

# Socioeconomic Impacts of Viral Public Health Shocks on the Caribbean Region

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Scope

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**Socioeconomic Impacts:** Social + Economic

**Viral Public Health Shocks:** 6 Outbreaks

**Caribbean Region:** ECCU, CARICOM, Regional Trading

Partners

# Purpose of the Research

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Public Benefits	Personal Benefits
Policy Recommendations	Curiosity
Improvements in Digital and Data Infrastructure	Learning
Resilience Among Vulnerable Groups	
Proactive Approach to Problem Solving	

# Theories

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1. There are similarities between how different regions were affected by the outbreaks.
2. There are differences between how different regions were affected by the outbreaks.
3. Males and females were not equally impacted by the outbreaks.
4. The working class members of society were more at risk than the elderly.
5. GDP, unemployment, and tourism were significantly impacted by the outbreaks.

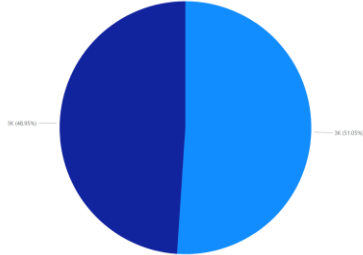
## Theories 1 & 2: Similarities & Differences Between Regions

— -Region	Outbreak					
	Spanish Flu (1918)	SARS (2003)	Swine Flu (2009)	Chikungunya (2014)	Zika (2015)	COVID-19 (2020)
ECCU			✓	✓	✓	✓
Other CARICOM			✓	✓	✓	✓
Regional Trading Partners	✓		✓	✓	✓	✓
Global Trading Partners	✓	✓	✓	✓	✓	✓
Other SIDS	✓		✓			✓

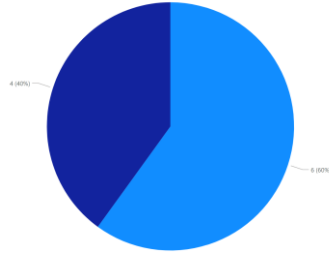
# Theory 3: Males and females were not equally impacted by the outbreaks

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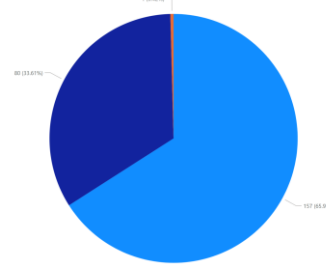
### SARS Cases



