



MATH225

Week 3 Lab Assignment

Name:

Instructor Name: Professor Cruz Sealey

Please use this template to help answer the questions listed in the lab instructions. The “parts” below refer to the parts listed in the lab instructions. Type your answers and post your screenshots in the spaces given below. Then, save this document with your name and submit it inside the course room.

Part 1. Read the assigned article.

Please reach out to your instructor if you did not receive the assigned article for the term by Monday of Week 3.

Title: Review of [Sentinel Enhanced Dengue Surveillance System — Puerto Rico, 2012–2022]

Author(s): [Zachary J. Madewell, PhD; Alfonso C. Hernandez-Romieu, MD; Joshua M. Wong, MD; Laura D. Zambrano, PhD; Hannah R. Volkman, PhD; Janice Perez-Padilla, MPH; Dania M. Rodriguez, MS; Olga Lorenzi, MS; Carla Espinet, MPH; Jorge Munoz-Jordan, PhD; Verónica M. Frasqueri-Quintana, MPH; Vanessa Rivera-Amill, PhD; Luisa I. Alvarado-Domenech, MD; Diego Sainz, MD; Jorge Bertran, MD; Gabriela Paz-Bailey, MD, PhD; Laura E. Adams, DVM]

Summarize the assigned article in one paragraph. Make sure to quote and interpret at least one statistic.

The article is about a quantitative study/observation of the island of Puerto Rico. SEDSS or the Sentinel Enhanced Dengue Surveillance System was created to survey and monitor the occurrence of dengue or dengue-like Acute febrile illnesses. Dengue is a mosquito borne viral illness which is an endemic in Puerto Rico. “From May 2012 to December 2022, there were 43,608 unique visits from 35,855 total participants enrolled in SEDSS” (Madewell et. Al 2024) 45% of this 43,608 were from Ponce.

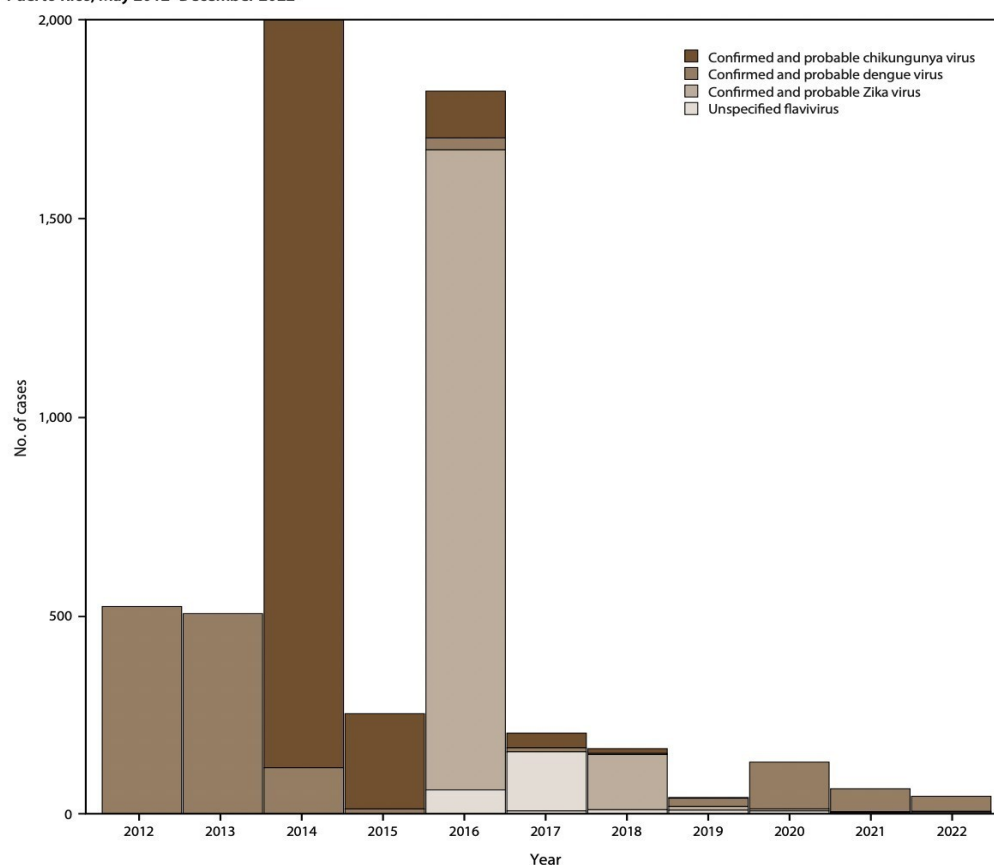
Through the surveillance 1432 of the cases were actual dengue, 2293 were confirmed or probable cases of chikungunya and 1918 confirmed or probable cases of Zika virus. The article or report shows the way SEDSS

can track and monitor the outbreak of different viral infections. Using statistics to follow the trends of different symptoms and signs to better control the possibility of an outbreak or endemic within the Puerto Rican Island.

Part 2. Choose ONE Graph, Table or Chart from the article.

Post a screenshot of ONE graph, chart or table from the assigned article (The article may have more than one chart/table/graph but you only choose one to analyze in this lab):

FIGURE 1. Confirmed or probable dengue, chikungunya, and Zika virus cases, by year — Sentinel Enhanced Dengue Surveillance System, Puerto Rico, May 2012–December 2022*



* Cases were deemed to be laboratory-confirmed if a serum or urine specimen was polymerase chain reaction- or immunoglobulin M-positive for a particular arbovirus.