



MATH225

Week 3 Lab Assignment

Name:

Instructor Name: Curtis Brown

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 [Surveillance of Waterborne Disease Outbreaks Associated with Drinking Water — United States, 2015–2020](#)

Author(s): [Jasen M. Kunz, MPH1](#); [Hannah Lawinger, MPH1](#); [Shanna Miko, DNP1](#); [Megan Gerdes, MPH2](#); [Muhammad Thuneibat, MPH2](#); [Elizabeth Hannapel, MPH3](#); [Virginia A. Roberts, MSPH1](#)

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

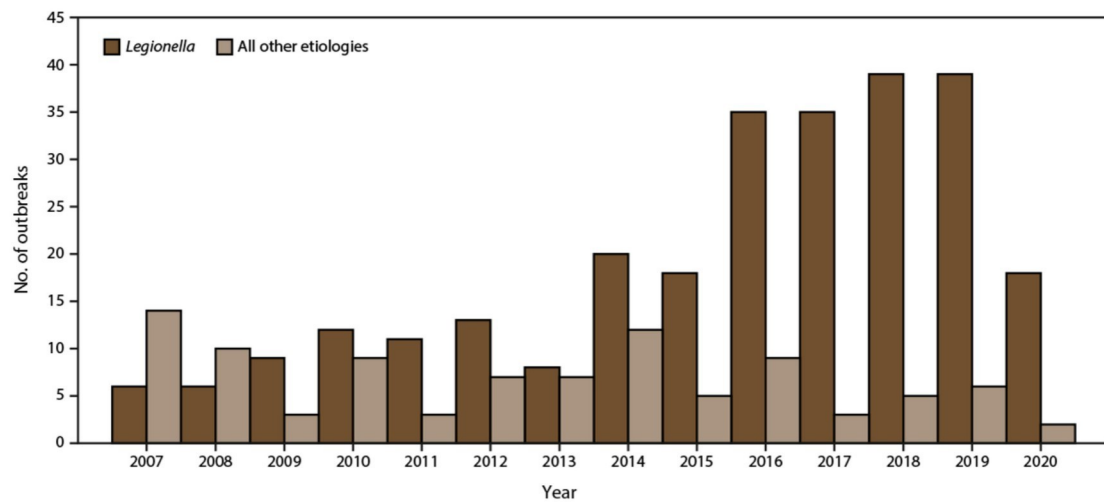
28 U.S. states reported 214 outbreaks associated with contaminated drinking water between 2015 and 2020, resulting in at least 2,140 illnesses, 563 hospitalizations, and 88 fatalities. A significant contributor was the *Legionella* bacterium, which caused 37% of all recorded infections, 98% of biofilm-related outbreaks, and the great majority of severe cases, including 98% of hospitalizations and 98% of fatalities. Enteric bacteria including *Shigella*, *Campylobacter*, and norovirus, on the other hand, caused 61% of illnesses but had far less severe consequences; just 2% of patients required hospitalization, and there were no recorded deaths.



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 4. Number of reported drinking water-associated outbreak etiologies,* by *Legionella* compared with all other etiologies — Waterborne Disease and Outbreak Surveillance System, United States, 2007–2020



* N = 366 outbreak etiologies

Part 3. Analyze the article.

Analysis

(Answer the following questions thoroughly in complete sentences, referencing the graph, chart or table you selected from the article.)