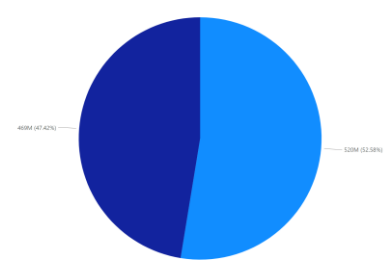
### Swine Flu Cases



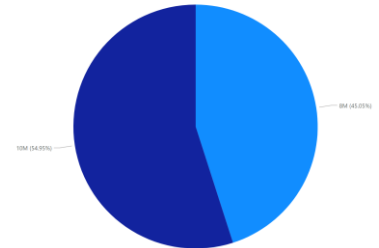
### Chikungunya Cases



### COVID-19 Cases



### COVID-19 Deaths

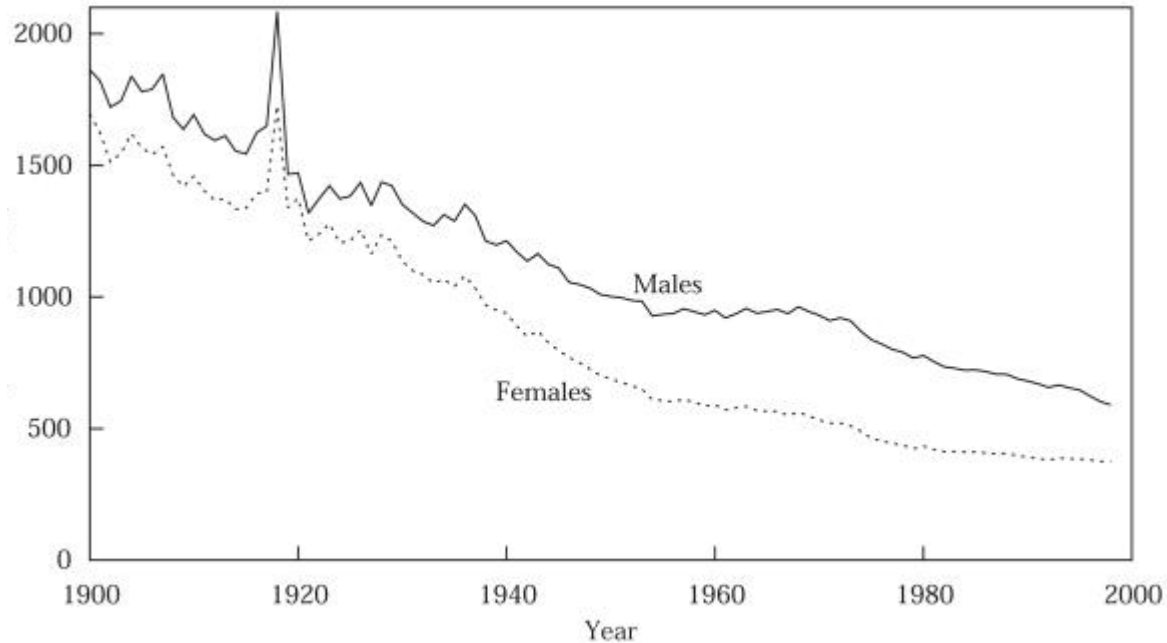


Light Blue = Female  
Dark Blue = Male  
Orange = Unknown

# Theory 3 Cont'd: Males and females were not equally impacted by the outbreaks

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Deaths per 100,000 People Before, During and After the Spanish Flu



# Theory 4: The working class members of society were more at risk than the elderly

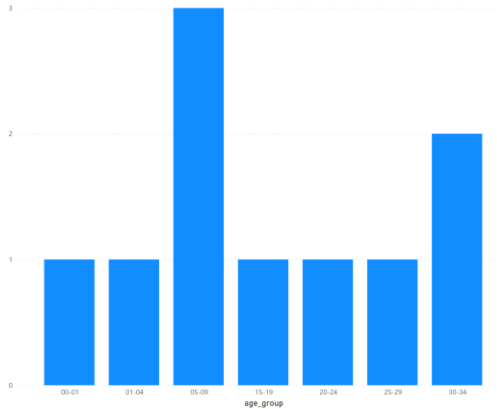
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## SARS Cases

