Cambridge Judge Business School

Centre for Risk Studies

HEALTH AND HUMANITY

Kayla Strong
Research Assistant, Cambridge Centre for Risk Studies

4 December 2018

Centre for **Risk Studies**

UNIVERSITY OF CAMBRIDGE
Judge Business School

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

Yemen Cholera Outbreak

Human pandemic

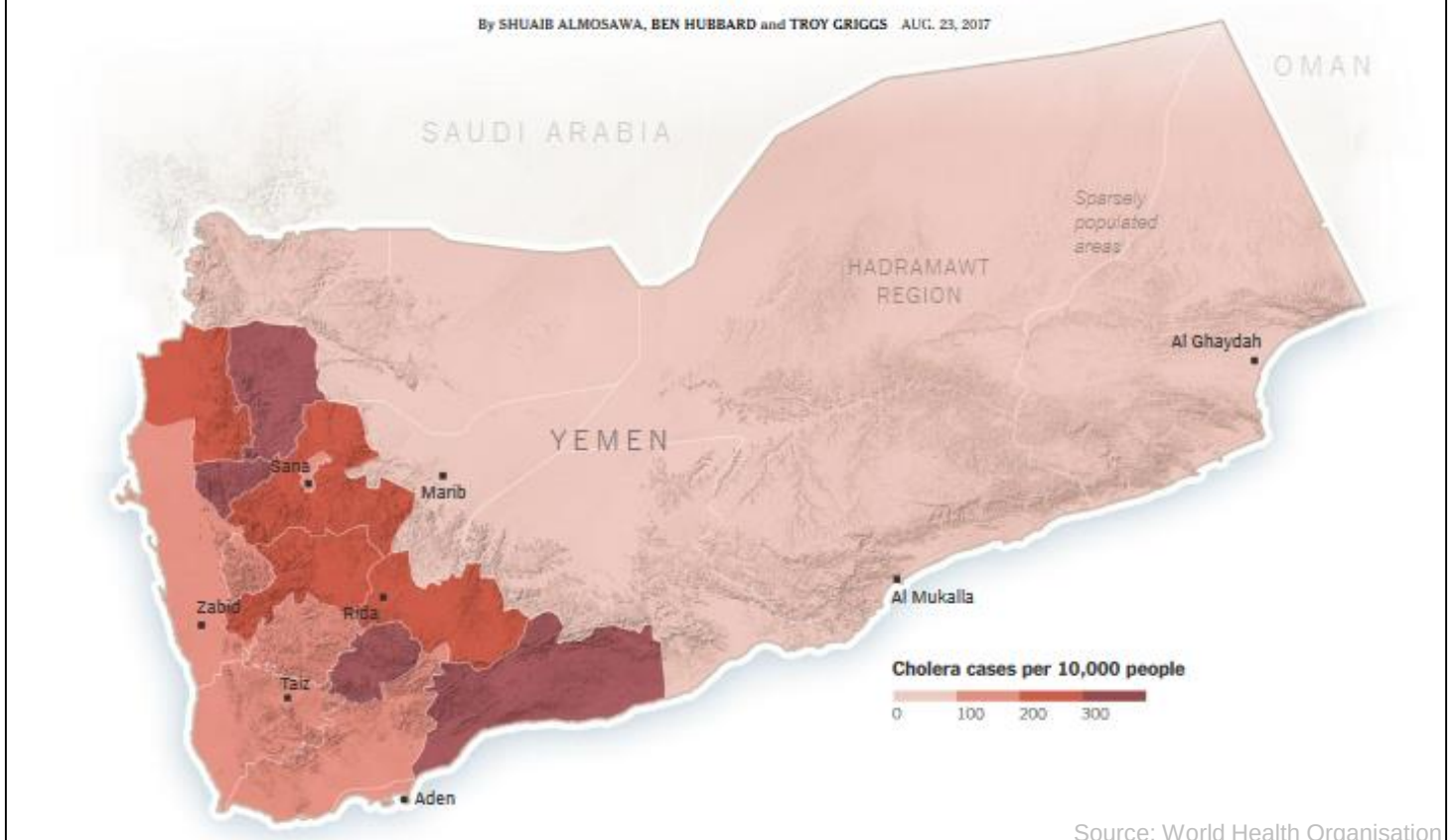
The New York Times

MIDDLE EAST

SHARE

'It's a Slow Death': The World's Worst Humanitarian Crisis

