HEALTH AND HUMANITY

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Anti-Microbial Resistance

Human Pandemic
- Yemen Cholera Outbreak
- Somalia Cholera Outbreak
- South Sudan Cholera Outbreak
- Democratic Republic of the Congo Ebola Crisis
- Nigeria Lassa Fever
- Avian Flu, H7N4
- Anti-Microbial Resistance

Plant Epidemic
- Panama Disease
- Xylella Fastidiosa
- Wheat Rust
While previous outbreaks may have helped build immunity in the population, other diseases and widespread malnutrition can weaken resilience.

ABC News, 2018

Almosawa, Hubbard, Griggs, 2017
Vaccination campaigns implemented in high risk districts 2017 has greatly contributed to the reduction in the number of new Cholera cases compared to the same time in 2017.
South Sudan declares the end of its longest cholera outbreak
Democratic Republic of the Congo Ebola Crisis

- Ebola outbreak in DR Congo now second worst in history

Latest numbers as of 30 November 2018
- Total cases: 434
  - Confirmed cases: 386
  - Probable cases: 48
- Deaths: 252
  - Confirmed: 204
  - Probable: 48
Nigeria Lassa Fever

- Nigeria battles its largest Lassa Fever outbreak on record

(NCDC, 2018)
Avian Flu and H7N4

“Any animal influenza virus that develops the ability of human to human transmission can theoretically cause a pandemic.”

– WHO, 2018

"World's first human case of H7N4 avian flu reported in China"

(Connor, 2012)

(Ducharme, 2018)
Anti-Microbial Resistance

“Antimicrobial resistance (AMR) threatens the effective prevention and treatment of an ever-increasing range of infections caused by bacteria, parasites, viruses and fungi.”

– WHO, 2018

Causes of Death, Annually

- Tetanus
- Road Traffic Accidents
- Measles
- Diarrhoeal Disease
- Diabetes
- Cholera
- Cancer
- AMR
- AMR (2050)

(O’Neill, 2014)
Plant Epidemics

Potential to Impact:
• Olive Trees
• Lavender
• Rosemary
• Almond Trees

Plant epidemic

Panama Disease
Nelson, 2017

Wheat Rust
Agricultural Research Service, 2006

Xylella Fastidiosa
Australian Government, 2018