. The Indonesian Ministry of Health has identified Yogyakarta Province as one of the 10 provinces most affected by dengue each year in the last three decades.

Funded by Yayasan Tahija (Tahija Foundation), and in partnership with Universitas Gadjah Mada, community engagement began in 2012, with releases from January 2014 of Wolbachia-carrying mosquitoes.

The first randomised controlled trial of the Wolbachia method was conducted over 3 years and completed in 2020. Results showed a 77% reduction in dengue incidence in areas treated with Wolbachia when compared with untreated areas.

Mosquito releases began after two years of engagement with communities and approval by the provincial government. Our Public Acceptance Model guides engagement, communication and issues management. No mosquitoes are released without full endorsement from the local Community Reference Group.

Mosquito-Borne Disease Burden in Indonesia

Dengue was first reported in two of Indonesia’s 29 provinces in 1968. Today, dengue has spread to all provinces and is endemic in many large cities and small towns.

A large-scale efficacy study to evaluate the impact of our Wolbachia method was completed in 2020 with extremely promising results. This was the first gold-standard randomised controlled trial of Wolbachia for dengue control.
This is a breakthrough research program that aims to find a solution to our dengue fever problem. We hope the World Mosquito Program will be able to provide evidence on the impact of Wolbachia, in reducing the number of dengue fever cases in Yogyakarta City.

- Dr Ani Mufidah Sari  
  Head of Jetis Community Health Centre

Warsito feeds mosquitoes every day with his own blood. This might seem like a strange thing to do, but for Warsito and others who work for the World Mosquito Program around the world, it’s a safe and normal daily occurrence.

The World Mosquito Program breeds Aedes aegypti mosquitoes that contain the Wolbachia bacteria, which blocks the transmission of viruses between people. As we breed the mosquitoes in our labs, we need to keep them fed and healthy until they are ready to be released, and in order to do this we need to give them their food source – blood.

Warsito loves mosquitoes – to him, they are family

Warsito joined the World Mosquito Program in 2012, helping to set up and launch the first project in Indonesia, in the beautiful city of Yogyakarta. Warsito has been involved in many aspects of the project: rearing mosquitoes (he’s an entomologist, a scientist who studies insects), community engagement, running events, collaborating with partners and liaising with the local and national governments. He believes that the key to success is building communication and transparency.

About us

The World Mosquito Program is an international, not-for-profit initiative that works to protect the global community from mosquito-borne diseases including dengue, Zika, chikungunya and yellow fever.

Our approach has widespread support from communities, governments, research institutes and philanthropic partners around the world. Through collaboration and innovation, we can make a difference to millions of lives.

Currently the World Mosquito Program works in 11 countries in Asia, the Pacific and the Americas. Our aim is to protect 50 million people over the next five years.

In addition to the Oceania Office in Melbourne, Australia, the World Mosquito Program has a regional Asian Hub in Ho Chi Minh City, Vietnam and plans for an Americas Hub in Panama City, Panama.

These hubs support projects in their respective regions and contribute to core global operations.

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