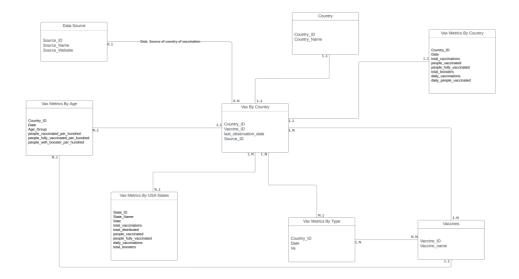
## **ER Diagram:**



## Schema:

- Country (Country\_ID\*, Country\_Name)
- Vaccines (Vaccine\_ID\*, Vaccine\_Name)
- Data\_Source (Source\_ID\*, Source\_Name, Source\_Website)
- Vax\_By\_Country (Country\_ID\*, Vaccine\_ID\*, Source\_ID\*, last\_observation\_date, total\_vaccinations, people\_vaccinated, people\_fully\_vaccinated, daily\_vaccinations, daily\_people\_vaccinated, total\_boosters)
- Vax\_Metrics\_By\_Country (Country\_ID\*, Date\*, Vaccine\_ID\*, people\_vaccinated\_per\_hundred, people\_fully\_vaccinated\_per\_hundred, total\_distributed, people\_with\_booster\_per\_hundred)
- Vax\_Metrics\_By\_Type (Vaccine\_ID\*, Age\_Group, Total\_Vaccinations, people\_vaccinated, people\_fully\_vaccinated, total\_boosters)
- Vax\_Metrics\_By\_Age (Country\_ID\*, Vaccine\_ID\*, Age\_Group, Date\*, people\_vaccinated, people\_fully\_vaccinated, total\_boosters)
- Vax\_Metrics\_By\_USA\_States (State\_ID\*, State\_Name, Date\*, total\_vaccinations, people\_vaccinated, people\_fully\_vaccinated, people\_with\_booster\_per\_hundred, daily\_vaccinations)

```
Database SQL:
```

```
1) Create Country table
CREATE TABLE Country (
   Country_ID INT PRIMARY KEY,
   Country_Name VARCHAR(255)
);
   2) Create Vaccines table
CREATE TABLE Vaccines (
       Vaccine_ID INT PRIMARY KEY,
       Vaccine_Name VARCHAR(255)
);
3) Create Data_Source table
CREATE TABLE Data_Source (
Source_ID INT PRIMARY KEY,
Source_Name VARCHAR(255),
Source_Website VARCHAR(255)
);
4) Create Vax_By_Country table
CREATE TABLE Vax_By_Country (
Country_ID INT,
Vaccine_ID INT,
Source_ID INT,
last_observation_date DATE,
total_vaccinations INT,
people_vaccinated INT,
people_fully_vaccinated INT,
```

```
daily_vaccinations INT,
 daily_people_vaccinated INT,
total_boosters INT,
PRIMARY KEY (Country_ID, Vaccine_ID, Source_ID),
FOREIGN KEY (Country_ID) REFERENCES Country (Country_ID),
FOREIGN KEY (Vaccine_ID) REFERENCES Vaccines (Vaccine_ID),
FOREIGN KEY (Source_ID) REFERENCES Data_Source (Source_ID)
);
5) Create Vax_Metrics_By_Country table
CREATE TABLE Vax_Metrics_By_Country (
Country_ID INT,
Date
         DATE.
Vaccine_ID INT,
people_vaccinated_per_hundred DECIMAL(5, 2),
people_fully_vaccinated_per_hundred DECIMAL(5, 2),
total_distributed INT,
people_with_booster_per_hundred DECIMAL(5, 2),
PRIMARY KEY (Country_ID, Date, Vaccine_ID),
FOREIGN KEY (Country_ID) REFERENCES Country (Country_ID),
FOREIGN KEY (Vaccine_ID) REFERENCES Vaccines (Vaccine_ID)
);
6) Create Vax_Metrics_By_Type table
CREATE TABLE Vax_Metrics_By_Type (
Vaccine_ID INT,
Age_Group VARCHAR(255),
Total_Vaccinations INT,
people_vaccinated INT,
people_fully_vaccinated INT,
total_boosters INT,
```

```
PRIMARY KEY (Vaccine_ID, Age_Group),
FOREIGN KEY (Vaccine_ID) REFERENCES Vaccines (Vaccine_ID)
);
-7)Create Vax_Metrics_By_Age table
CREATE TABLE Vax_Metrics_By_Age (
Country_ID INT,
Vaccine ID INT,
Age_Group VARCHAR(255),
Date DATE,
people_vaccinated INT,
people_fully_vaccinated INT,
total_boosters INT,
PRIMARY KEY (Country_ID, Vaccine_ID, Age_Group, Date),
FOREIGN KEY (Country_ID) REFERENCES Country (Country_ID),
FOREIGN KEY (Vaccine_ID) REFERENCES Vaccines (Vaccine_ID)
);
8) Create Vax_Metrics_By_USA_States table
CREATE TABLE Vax_Metrics_By_USA_States (
State_ID INT PRIMARY KEY,
State_Name VARCHAR(255),
Date DATE,
total_vaccinations INT,
people_vaccinated INT,
people_fully_vaccinated INT,
people_with_booster_per_hundred DECIMAL(5, 2),
daily_vaccinations INT
);
```