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age, written descriptions, documentary accounts, and primary literatures to determine full answers to the core questions.

Results: Eight of the ten questions identified commonalities between the AIDS and COVID-19 pandemics. These include slow government policy responses that negatively impacted the timing and the epidemic trajectory, involvement of marginalized populations of societies who were disproportionately affected by the diseases, discovery of existence of persistent economic and social inequalities, and introduction of lifelong morbidities in patients. Most importantly, this analysis found the importance of collaborative, scientifically driven political leadership as evidenced by the improved pace of disease control measures and research for therapeutic and vaccine discovery following adoption of evidence-based policy.

Conclusion: This analysis identifies multiple factors that paralleled the trajectory of the HIV/AIDS epidemic and SARS-CoV-2/COVID-19 pandemic. In order to prepare for potential pandemics or large-scale outbreaks in the future, policies mindful of these lessons outlined will help provide guidance for future responses to emerging pathogens.

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Pandemic Parallels: Common Threads between the COVID-19 Pandemic and the Ebola Virus Disease Epidemic of 2014

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Purpose: This analysis explored the parallels between the 2014–2016 Ebola virus disease (EVD) epidemic in West Africa and SARS-CoV-2 and its associated disease (Coronavirus disease 2019 [COVID-19]) in order to compare and contrast patterns that enable or exacerbate epidemics of novel or non-endemic pathogens.

Methods & Materials: Our research team developed a core set of ten questions focused on features common to major disease epidemics, including the natural reservoir of the infectious agent, the initially impacted populations, resulting societal impacts, the political response parameters and dynamics, resulting scientific discoveries, long-term morbidity in patients, and disproportionately impacted populations. We utilized both the primary literature and contemporary accounts such as news coverage and documentary accounts to determine full answers to the core questions. Commonalities between the emergence of Ebola and SARS-CoV-2 were identified.

Results: Seven of the ten questions identified positive parallels between the Ebola and COVID-19 pandemics. These include the the damaging effects of public mistrust of health officials on disease transmission, negative impact of slow country-level responses, the introduction of lifelong morbidities in patients, disproportionate disease impacts on vulnerable populations, and the positive impact of governmental research funding on the pace of vaccine development and distribution.

Conclusion: This analysis identifies multiple common factors that influenced the epidemic dynamics and disease burdens of Ebola Virus Disease and SARS-CoV-2/COVID-19, despite the differences in transmission dynamics. Policies mindful of these impacts can guide future responses to rapidly growing outbreaks.

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Topic 28: Public Communication of Outbreaks and Emerging Diseases

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Investigating SARS-CoV-2 Test Positivity Calculations Across US Jurisdictions

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Purpose: Throughout the COVID-19 pandemic, many US epidemiologists and policymakers turned to an indicator called test positivity, or the percent of tests coming back positive for SARS-CoV-2, to contextualize COVID-19 case counts with testing volume. But the nation's patchworked health data infrastructure, composed of 56 systems managed by each state and territory, complicated efforts to calculate the metric in a comparable way across US jurisdictions. We set out to map jurisdictional reporting differences in test positivity and investigate whether they interfered with its effectiveness and comparability as an indicator. Understanding these differences is important because jurisdictional test positivity informed consequential policy and individuals' understanding of risk in their communities.

Methods & Materials: We surveyed the health department websites of all US states and territories to examine how these jurisdictions were presenting test positivity on COVID-19 dashboards. When details about definitions were unavailable on jurisdictional websites, we reached out to jurisdictional public health officials for clarification. We also scored jurisdictions' presentations against best practices we identified for calculating the metric.

Results: Among the 48 states and territories posting test positivity values, we observed no consensus on how to calculate the metric—jurisdictions used different units, test types, averaging techniques, and dating schemes. By looking at data for jurisdictions that posted multiple test positivity metrics, we observed that these definitional differences could result in variations from 31% to 300%. Only four states were following all ten of the best practices for reporting test positivity.

Conclusion: The sheer number of ways states and territories define test positivity is alarming, given how much the indicator influenced US COVID-19 policy. Based on our survey, we believe the confidence of regulators in the precision and national comparability of test positivity is misplaced: The metric's value reflects state and territorial reporting decisions as much as actual viral prevalence. These findings underscore the need to invest in centralized public health infrastructure and create national reporting standards to improve unity of state reporting.

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