By SHUAIB ALMOSAWA, BEN HUBBARD and TROY GRIGGS AUG. 23, 2017



Source: World Health Organisation

Almosawa, Hubbard, Griggs, 2017

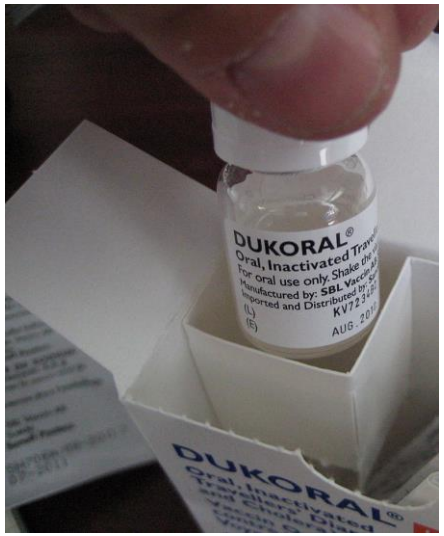
- "While previous outbreaks may have helped build immunity in the population, other diseases and widespread malnutrition can weaken resilience."

ABC News, 2018

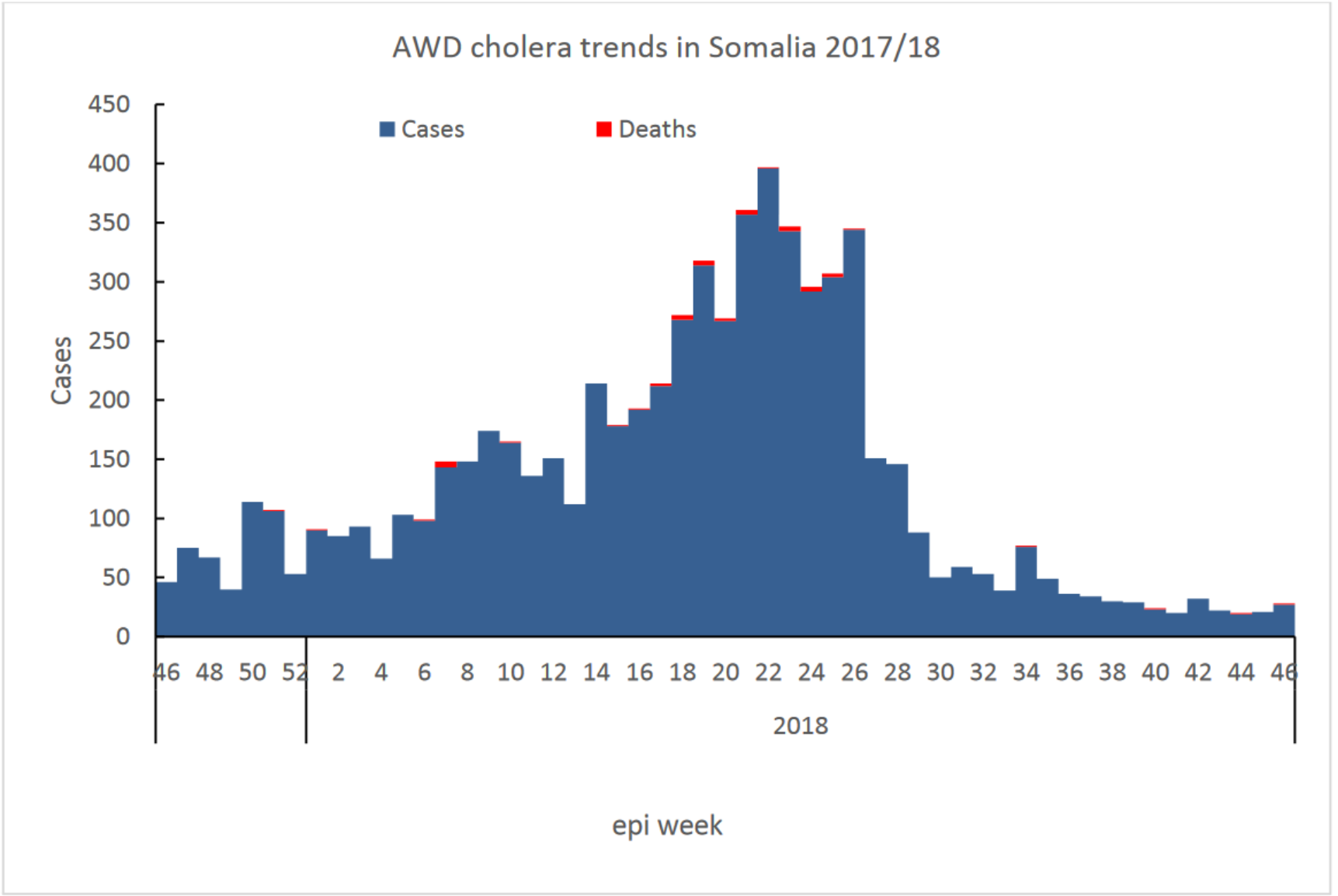
Somalia Cholera Outbreak

Human pandemic

- 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.



