Cause of Death Exploration with Tableau

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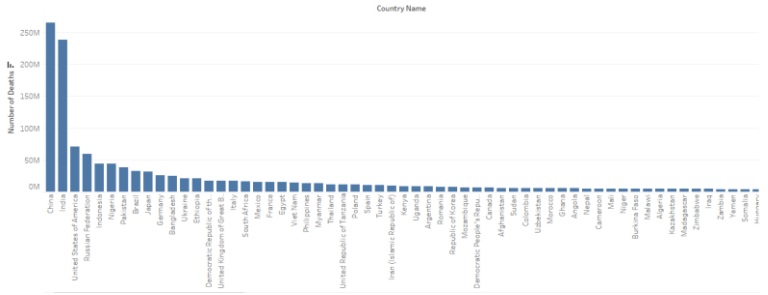
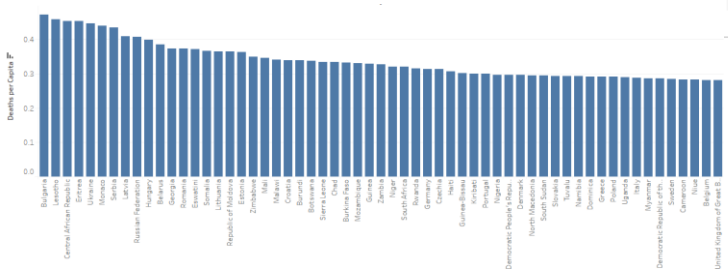
Project Process

- Importing & Cleaning Data
  - Much simpler & more complete compared to previous projects (Kaggle had data listed as a "10.0" on usability scale)
  - Used Alpha-3 codes to identify countries (see https://www.iban.com/country-codes)
    - Easy to find other data sources with this information
  - Downloaded & related World Population data (from https://statisticstimes.com/)
    - Provided many useful data points including:
      - Area (km²)
      - Density (per km²)
      - Growth Rate
      - Population (for a given decade)
  - Downloaded & related country information data
    - Utilized for the "Continent" and "Region" columns
    - Allows for filtering on specific geographical areas
  - Created my own "Cause of Death Category" table
    - Split the 33 causes of death into 7 categories for deeper trend analysis

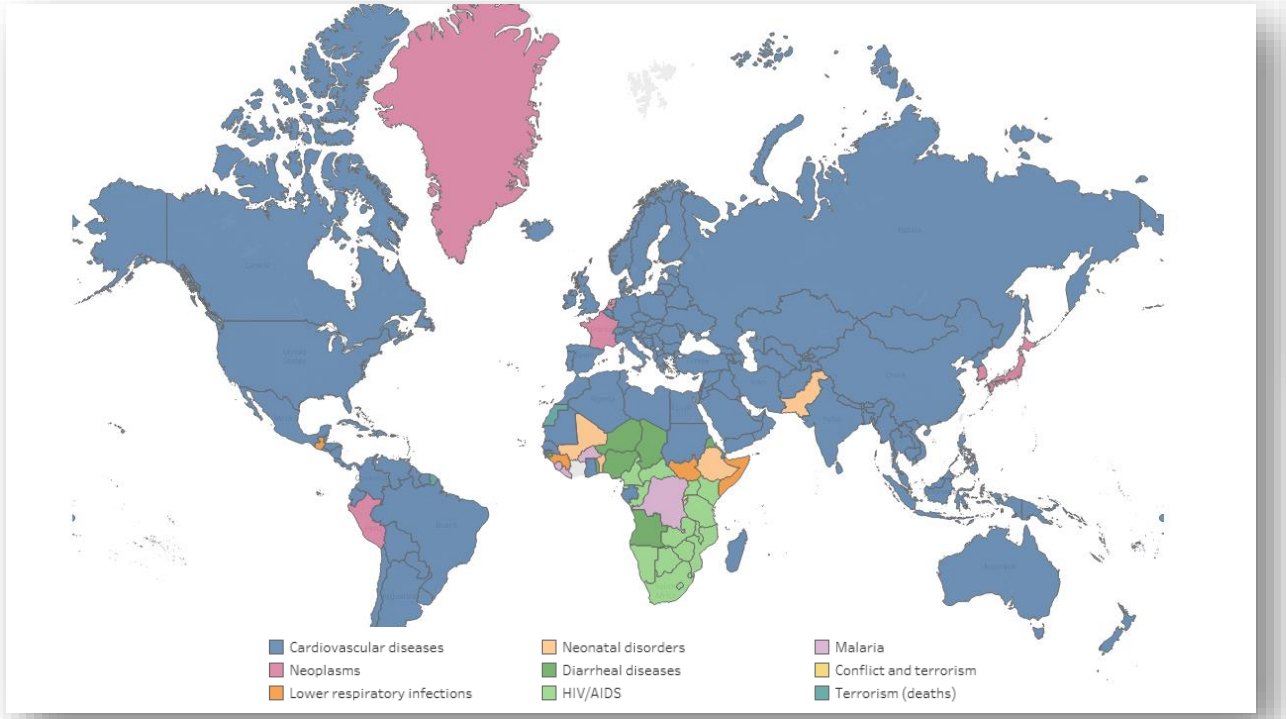
Category	Cause of Death
Infectious Diseases	Diarrheal diseases
	HIV/AIDS
	Lower respiratory infections
	Malaria
	Meningitis
	Tuberculosis
Injuries	Drowning
	Environmental heat and cold exposure
	Exposure to forces of nature
	Fire, heat, and hot substances
	Poisonings
	Road injuries
	Self-harm
Maternal and Neonatal Health	Maternal disorders
	Neonatal disorders
Non-Communicable Diseases	Acute hepatitis
	Alzheimer's disease and other dementias
	Cardiovascular diseases
	Chronic kidney disease
	Chronic respiratory diseases
	Cirrhosis and other chronic liver diseases
	Diabetes mellitus
	Digestive diseases
	Neoplasms
	Parkinson's disease
Nutritional Disorders	Nutritional deficiencies
	Protein-energy malnutrition
Substance Use Disorders	Alcohol use disorders
	Drug use disorders
Violence and Conflict	Conflict and terrorism
	Interpersonal violence
	Number of executions (Amnesty International)
	Terrorism (deaths)

