We believe that when risk can be properly assessed and mitigated, the world will be more prepared to manage epidemics.
The Zika virus alone could end up costing Latin America and the Caribbean up to $18 billion, according to a report from the United Nations. The World Bank estimates the 2015 Ebola outbreak cost more than $32 billion. As a result of the 2015 MERS virus outbreak in South Korea, the country’s tourism industry plunged 41 percent from the previous year, and revenue losses for the country were estimated to amount to over $90 million. Moreover, the South Korean government was forced to inject $16 million into the flagging economy to combat those losses.

Such economic losses will continue to escalate since the underlying factors driving the emergence of infectious disease - increased urbanization, climate change and extensive global transportation networks - are increasing. It is evident that epidemics are not one-off events, but rather demonstrate distinct patterns similar to other natural catastrophes. As such, the risks associated with infectious disease events should be better understood, analyzed and mitigated to ensure that organizations can withstand future impact.
A Solution to the Problem

Metabiota partners with governments and industry worldwide to identify infectious disease risks, minimize the effects of outbreaks and contain the economic impact of epidemics.

Our modeling platform generates real-world outbreak scenarios from global reference and customer data. Included in this proprietary data set:

- More than 1,200 outbreaks covering 100 years of historical events;
- Over 48 million cases and 6 million deaths;
- Over 150 pathogens;
- More than 240 data sources and 230 countries and territories.

This unique data set drives a peer-reviewed and validated disease model library that features 20 million stochastic realizations with weekly resolution.

The Metabiota modeling framework includes: a disease spread model, event catalog, and risk analytics solution. This framework, combined with Metabiota’s consultative and agile approach, allows organizations to develop a new view of their risk and monitoring tools that can help provide an early warning system for the potential impact of epidemics.
In addition to modeling a company’s potential loss (frequency, severity and on a scenario basis), our offering is designed to help the insurance industry in the following ways:

**Life (re)Insurance companies:**
- Prepare for a capital event and mitigate the potential for significant losses from pandemics;
- Manage earnings events that occur from the volatility of outbreaks and small epidemics, thereby ensuring stable earnings;
- Quantify exposure to potential losses from large global health events, to more precisely articulate them to key stakeholders (e.g. Boards, investors/shareholders, rating agencies, and regulatory bodies).

**Property & Casualty (re)Insurance companies:**
- Quantify risk from infectious disease outbreaks;
- Create novel product offerings to address the infectious disease coverage gap including non-physical damage business interruption, travel, and personal accident covers;
- Facilitate the efficient management and transfer of risk through accumulation management and reinsurance structuring.

Contact Metabiota.com to understand how we can partner to better manage your exposure.

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