PHASE- 5

Project Title: Public Health Awareness

Project Documentation & Submission

In this part you will document your project and prepare it for submission.

Document the public health awareness campaign analysis project and prepare it for submission.

Documentation

- Outline the project's objective, design thinking process, and development phases.
- Describe the analysis objectives, data collection process, data visualisation using IBM Cognos, and derived actionable insights.
- Explain how the insights from the analysis can measure campaign effectiveness and guide future strategies.

Submission

- Share the GitHub repository link containing the project's code and files.
- Provide instructions on how to replicate the analysis and generate visualisations using IBM Cognos and perform data analysis using code.

- Include example outputs of the visualisations and code-generated insights

1. **Project Objective:**
    - The primary objective of this project is to evaluate the effectiveness of a public health awareness campaign and use the insights gained to enhance future public health campaigns. The goal is to assess the reach, engagement, and impact of the campaign on public health awareness.
2. **Design Thinking Process:**
    - **Empathise:** Understand the target audience's health-related concerns and needs.
    - **Define:** Clearly define the goals and objectives of the public health awareness campaign.
    - **Ideate:** Brainstorm creative campaign strategies to address the identified health concerns.
    - **Prototype:** Develop and launch the public health awareness campaign.
    - **Test:** Collect data and assess the campaign's performance.
    - **Iterate:** Use insights to refine future public health awareness strategies.
3. **Development Phases:**
    - **Phase 1: Pre-Campaign Analysis**
        - Define campaign objectives, including specific health issues to address.
        - Identify the target audience and their demographics and preferences.
        - Develop campaign content and select appropriate channels for outreach.

- **Phase 2: Campaign Execution**
    - Launch the public health awareness campaign using chosen channels.
    - Monitor engagement, reach, and other relevant campaign data.
- **Phase 3: Post-Campaign Analysis**
    - Collect and analyse data to evaluate the effectiveness of the campaign.
    - Utilise data visualisation tools to gain insights.
    - Derive actionable insights to improve future public health awareness initiatives.

4. Analysis Objectives:

- Measure the campaign's reach, engagement, and awareness impact.
- Analyse demographic data to identify the most responsive audience segments.
- Evaluate the effectiveness of the campaign in increasing awareness of the targeted health issues.
- Identify successful and less successful campaign components.
- Assess the cost-effectiveness of the campaign.

5. Data Collection Process:

- Gather data from various sources, including website analytics, social media metrics, survey responses, and event attendance records.
- Utilise tracking tools and custom surveys to capture specific campaign-related data.
- Ensure the quality and accuracy of the data collected.

6. Data Visualization Using IBM Cognos:

- Import the collected data into IBM Cognos or similar data visualisation tools.

- Create visualisations such as charts, graphs, and dashboards to represent key campaign metrics and trends.
- Develop interactive reports to provide a comprehensive view of campaign performance.

7. Derived Actionable Insights:

- Identify the most effective channels and messaging strategies.
- Analyse the demographic data to tailor future campaigns to the most responsive audience segments.
- Measure the campaign's impact on public health awareness by comparing baseline and post-campaign data.
- Pinpoint successful elements of the campaign that can be replicated.
- Assess the cost-effectiveness of the campaign in relation to its impact.

8. Measuring Campaign Effectiveness:

- Track key performance indicators (KPIs) such as reach, engagement, and awareness metrics.
- Compare the campaign's impact against predefined objectives and benchmarks.
- Use surveys and feedback to gauge public perception and knowledge improvement.
- Monitor website and social media traffic related to the campaign.