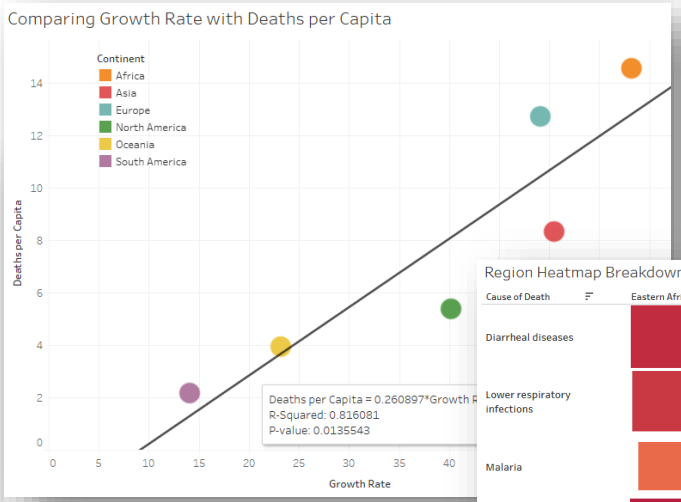
- Data Exploration & Analysis
  - Removed all rows that did not contain a country code
  - No duplicates detected
  - Using basic "Number of Deaths" became an obvious issue when including countries with large populations
    - The solution? per Capita calculations

