



[Link to presentation](#)

Karli Redinger¹, Clara Rivera², Jeff Kovach¹, Jessica Hervol¹, Sarah Markt¹, John Paul Stephens⁴, Tyler Reimschisel³, Sara Lee², Daniel Tisch¹

¹Department of Population and Quantitative Health Sciences, School of Medicine, Case Western Reserve University, Cleveland, OH; ²University Health and Counseling Services, Case Western Reserve University, Cleveland, OH; ³Office of Interprofessional and Interdisciplinary Education and Research, School of Medicine, Case Western Reserve University, Cleveland, OH; ⁴Department of Organizational Behavior, Weatherhead School of Management, Case Western Reserve University, Cleveland, OH



DEPARTMENT OF POPULATION AND QUANTITATIVE HEALTH SCIENCES

Background

- Throughout the COVID-19 pandemic, CWRU implemented a variety of policies and tactics to mitigate the spread of the virus and keep the campus community safe
- The Pandemic Response Study was established to characterize the University's response through semi-structured interviews and COVID-19 testing data analysis via an interdisciplinary team of individuals from across the university
- This study's aim is to understand what went well during the response and learn as an institution for future public health crises

Population

- A total of 38 interviews were conducted among University leadership including Deans, faculty, staff, and students involved in the response at any point throughout the pandemic
- COVID-19 testing data was de-identified and obtained from CWRU University Health and Counseling Services. It included PCR and rapid antigen testing data from 17,544 individuals (82,534 total tests) that had taken a test at CWRU at any point between November 2020 and December 2021

Learning Objectives

- Construct figures from testing data to describe trends in University COVID-19 testing and infection rates at CWRU
- Interpret qualitative data from interviews of University leadership to depict decision-making process involved with COVID-19 related policies at the university
- Investigate the role of University policies and their impact on COVID-19 testing and infection trends

Activities

- Participated in biweekly team meetings to go over data, give progress updates, and discuss future directions of the study
- Conducted and transcribed semi-structured interviews with other research assistants
- Took part in initial qualitative analyses of interview transcripts
- Performed quantitative analyses of COVID-19 testing data using SPSS statistical software

Deliverables

- Conducted and transcribed 14 interviews with University leaders involved in the COVID-19 response
- Qualitative analysis of 5 interviews via first-order coding
- Regression analyses on campus-wide COVID-19 testing data
- Presentation of epidemiological findings to University leadership

