

Global Data

- A pandemic could kill as many people as a devastating war, yet the resources committed to pandemic prevention and response are a fraction of the resources we commit to security (NAM, 2016).
- The World Bank has estimated the economic impact of a severe pandemic (that is, one on the scale of the influenza pandemic of 1918–1919) at nearly 5 percent of global gross domestic product (GDP), or roughly \$3 trillion (NAM, 2016).
- The economic risks of epidemics are not trivial. Victoria Fan, Dean Jamison, and Lawrence Summers recently estimated the expected yearly cost of pandemic influenza at roughly \$500 billion (0.6 percent of global income), including both lost income and the intrinsic cost of elevated mortality. Even when the health impact of an outbreak is relatively limited, its economic consequences can quickly become magnified (Bloom, 2018).

West Africa Data

- Aggregate cumulative GDP losses for Guinea, Liberia, and Sierra Leone in 2014 and 2015 are estimated to amount to more than 10 percent (UNDG, 2015; World Bank, 2014). This huge cost is the result of an epidemic that, for all its horror, infected only about 0.25 percent of the population of Liberia, roughly 0.25 percent of the population of Sierra Leone, and less than 0.05 percent of the population of Guinea (WHO, 2016), with approximately 11,300 total deaths (CDC, 2016). (NAM, 2016)
- Liberia saw GDP growth decline 8 percentage points from 2013 to 2014 during the recent Ebola outbreak in west Africa, even as the country's overall death rate fell over the same period (Bloom, 2018).
- According to the United States Agency for International Development (USAID), Guinea and Sierra Leone experienced fiscal deficits of 9.4% and 4.8% of GDP, respectively, in 2015 alone (USAID, 2017).
- Guinea, Liberia and Sierra Leone also suffered significant disruptions to key export industries, particularly mining, oil & gas, transportation, construction and agriculture; the suspension of major international commercial projects; and declines in production and exports ranging from a 20% decline in rubber exports from Liberia in 2014 to a 75% decrease in 2014 palm oil production in Guinea (USAID, 2017).
- In 2015, due to the Ebola outbreak, Nigeria was indirectly economically affected mostly by lost trade through closed borders, disrupted supply chains, marked reduction in travel and tourism, and cancellation of international events (World Bank, 2015).
- In West Africa during the Ebola outbreak, the largest estimated effects on GDP from consultation with World Bank country teams were in Nigeria (about \$186 million), Côte d'Ivoire (about \$93 million), Mali (about \$75 million), and Senegal (about \$45 million) (World Bank, 2015).

Nigeria-Specific Data

- Due to the 2014-2015 Ebola epidemic, the World Bank estimates that Guinea, Liberia and Sierra Leone lost \$600 million, \$300 million and \$1.9 billion, respectively, in GDP. Nigeria was more

fortunate because it had a significantly lower number of Ebola cases, however, the relatively small outbreak still cost Nigeria \$186 million in GDP (Bali et al., 2016).

- Based on the NCDC's costed NAPHS, Nigeria would only need roughly US\$0.40 per person per year to establish a preparedness infrastructure that protects Nigerians. *[Calculations based upon 5-year costing of NAPHS and World Bank's 2018 estimate of the Nigerian population.]*
- Based on 2015 data, the International Working Group on Financing Preparedness estimated Nigeria's economic losses in the event of a pandemic at an annual loss of US\$9,662,722,821 (3.51 trillion naira), annual loss per capita of US\$53.03 (19,269 naira) and an annual loss in GNI of 1.98 (IWG, 2018).

Global Arguments

- A major outbreak's impact is not limited to the health sector; outbreaks affect multiple sectors economically due to trade losses from border closures, trade and travel bans, disrupted supply chains, decline in tourism, drop in foreign investment and cancellation of international events (World Bank, 2015)
- The economic impact of infectious diseases appears to be increasing as greater human and economic connectedness—whether through transnational supply chains, increased travel, or ubiquitous access to communication technologies and media—fuel contagion (NAM, 2016)
- The task for policy makers is not just to reduce the likelihood and cost of pandemics as extreme right-tail events, but to reduce the economic and human costs across the whole spectrum of infectious disease threats. We should not become fixated on the probability of a “once-in-a-100-years” pandemic of the 1918–1919 influenza pandemic of severity. Much less virulent pandemics can still cause significant loss of life and economic impact (NAM, 2016).
- World Bank estimates that investment to strengthen national health systems to IHR standards would yield a positive return on investment and economic growth (National Academy of Medicine, 2016).
- We appear to have been successful in preventing Ebola from becoming a pandemic, but at far greater cost in terms of lives and dollars than would have been necessary had we been better prepared (NAM, 2016).
- If we overinvest, we will have upgraded primary health care and public health systems more than merited by the pandemic threat alone and spent more on vaccine and diagnostic research than strictly necessary. Yet it is hard to see this as wasted money. The core capabilities of primary care and public health systems are crucial to achieving many other health objectives (NAM, 2016).
- One truth that holds across many different types of potentially catastrophic risks, including pandemics, is that prevention is far more cost-effective than response, and that the most effective response is a well-prepared response. In other words, spending money now will save money and lives later (NAM, 2016).
 - “Responding to outbreaks once they have happened is far more expensive - in lives and money - than investing in preparedness” (IWG, 2018).

- First, and perhaps most obviously, there are the costs to the health system, both public and private, of medical treatment of the infected and of outbreak control (2018).
 - A sizable outbreak can overwhelm the health system, limiting the capacity to deal with routine health issues and compounding the problem.
- Beyond shocks to the health sector, epidemics force both the ill and their caretakers to miss work or be less effective at their jobs, driving down and disrupting productivity (Bloom, 2018).
- Fear of infection can result in social distancing or closed schools, enterprises, commercial establishments, transportation, and public services—all of which disrupt economic and other socially valuable activity (Bloom, 2018).

Nigeria-Specific Arguments

- Ebola also demonstrated that being better prepared has huge benefits. For example, Nigeria contained the virus successfully, despite being a densely populated nation with many health and social challenges (NAM, 2016).

Sources:

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