**COVID 19 DATA**

**https://docs.google.com/spreadsheets/d/1bdIT7r0pOCwvainhp1pIFavqAx2bQh7H5i8XhGdud9s/edit?gid=1272699406#gid=1272699406**

**📥 Steps to download Google sheet as Excel File.**

1. **Open your Google Sheet**
   * Go to Google Sheets and open the file you want.
2. **Go to the Menu Bar**
   * At the top, click on **File**.
3. **Choose the Download Option**
   * From the dropdown menu, hover over **Download**.
4. **Select Microsoft Excel (.xlsx)**
   * Click **Microsoft Excel (.xlsx)** from the list.
5. **Save the File**
   * The file will download to your computer in .xlsx format.
   * You can now open it with Microsoft Excel.

**📊 COVID-19 Dashboard — Possible Visualizations**

**1. Case Analysis**

* **Column Chart** → Total Cases by Country
* **Bar Chart** → Total Cases by State
* **Line Chart** → Daily / Monthly New Cases Trend
* **Clustered Column Chart** → New Cases vs Recoveries by Country
* **Stacked Column Chart** → New Cases + Deaths + Recoveries (contribution to total)
* **Map Chart** (if Excel version supports) → Cases by Country/State

**2. Mortality & Recovery**

* **Pie / Donut Chart** → % of Total Deaths by Country
* **Column Chart** → Deaths vs Recoveries by Country
* **Clustered Bar Chart** → Deaths by State/City
* **Line Chart** → Daily Deaths Trend (Time series)
* **100% Stacked Column Chart** → Recovery vs Deaths % by Country

**3. Testing & Vaccination**

* **Combo Chart (Column + Line)** → Tests Conducted (Column) vs New Cases (Line)
* **Column Chart** → Total Vaccine Doses by Country
* **Stacked Column Chart** → Vaccination vs Cases by Country
* **Pie / Donut Chart** → Vaccination Distribution by Country
* **Line Chart** → Vaccination Progress over Time

**4. Population Impact**

* **Column Chart** → Cases per Million Population (Country level)
* **Bar Chart** → Deaths per Million Population (State level)
* **Clustered Column Chart** → Population vs Total Cases
* **Scatter Plot** → Cases vs Population (to see proportional impact)

**5. Time-Based Analysis**

* **Line Chart with Markers** → Daily Cases Trend (per country)
* **Timeline (Pivot Filter)** → Filter Dashboard by Month/Year
* **Area Chart** → Cumulative Cases Over Time
* **Moving Average Line** → 7-day Rolling Avg of Cases
* **Column Chart** → Peak Month of Cases

**6. Dashboard-Level KPIs**

* **KPI Cards** (big numbers at top):  
    
  + Total Cases
  + Total Deaths
  + Total Recovered
  + Total Tests Conducted
  + Total Vaccinations
  + Active Cases = (TotalCases − TotalRecovered − TotalDeaths)
* **Slicers** → Country, State, City, Month
* **Timeline Filter** → To filter all pivots by date

**7. Advanced Visuals**

* **Waterfall Chart** → Cases → Recoveries → Deaths → Active Cases
* **Histogram** → Distribution of Daily Cases (low vs high days)
* **Box Plot (via workaround)** → Spread of daily cases (per country)