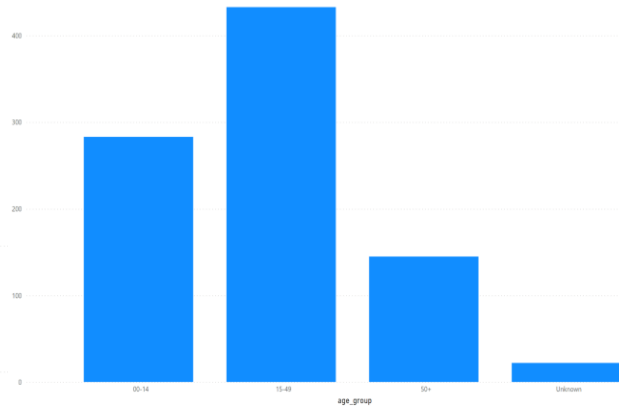
49

Median Age of Cases

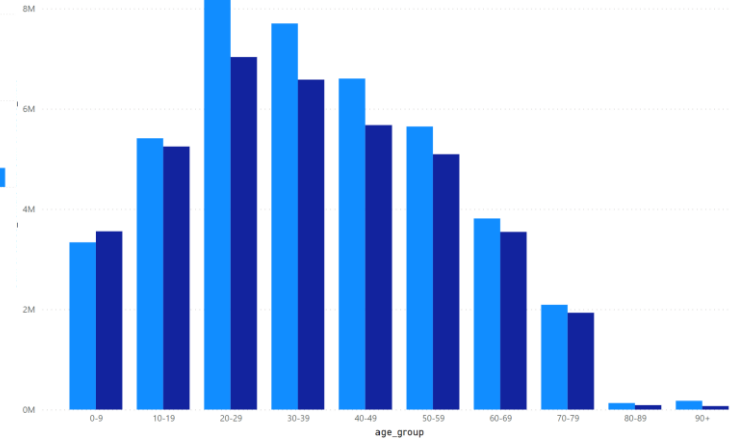
## Swine Flu Cases



## Chikungunya Cases



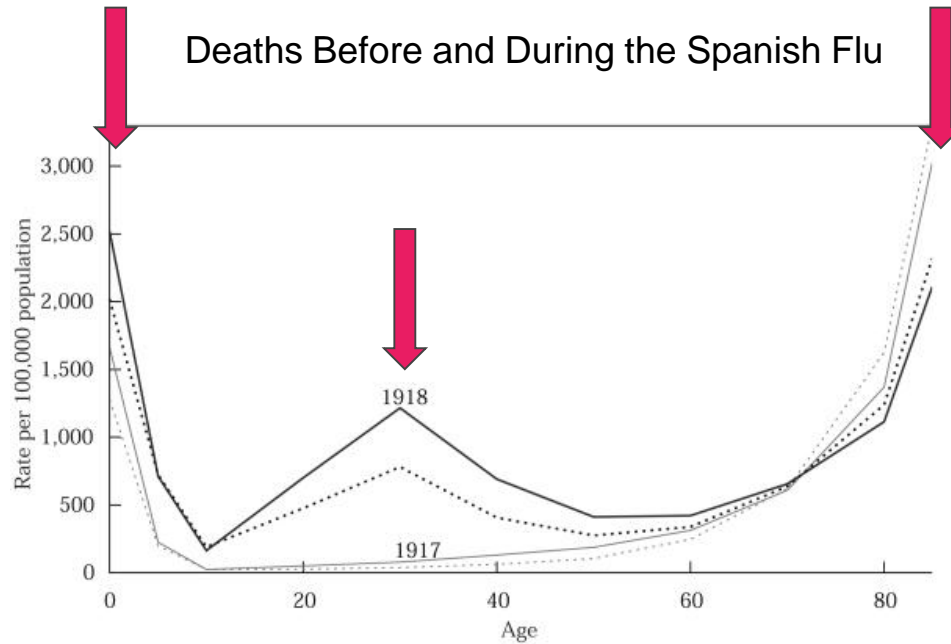
## COVID-19 Cases (Male vs. Female)





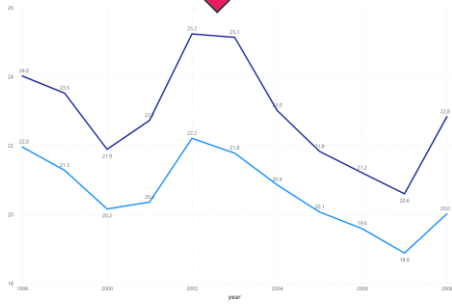
# Theory 4: The working class members of society were more at risk than the elderly

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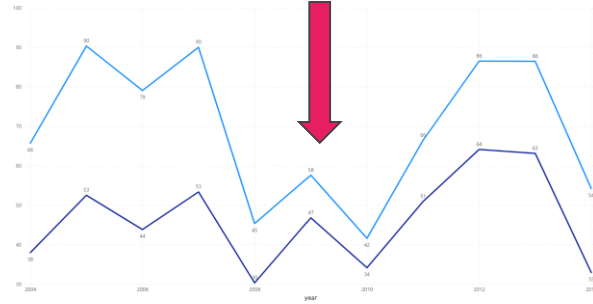