Wikimedia Commons, 2008



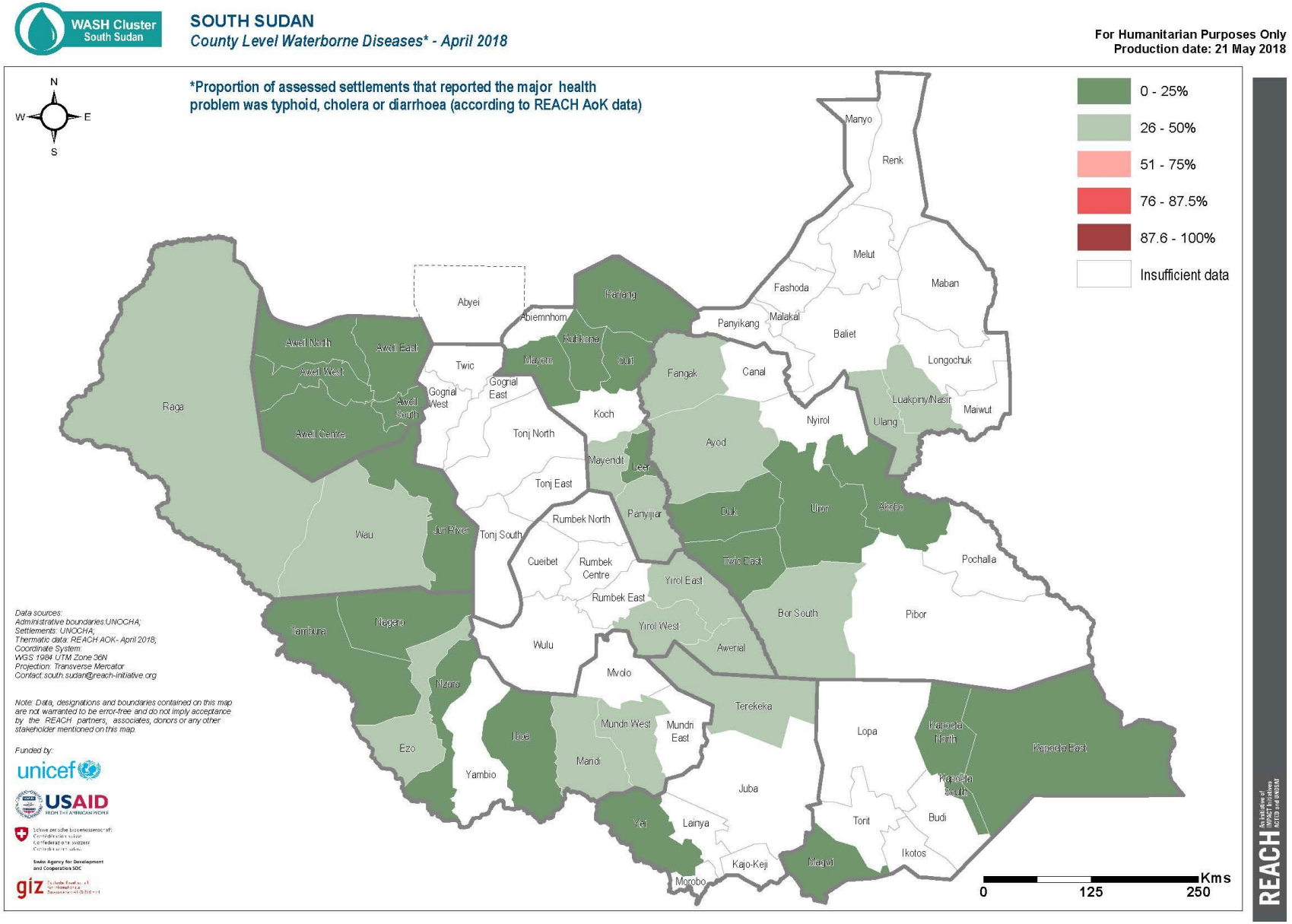
Ministry of Health, Somali Federal Republic, 2018

