

“Health Wars” Sparked by a Global Pandemic End in a Health Catastrophe

Forecasts:

- **400 million perish in a global pandemic beginning in 2030.**
- **Divergent pandemic responses lead to “health wars” both within and across borders.**
- **By 2039, the world faces the largest and deepest health chasm ever witnessed.**

Despite an increase in natural disasters and conflicts over natural resources, world population continued to grow to 7.5 billion in 2020, on pace to reach 9.8 billion in 2039. Asia continued to experience robust growth, while population also grew in South America and Africa following the alleviation of such diseases of poverty as malaria, tuberculosis, and HIV/AIDS.

Rapid urbanization in the decade leading to 2020 created “megacities.” Unmitigated population growth led those in rural areas to clear land for agriculture and housing, causing further environmental degradation. This human “invasion” of previously untouched areas irrevocably altered natural habitats and accelerated the extinction of large number of species, particularly in the rainforests of South America.

Globalization continued to increase business travel, while migrant workers and refugees contributed to unprecedented mass migration. At the same time, medical tourism and leisure travel gained in popularity, particularly after the easing of visa requirements beginning around 2015. The combination of a surge in global mobility, human exposure to exotic plants and animals, and the effects of global warming on the pathogen environment, set the stage for a global pandemic.

In 2030, a virus crossed over from flies to humans in the rainforest of Brazil and mutated into a virulent strain. Symptoms of the benign phase of the disease included fever, headache, chills and malaise beginning approximately two weeks after infection and subsiding soon thereafter. The lag time between initial infection and the onset of symptoms made it difficult to detect the virus in patients coming to hospitals for other medical reasons. As a result, first responders – doctors and nurses – found themselves infected as well. The infection spread quickly through person-to-person airborne transmission from South to North America, then throughout the world. About 5% of those infected went on to develop the severe or toxic form of the disease approximately six weeks after infection, leading to abdominal pain, vomiting and kidney failure resulting in death. Because the causal virus and transmission method were not known, there were no vaccines available.

Instant and reliable global information exchange through the Google Health Consortium (GHC) helped identify Brazil as the country where the infection originated. However, news of the virus set off a panic around the world, overwhelming both developed and developing countries. Countries could not reach a global consensus on how to respond. International shipping and travel, as well as domestic public transport, faced massive disruptions and in some areas ceased operations. The resulting shortages of essential commodities instigated the largest economic crisis since 2008, with the most disastrous effects hitting African countries with minimal or absent agricultural and manufacturing capabilities.

Logistic support for first responders and humanitarian relief replaced defense and war-fighting as the primary roles of the military.

Developed countries instituted new restrictions on travel that disrupted businesses and separated families. The governments temporarily closed schools and offices, and restricted people from congregating in public areas. They also created teams of mobile testing units to identify, quarantine, and treat infected people. The perception of these restrictions as violations of civil liberties further heightened social unrest. Religious groups preached that the pandemic was a sign of the apocalypse.

Governments of some developing countries tried to coordinate a response to the pandemic, but lack of resources and a weak legal system created an environment where profiteers sold fraudulent vaccines and treatments, giving people a false sense of security that actually helped the virus to spread. In other countries, governments lacking the resources to initiate a focused immigration policy simply closed their borders, exacerbating the economic crisis. These governments also enforced quarantines on provinces where the virus was rampant, cutting off these populations from the rest of the country in ghetto-like conditions. Rebellions by these infected populations led to skirmishes, small-scale civil war, and general social chaos that added to the stresses these countries already faced. In some cases, local skirmishes spilled across borders and escalated into full-fledged wars between countries.

The pharmaceutical industry, crippled by the economic crisis, could not meet the urgent and growing demand for a vaccine. By 2033, sustained research among the remaining Pan-Atlantic universities led to the development of a vaccine against the virus causing the pandemic. However, intellectual property issues and the breakdown of logistics severely limited access and distribution of the vaccine, causing further flare-ups of the ongoing health wars.

By 2039, the pandemic was contained in most parts of the world. The developed world has shrunk while more countries find themselves in regression. Life expectancy in the developed world has returned to its previous 80 or 90 years, with populations spending those years in relative economic comfort. In the remaining areas, however, war, economic depression, and the further deterioration of public health have essentially cut life expectancy in half. Sporadic outbreaks of the original pandemic, as well as other diseases new and old, continue to devastate these populations. Reverting to a primitive struggle for survival, these populations increase their birth rates, stabilizing population in some areas. However, isolation from the developed world, the total collapse of infrastructure and government services, and bloody conflict over scarce resources are driving populations in other areas toward extinction.

Further Reading:

- World Population Prospects: *The 2006 Revision* (<http://data.un.org/Browse.aspx?d=PopDiv>)
- Philip Stevens, *Diseases of Poverty and the 10/90 Gap* (http://www.fightingdiseases.org/pdf/Diseases_of_Poverty_FINAL.pdf)
- World Wildlife Fund (WWF): *Problems in the Amazon* (http://www.panda.org/about_wwf/where_we_work/latin_america_and_caribbean/region/amazon/problems/index.cfm)
- Stacey Knobler, Adel Mahmoud, Stanley Lemon and Leslie Pray, *The Impact of Globalization on Infectious Disease Emergence and Control: Exploring the Consequences and Opportunities* (http://www.nap.edu/catalog.php?record_id=11588)
- World Health Organization: Global Influenza Preparedness Plan (http://www.who.int/entity/csr/resources/publications/influenza/GIP_2005_5Eweb.pdf)
- Alfonso Cuarón, *Children of Men* (<http://www.childrenofmen.net/>)