**Project 2: World Immunization Progress**

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**Data:** Unicef Immunization percentages by country over the recent 40 years. Data on 14 vaccines. Sanitation, hygiene, and water supply measures.

UNICEF, acronym of United Nations Children's Fund, formerly (1946–53) United Nations International Children's Emergency Fund, special program of the United Nations (UN) devoted to aiding national efforts to improve the health, nutrition, education, and general welfare of children.

<https://data.unicef.org/topic/child-health/immunization/>

Life expectancy and infant mortality rates will be obtained from data.worldbank.org

**Goal:** The goal of this project is to collect, visualize, and analyze the percent to people vaccinated in each country worldwide. We want to answer 1. how percent immunized changed over, 2. how percent immunized is distributed worldwide, and 3. Does there exist a relationship between percent immunized and life expectancy or infant mortality. For countries with low immunization rates, it is of interest to answer why. While this is beyond the scope of what this data can answer, we might find a smaller regional focus where we could look for data regarding vaccination formulation, how it is administered, and outside factors such as sanitation or political environment.

**Inspiration:** Our inspiration for choosing this topic is Shilpa’s background in immunization research and her ongoing passion for learning more about the influence of immunization to world health. Some visualization inspiration we found include: <https://unicef.shinyapps.io/wuenic_analytics/> and <https://data.humdata.org/organization/unicef-data>

**Extras to consider:** It would be nice to include a scraping of a recent article from WHO about each vaccine.We might also be able to include a forecast of immunization trends for countries of interest.