# Theory 5: Unemployment was significantly impacted by the outbreaks

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SARS



Swine Flu



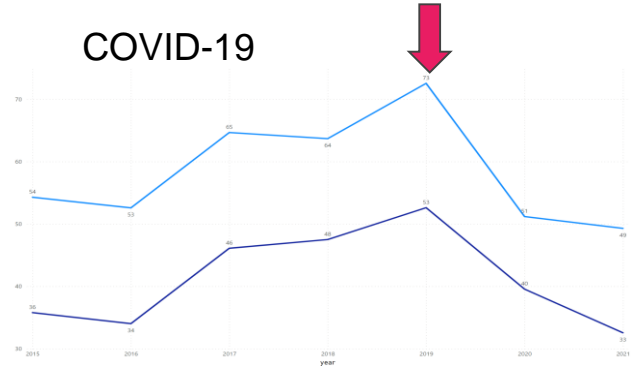
Chikungunya



Zika

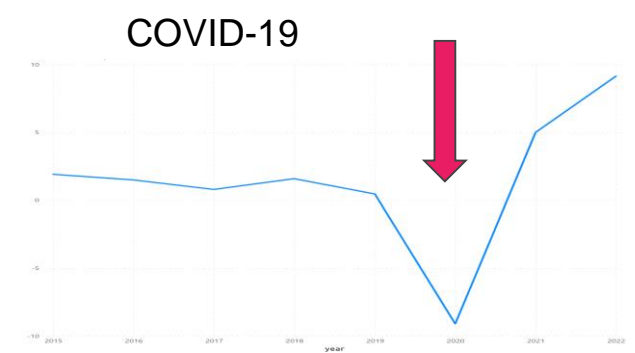
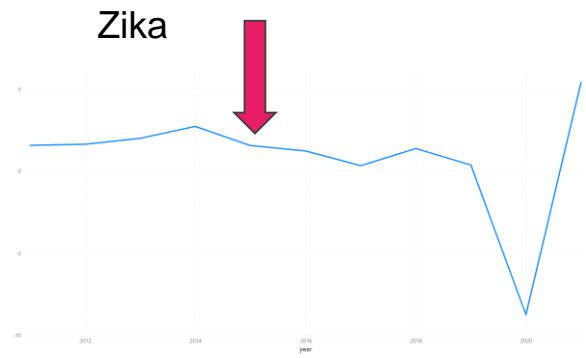
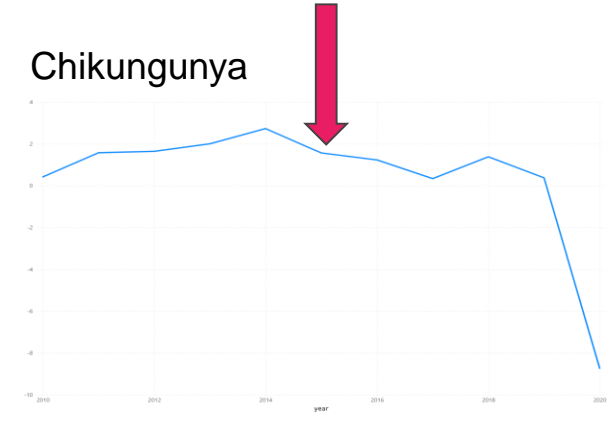
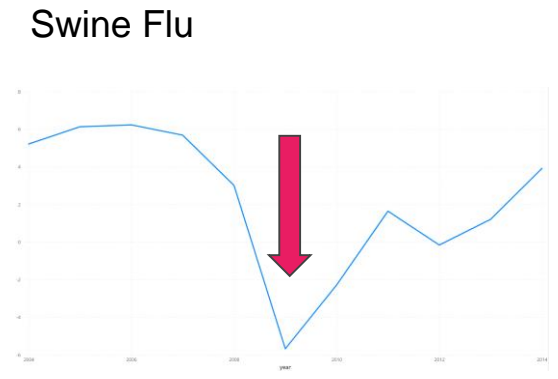