Results

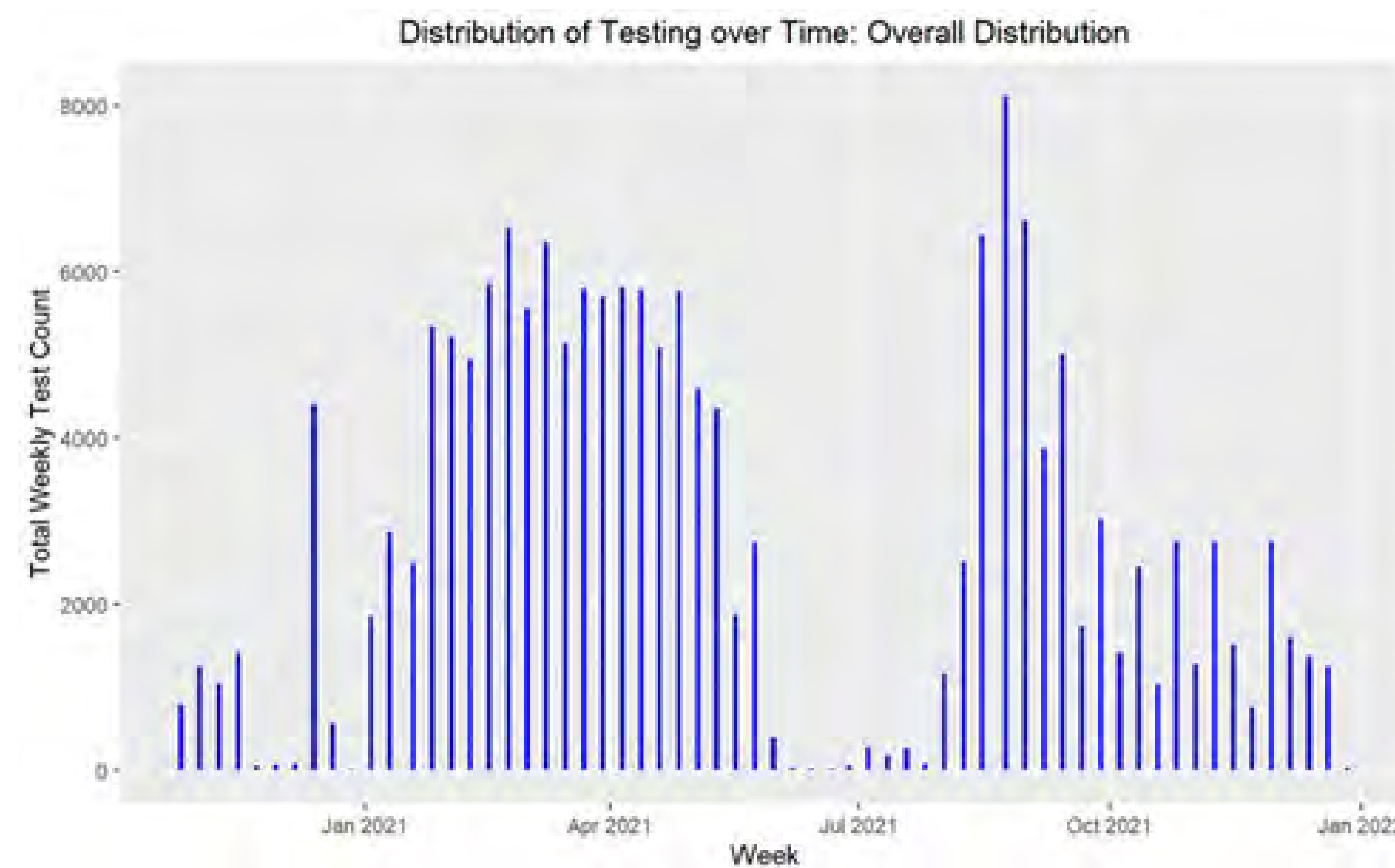


Figure 1. Overall Distribution of PCR and Antigen Tests. Weekly distribution of testing data for all participants from November 2020 through December 2021

A Undergraduate	Odds Ratio	p-value
Black/African American	1.031	.890
On-Campus Resident	.718	.002

B Graduate	Odds Ratio	p-value
Black/African American	1.770	.001

Figure 2. Logistic regression models stratified by undergraduate and graduate student status. A) Logistic regression model for positive tests among undergraduate students, N = 5,959. B) Logistic regression model for positive tests among graduate students, N = 4,928. All variables were dichotomized by the reference category listed.

Lessons Learned

- Lessons learned from the study:**
 - CWRU public health policies were effective because campus residency among undergrads eliminated racial differences observed in other populations and case rates were significantly lower for all members of the CWRU community
 - CWRU leadership engaged in an active and innovative response by incorporating multiple stakeholders at the university and in the surrounding community
- Personal lessons learned from taking part in the project:**
 - The importance of interdisciplinary collaboration
 - The value of incorporating both qualitative and quantitative data to gain a broader perspective about public health issues

Public Health Implications

- University-specific implications:**
 - Characterization of the university's response will allow leadership to disseminate information to the campus community and other stakeholders
 - Findings from the quantitative and qualitative analyses can be shared with University leadership to guide future COVID-19 and other public health policies
- Broader public health implications:**
 - The protective effect of CWRU's mitigation policies indicate that public health strategies are effective at limiting the transmission of COVID-19
 - Effective and innovative strategies implemented by the University can be shared with other entities in the case of future public health threats

Future Directions

Qualitative analysis of interview data is still being conducted to determine major themes to be shared with University leadership and the campus community

Acknowledgements

I would like to thank all members of the Pandemic Response Study team for allowing me to take part in this project, especially Dr. John Paul Stephens, Dr. Sarah Markt, and Dr. Daniel Tisch for their guidance throughout the process