9. Guiding Future Strategies:

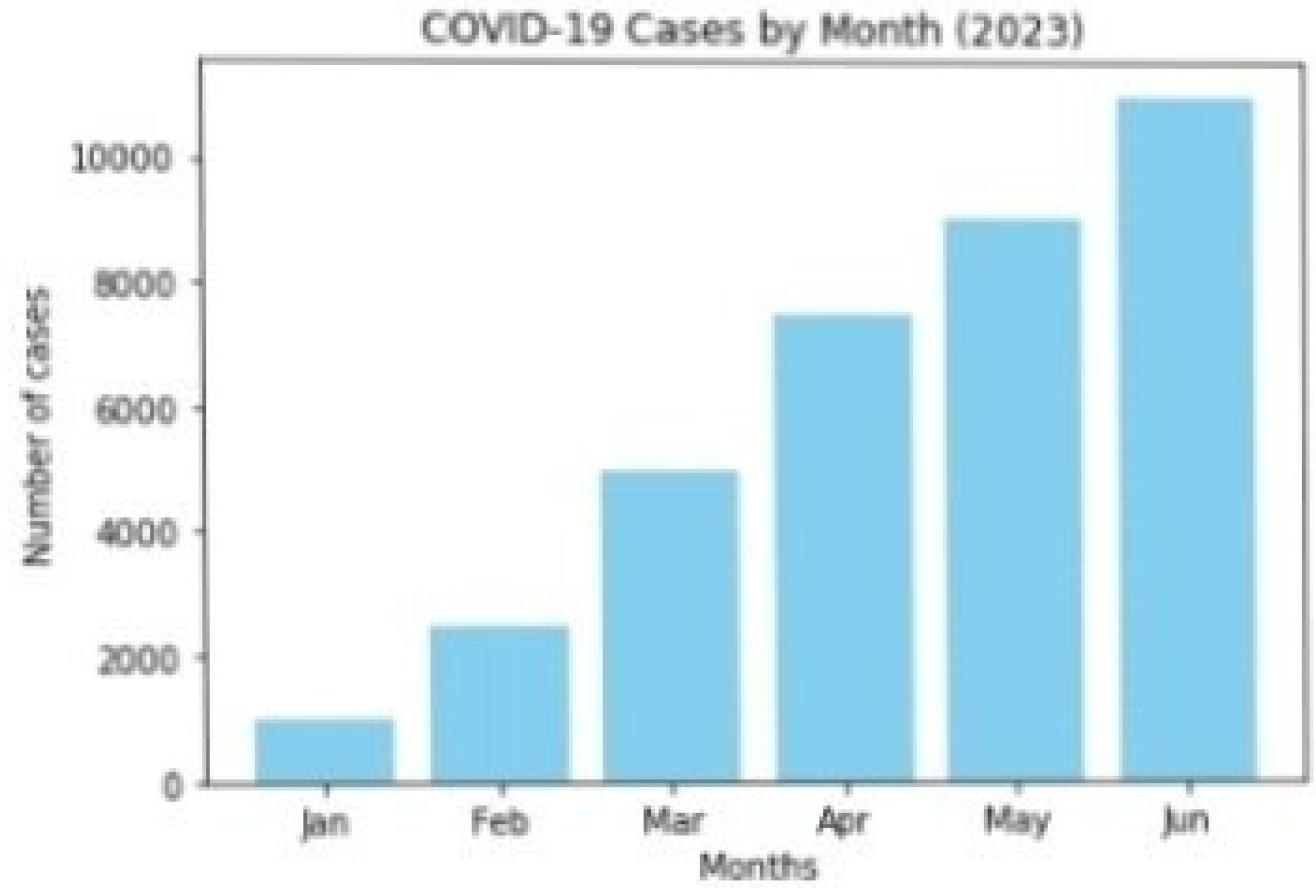
- Utilise insights from the analysis to make data-driven decisions for future public health awareness campaigns.

- Allocate resources more effectively to high-performing channels and strategies.
- Adapt messaging and content to address the most critical health concerns.
- Continuously analyse and improve public health awareness strategies based on ongoing data-driven feedback.

This project is designed to provide a structured framework for evaluating the effectiveness of public health awareness campaigns, using data-driven insights to guide future strategies and ensure more impactful and targeted public health initiatives.