COVID-19



Light Blue = Female  
Dark Blue = Male

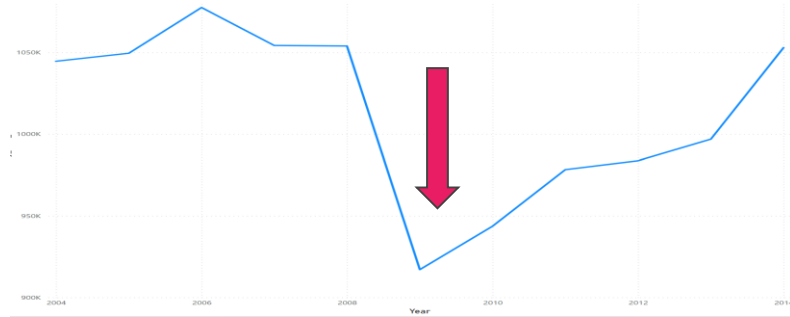
# Theory 5 Cont'd: GDP was significantly impacted by the outbreaks



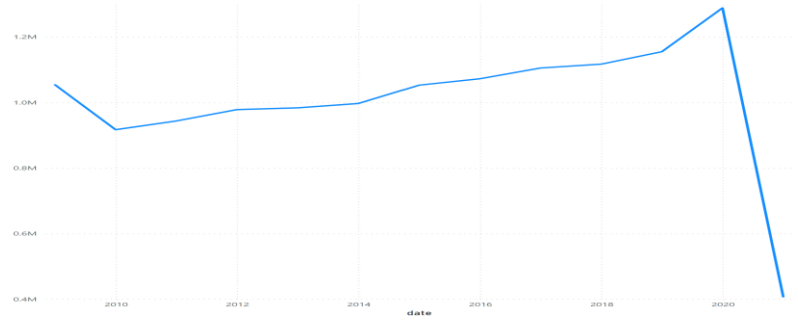
# Theory 5 Cont'd: Tourism was significantly impacted by the outbreaks

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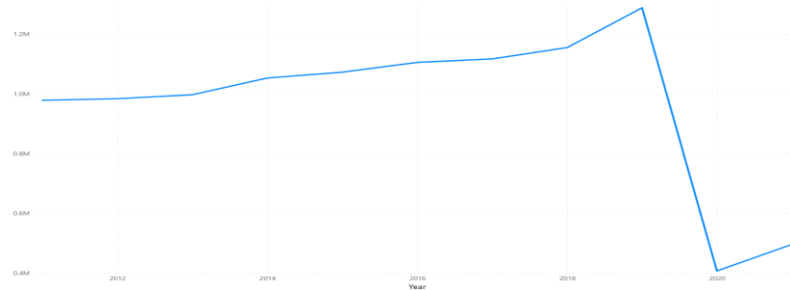
### Swine Flu



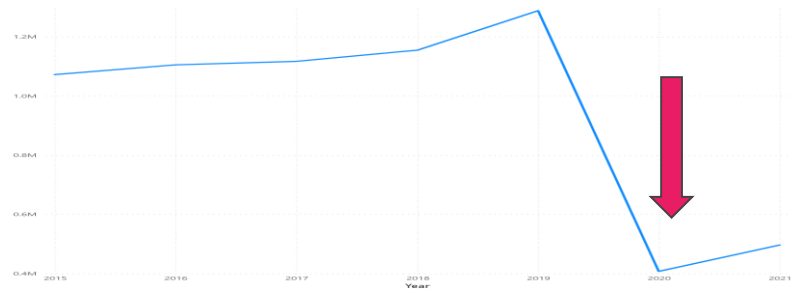
### Chikungunya



### Zika



### COVID-19



## Next steps

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- Additional data collection
- Hypothesis Testing
- Modelling

# Challenges & Recommendations for Infrastructure

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- **Digital/Data**
  - More data disaggregation is needed
  - Optimize website performance for data display
  - Ensuring the availability of data
- **Social**
  - Training and education in data collection and collation for health professionals
- **Financial**
  - Proper allocation of expenditure
- **Resilience**
  - Durable Systems
  - Contingency plans to protect the vulnerable based on facts

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Thank You