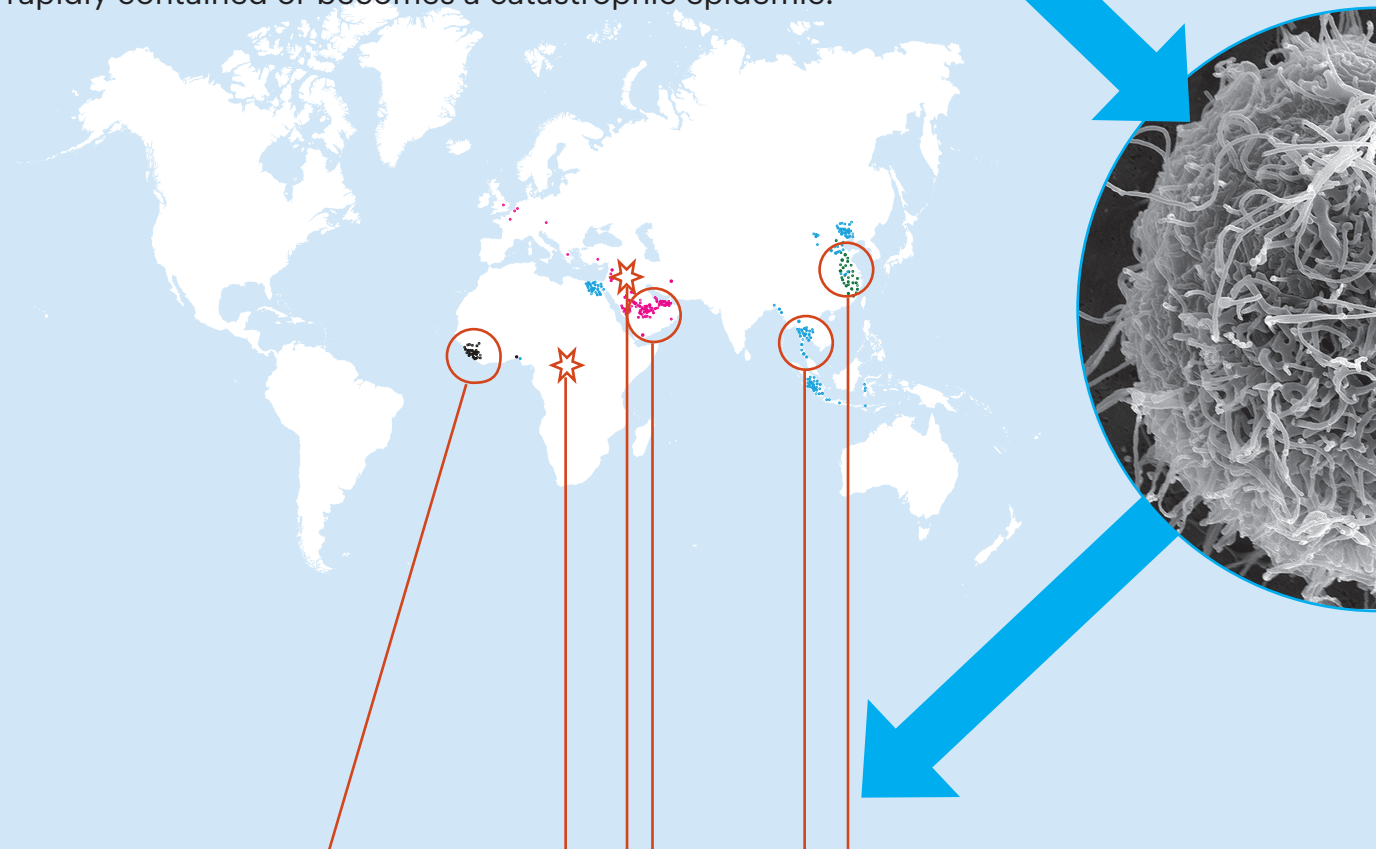


EBOLA 2014

Disease ecology typically focuses on a pathogenic organism's relation to its milieu—in particular, animal hosts and their ecological niche—and on how this milieu is affected by human behavior. But the 2014 Ebola outbreak brings to light the limitations of this notion of ecology. As the articles in this issue make clear, the concept of disease ecology must also include the technical, political and social elements that shape whether an outbreak is rapidly contained or becomes a catastrophic epidemic.



