A Tale of Two Pandemics: Applying Lessons from Ebola to Drive Innovation for Zika

Methodology

- Interviewed stakeholders from the public, private, and non-profit sectors
- Analyzed partnership formation following the Ebola and Zika outbreaks

Project Summary

With the significant international consequences of recent outbreaks, the ITP Lab conducted extensive stakeholder interviews and macro-level health policy analysis to expose gaps in pandemic preparedness and develop legal frameworks for future threats.

The Pandemic Problem

- Emerging infectious disease outbreaks pose a significant health and socioeconomic threat

- Severe Acute Respiratory Syndrome (SARS) – 2002
  - 8000+ cases reported in 37 countries
  - 700+ deaths prior to containment
  - $40+ billion in losses worldwide
  - No vaccine is currently available for future outbreaks

- Middle East Respiratory Syndrome (MERS) – 2012
  - 1000+ cases reported in 24 countries
  - 22+ million in losses during 2015
  - South Korea outbreak
  - No vaccine is currently available for future outbreaks

- Ebola Virus – 2014
  - 28,000+ cases reported in 10 countries
  - 11,000+ deaths prior to containment
  - $30+ billion in losses worldwide
  - No vaccine is currently available for future outbreaks

- Zika Virus – 2016
  - Cases reported in 30+ countries
  - Possible link to microcephaly
  - $3.5+ billion in estimated losses
  - No vaccine is currently available for future outbreaks

Mapping R&D Alliances

Stakeholder Analysis

- Public health imperative drove rapid response of key players
- Cost of drug development inhibits sustainable investment
- Public-Private Partnerships (PPPs) are a model for risk-sharing and innovation
- Incentives must be tailored to meet unique partner profiles
- Pandemic response must be proactive and not reactive

Rethinking R&D

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