

# **Dengue Risk Analysis Tool**

## **User Manual**

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# Landing Page

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## Dengue Risk Analysis

Early Action and Dengue Monitoring



### About

The dengue modelling tool aims to use outbreak and alarm indicators to derive prediction models on potential local outbreaks. It makes use of pathogen variables and socio-economic indicators, which may dictate opportunities for exposure and levels of immunity of the host.

This user-friendly interface should help organizations, including LGUs in the development of their dengue response plans way ahead of time. This web-based platform will also shorten the learning curve and provide duty-bearers with evidence-based inputs for decision-making. For LGUs with existing dengue risk analysis in place, the tool will support evidence-based planning and may help in the improved efficiencies in allocating limited resources on dengue prevention and mitigation.



**Ready?**  
**Start your analysis now.**

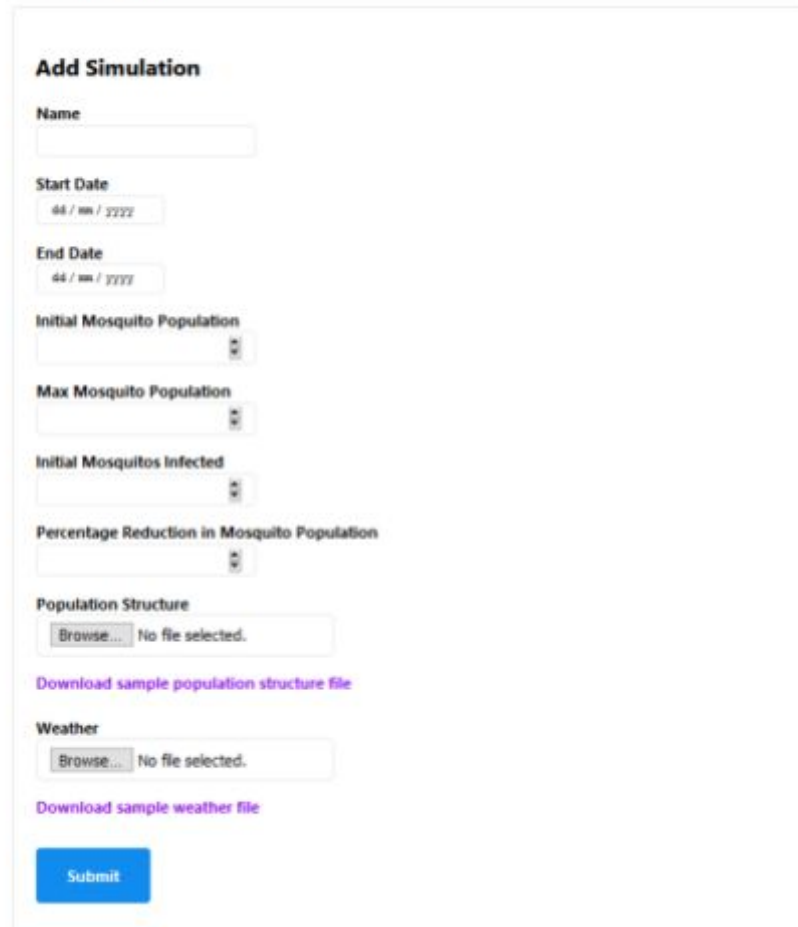
[Get started](#)

[Learn more](#)

Click the get started button or the model link to navigate to the simulation page. Clicking the learn more will download a copy of this user manual.

# Simulating

## Dengue Tool



The image shows a web form titled "Dengue Tool" with a section "Add Simulation". The form contains several input fields: "Name" (text), "Start Date" (date picker), "End Date" (date picker), "Initial Mosquito Population" (number), "Max Mosquito Population" (number), "Initial Mosquitos Infected" (number), and "Percentage Reduction in Mosquito Population" (number). Below these are two file upload sections: "Population Structure" and "Weather", each with a "Browse..." button and a "Download sample population structure file" / "Download sample weather file" link. A blue "Submit" button is at the bottom.

**Name:** This field indicates the name of your simulation, the name will be shown in the results page along with the date of simulation.

Simulation is only for one year

**Start Date:** Start date of the simulated dengue infection. Example: 01/01/2021

**End Date:** End date of the simulated dengue infection. Example: 30/12/2021

**Initial Mosquito Population:** The initial number of mosquitos in a community.

**Max Mosquito Population:** The maximum/limit of mosquitos in a community.

**Initial Mosquitos Infected:** The initial number of mosquitos that have dengue.

**Percentage Reduction in Mosquito Population:** The percentage of reduction in mosquito population possibly from preventative measures.

Sample files for the required CSV files are downloadable as seen in the image.

**Population Structure:** Data for the population structure in a community.

**Weather:** Data for weather in a community.

## Variable Definition

**population1**: number of susceptible humans who never had dengue before

**population2**: number of susceptible humans who had dengue before

**hosp**: probability of being tested or hospitalized

**severity1**: severity of newly infected humans who never had dengue before

**severity2**: severity of newly infected humans who had dengue before

**initialinfected1**: current infectious active cases (humans who never had dengue before)

**initialinfected2**: current infectious active cases (humans who had dengue before)

**initialvaccinated1**: vaccinated humans who never had dengue before

**initialvaccinated2**: vaccinated humans who had dengue before

**vaccinationrate1**: vaccination rate of humans who never had dengue before (per day)

**vaccinationrate2**: vaccination rate of humans who had dengue before (per day)

**maxmosquitobites**: maximum number of mosquito bites a human acquired per day

## Results

### Simulation Results

- [Malabon 2021-03-17 15:15](#)
- [Taguig 2021-03-17 15:14](#)
- [Manila 2021-03-17 14:37](#)
- [Manila 2021-03-17 14:28](#)

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Displaying 1-4 of 4

The user is able to see previous simulations on this page. 10 resulting items are displayed before needing to go to the next page.

# Malabon 2021-03-17 15:15



Upon choosing a name, the user will be shown the results of the simulation. The user may also download the raw data using the button below the charts.