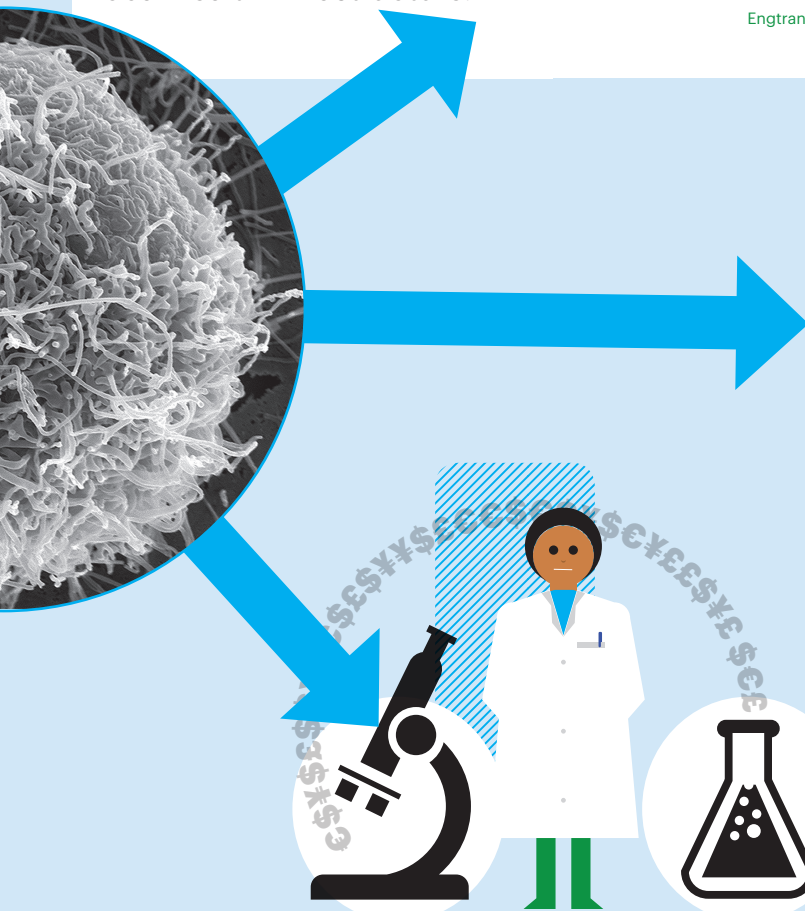
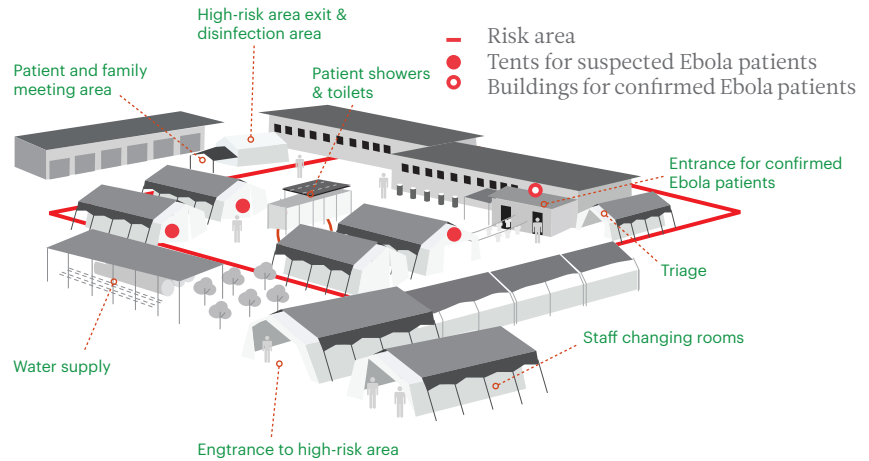
GLOBAL HEALTH SECURITY

Focuses on detecting and containing emerging disease outbreaks so that they do not spread to threaten global economies and populations. During the 2014 Ebola epidemic, there was no intensive global health security response until the disease spread beyond poor West African nations.



HUMANITARIAN BIOMEDICINE

Engages in acute response to neglected diseases in resource poor, typically rural settings. In Spring 2014, it proved incapable of managing a complex and rapidly spreading Ebola outbreak in the absence of local health infrastructure.



CLASSICAL PUBLIC HEALTH

Includes hospital facilities, clinicians, basic supplies, sanitation systems and laboratories. Political crisis, economic reforms and civil conflict left glaring absences in such infrastructure, making it impossible to contain the outbreak in its early stages.

BIOTECHNOLOGY AND DRUG DEVELOPMENT

Targets diseases that have existing markets or other sources of investment such as philanthropies or biodefense. Potential Ebola drugs and vaccines had not been supported through clinical trials in time to make treatment or prevention possible in the early stages of the outbreak.