

UNOOSA - Webinar Nov 24, 2020

Session 2: Space technology contribution during the pandemics situation



What Have Former Pandemics and
Covid-19 Taught US about Social
Disruption in a Time Lacking in
Antivirals and Vaccines

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Social Disruption

- Economic
- Jobs
- Education
- Mental Health
- Political
- Religious
- Travel
- Gatherings
- Sporting Events\
Olympics
- Elderly Care
- Vulnerable Populations
- Inequality
- Quarantine/Isolation



“To different degrees, most of the great epidemics have been incubators of social unrest”



Why Pandemics Disrupt

- Throughout history, **epidemics** and **pandemics** have resulted in massive social and political **impacts and consequences**. Clashes break out between states/governments and citizens, eroding state capacity and trust. Socioeconomic crisis and inequity drive population displacement, and heighten both social tension and discrimination.



The Vulnerable are Always With Us

- Those in poverty
- Older (chronically ill, fragile, medicated)
- Disabled
- Mental Health Issues
- Youth
- Indigenous
- The “long haulers”



POLITICS AND PANDEMICS

- The United States has never been more divided politically than it is now. Controversy and violence continue concerning our election. How did we allow a deadly pandemic to become politicized?
- Masks, mass gatherings, and social distancing were reduced to political positions.



Differences Between Now and Response to the 1918 Pandemic – Not Much!

- Comparison on non-pharmaceutical societal approaches
 - Masks
 - Social distancing
 - Hand washing
- Refugees, migrants, and the displaced always suffer disproportionately



Non-Pharmaceutical Differences Past Pandemics vs Covid-19

- Hospital care
- Trained professionals
- Supportive care such as ventilators
- Isolation units
- Care of bodies and cremation
- Possibility of other medications that are not antivirals or vaccines



Anti-Mask Society



Masks Wearing Sparked Political and Cultural Wars!

<https://www.nytimes.com/2020/08/03/us/mask-protests-1918.html>



Residents Faced Arrest





PLAYBOOK FOR EARLY RESPONSE TO HIGH-CONSEQUENCE EMERGING INFECTIOUS DISEASE THREATS AND BIOLOGICAL INCIDENTS

TABLE OF CONTENTS

Why Didn't the US Pandemic Plan Work?

- Slow response
- Public health money had been cut
- States were forced to compete with one another for scarce medical supplies
- Despite warnings about coronavirus threat, no vaccines were tested
- Government denial
- Political polarization
- Pandemic Playbook NOT followed



Space4Health and SARS-CoV-2

Models to Track, Predict, and Respond

- Measure location of infected individuals
- Tracking of empty parking lots, roads, and other modes of travel.
- Effect of lockdowns and public health measure on society (view from space) – traffic movement and pollution studies
- Tracking phone data on population movements
- Where are the cases/deaths?
- Antigen/antibody testing patterns?
- Medical Resource patterns?
- Population movement?
- Recovery patterns?



Lessons Learned – Maybe??

- Human health and health of the planet are linked.
- Prevention better than the cure – science as a guide to informed decision-making.
- Covid-19 can sicken and kill anyone.
- Many people are infectious without being sick.
- Critical role of the private sector.
- Masks work
- Misinformation kills



<https://www.forbes.com/sites/georgkell/2020/04/11/four-lessons-we-should-learn-from-the-pandemic/?sh=337ffd0b6370>

<https://www.scientificamerican.com/article/nine-important-things-weve-learned-about-the-coronavirus-pandemic-so-far/>

Lessons Learned - Maybe?

- Always be prepared for outbreaks of infectious disease – they WILL happen.
- Denial doesn't work. Immediate massive response required.
- Social disruption WILL occur.
- Formalize current process for rapid Vaccine production for immediate activation.
- More global communication/cooperation.
- Structured assistance for all populations.



PLEASE!

**Continue Public Health Measures
until a vaccine is available
WE ARE SO CLOSE!**

Thank You