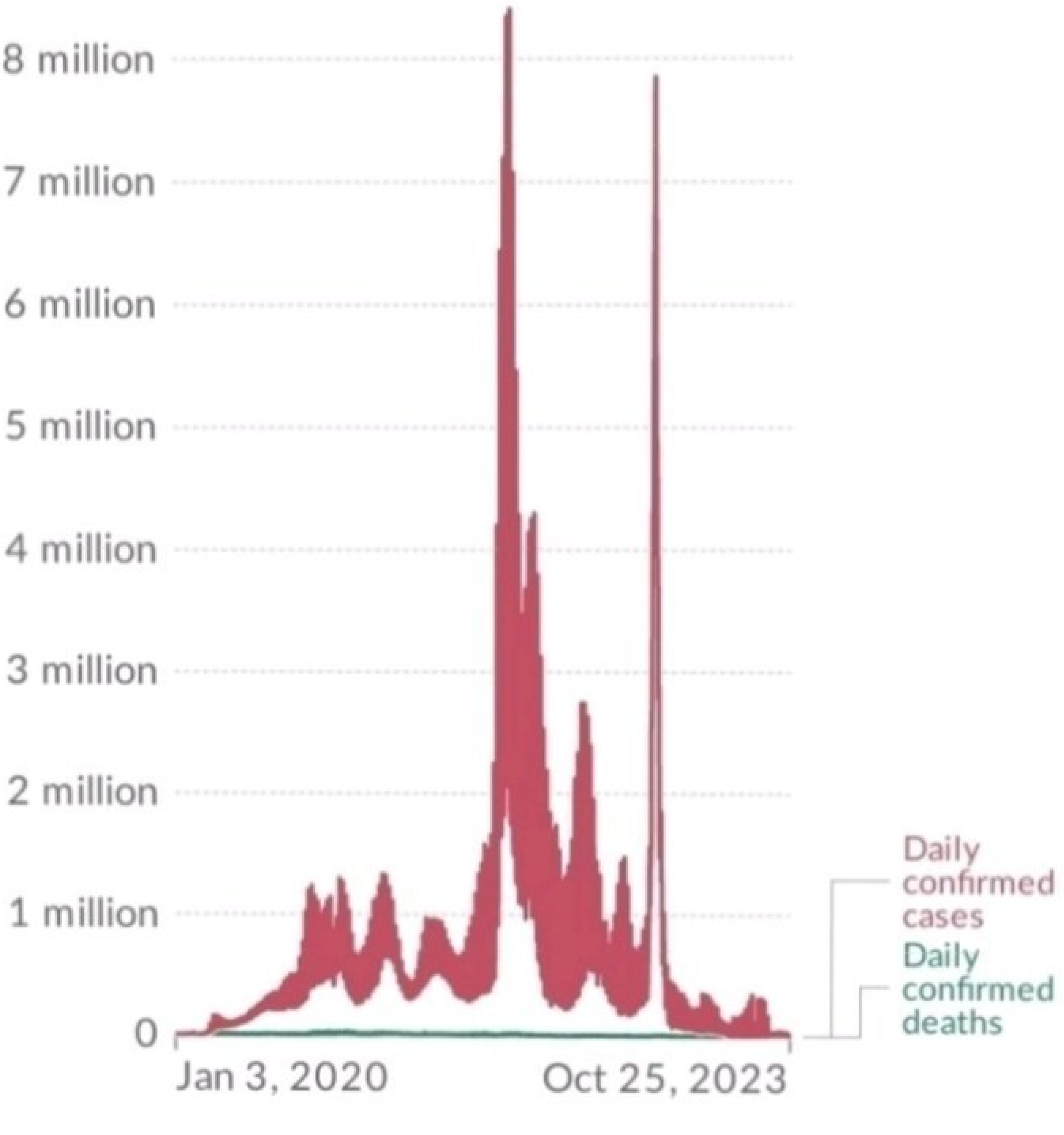
VISUALIZATION SOURCE CODE:

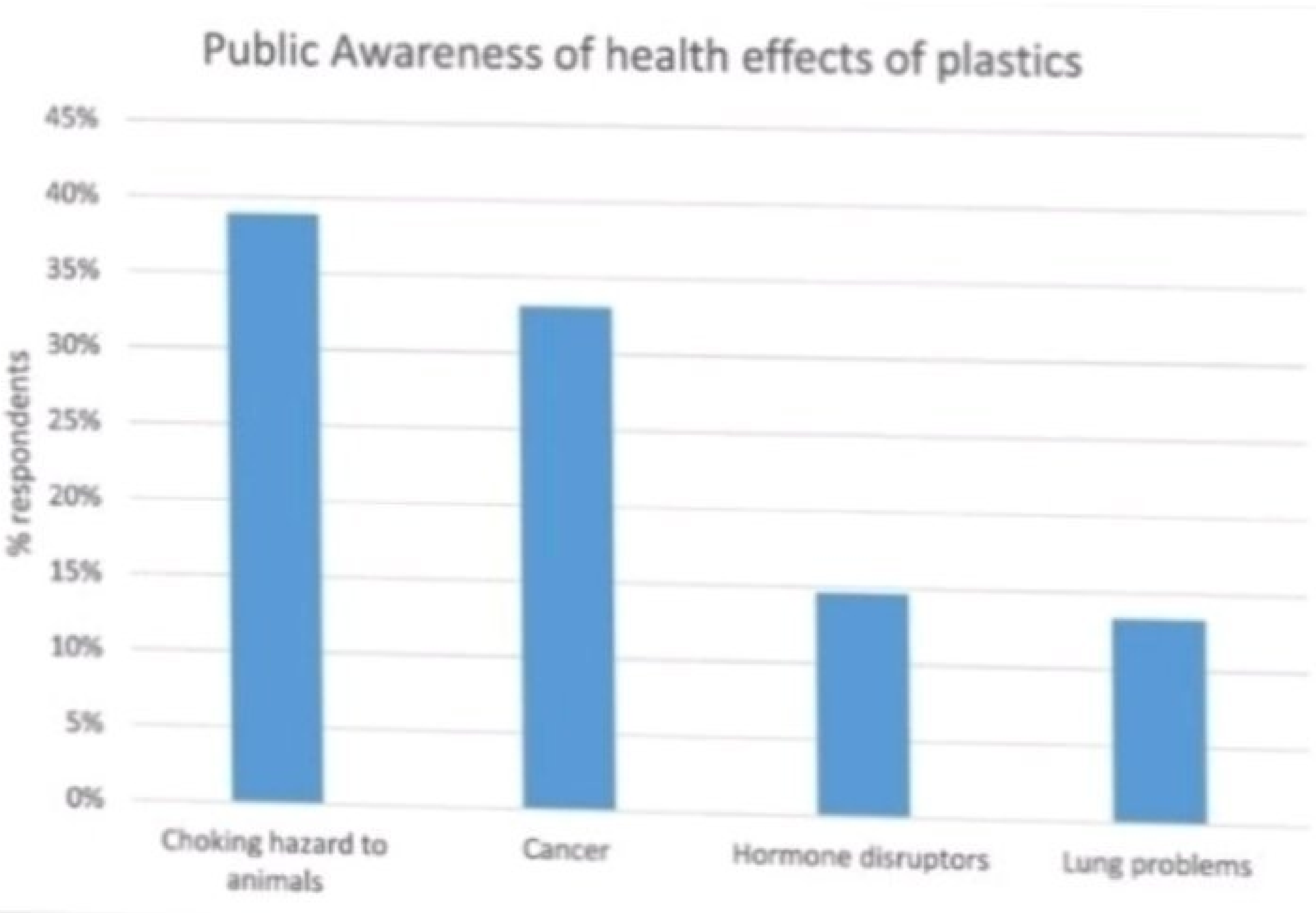
```
Import matplotlib. Pyplot as plt

Months=['Jan', 'Feb', 'Mar', 'Apr', 'May', 'Jun']

Cases =[1000, 2500,5000,7500,9000,11000]

Plt. Bar(months, cases, colour='sky blue')

Plt. Xlabel('months')

Plt. Ylabel('number of cases)

Plt. Title('COVID-19 cases by month (2023) ')

Plt. Show()
```


COVID-19 Cases by Month (2023)
Number of cases
10000
8000
6000
4000
2000
0
Jan
Feb
Mar
Apr
May
Jun
Months

CODE FOR PYTHON :

```
Def vaccination_coverage(population, vaccinated):
Coverage = (vaccinated / population) * 100
  Return coverage

# Input the population and number of people vaccinated
Population = int(input("Enter the total population: "))
Vaccinated = int(input("Enter the number of vaccinated people: "))

# Calculate vaccination coverage
Coverage = vaccination_coverage(population, vaccinated)

# Display the results
Print(vaccination Coverage: {coverage:.2f}%")
If coverage >= 70:
  Print("Good vaccination coverage. Keep it up!")
Else:
  Print("Vaccination coverage is below the recommended level. Encourage vaccination!")

# Provide information about vaccinations
Print("Vaccinations are crucial for preventing the spread of diseases and protecting public health.")
Print("Make sure to stay informed and get vaccinated to help keep the community safe.")
```


8 million
7 million
6 million
5 million
4 million
3 million
2 million
1 million
0
Jan 3, 2020
Oct 25, 2023
Daily confirmed cases
Daily confirmed deaths


Public Awareness of health effects of plastics
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
% respondents
Choking hazard to animals
Cancer
Hormone disruptors
Lung problems