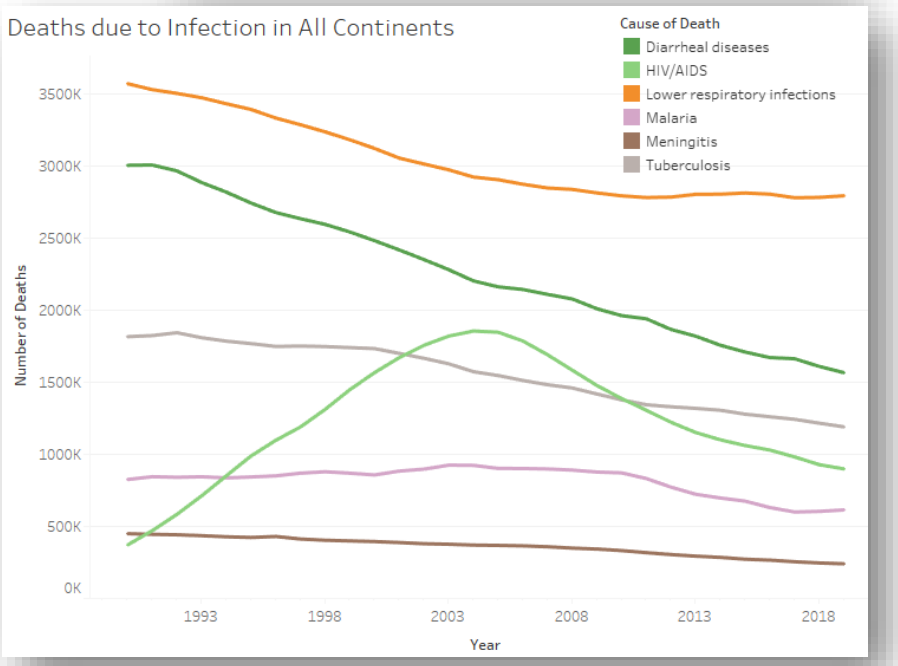


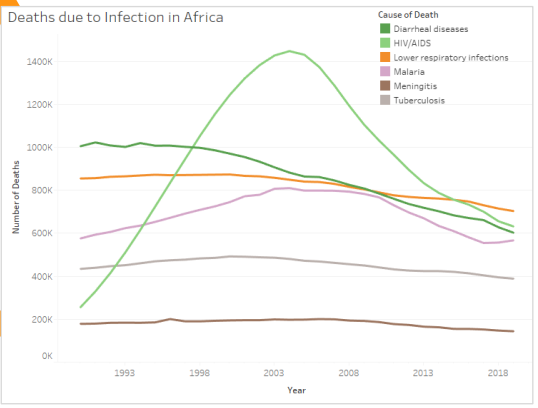


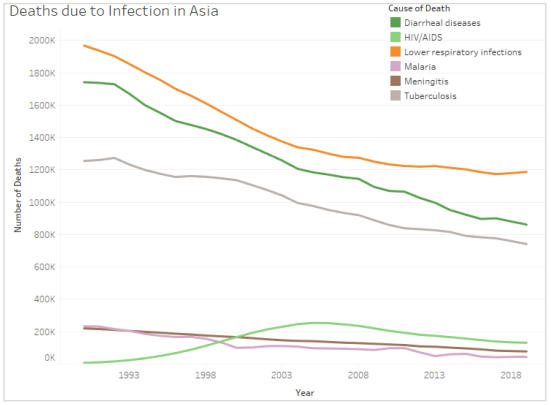
Discoveries

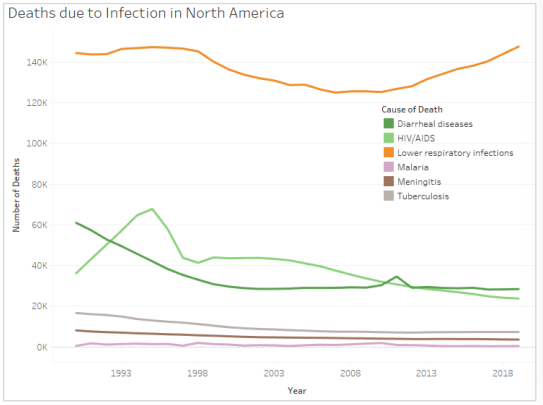




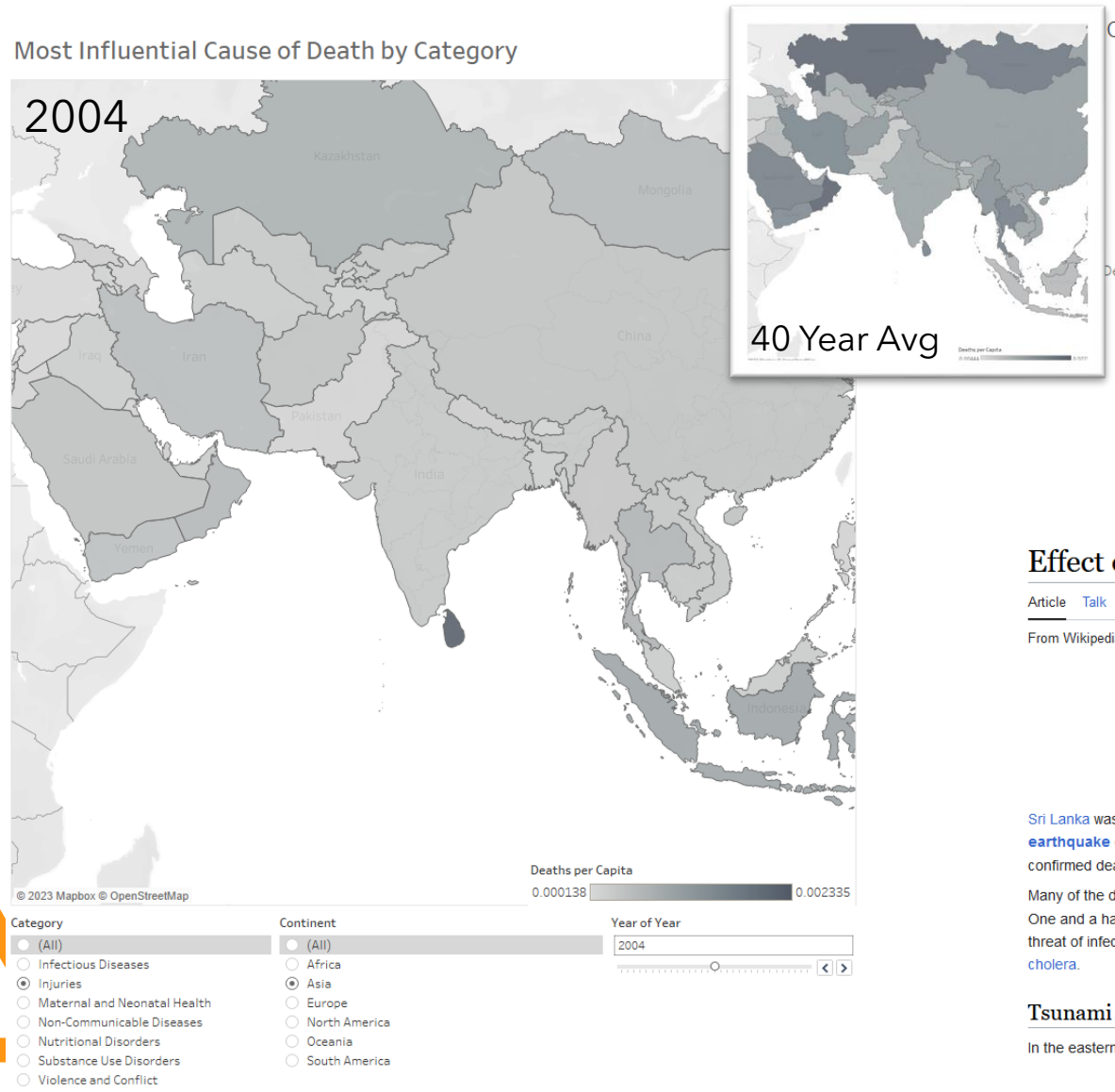


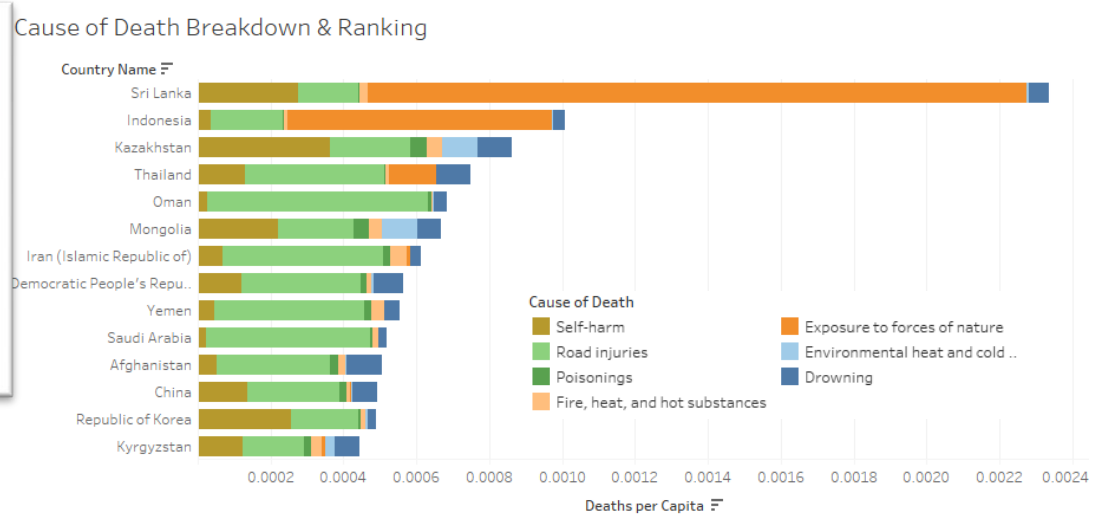






Discoveries cont.





Effect of the 2004 Indian Ocean earthquake on Sri Lanka

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- This article's **factual accuracy may be compromised due to out-of-date information**. *(August 2014)*
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Sri Lanka was one of the countries **struck by the tsunami resulting from the Indian Ocean earthquake on December 26, 2004**. On January 3, 2005, Sri Lankan authorities reported 30,000+ confirmed deaths.[1]

Many of the dead were adults and the elderly.[*clarification needed*] The south and east coasts were worst hit.[2] One and a half million people were displaced from their homes. The death toll continued to rise as the threat of infectious diseases breaking out turned into a reality, with doctors confirming first cases of cholera.

Effect of the 2004 Indian Ocean earthquake on Sri Lanka

Red Cross volunteers removes corpse from the shore

Tsunami and immediate effects [edit]

In the eastern Sri Lankan Ampara District alone, more than 10,000 people died. A holiday train, the

Challenges

- Took a bit of time to get accustomed to Tableau's interface
  - Started off with Tableau Desktop, trial expired, then had to restart on Public (didn't apply for student's license)
- Finding sufficient & detailed population data
  - Had to use one that only had data once a decade
  - Meant I had to average out population over 40 years for the "per capita" calculations
- Picking the right visuals & trying to tell a story
  - Easy to make a bunch of charts, harder to make a meaningful message