UNIVERSITY OF CAMBRIDGE Judge Business School | Centre for Risk Studies

South Sudan Cholera Outbreak

Human pandemic

- South Sudan declares the end of its longest cholera outbreak



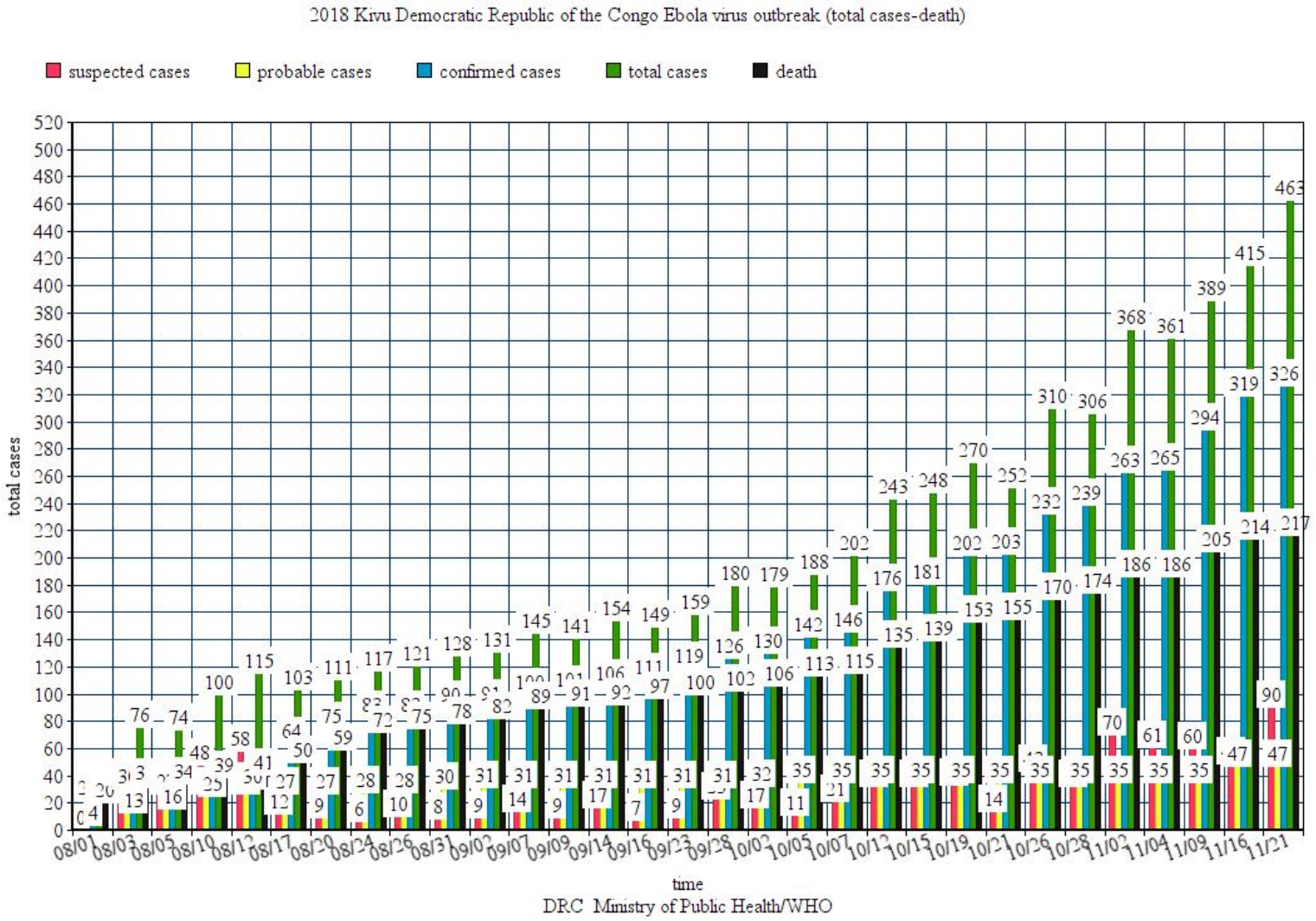
Democratic Republic of the Congo Ebola Crisis

Human pandemic

- Ebola outbreak in DR Congo now second worst in history

Latest numbers as of 30 November 2018

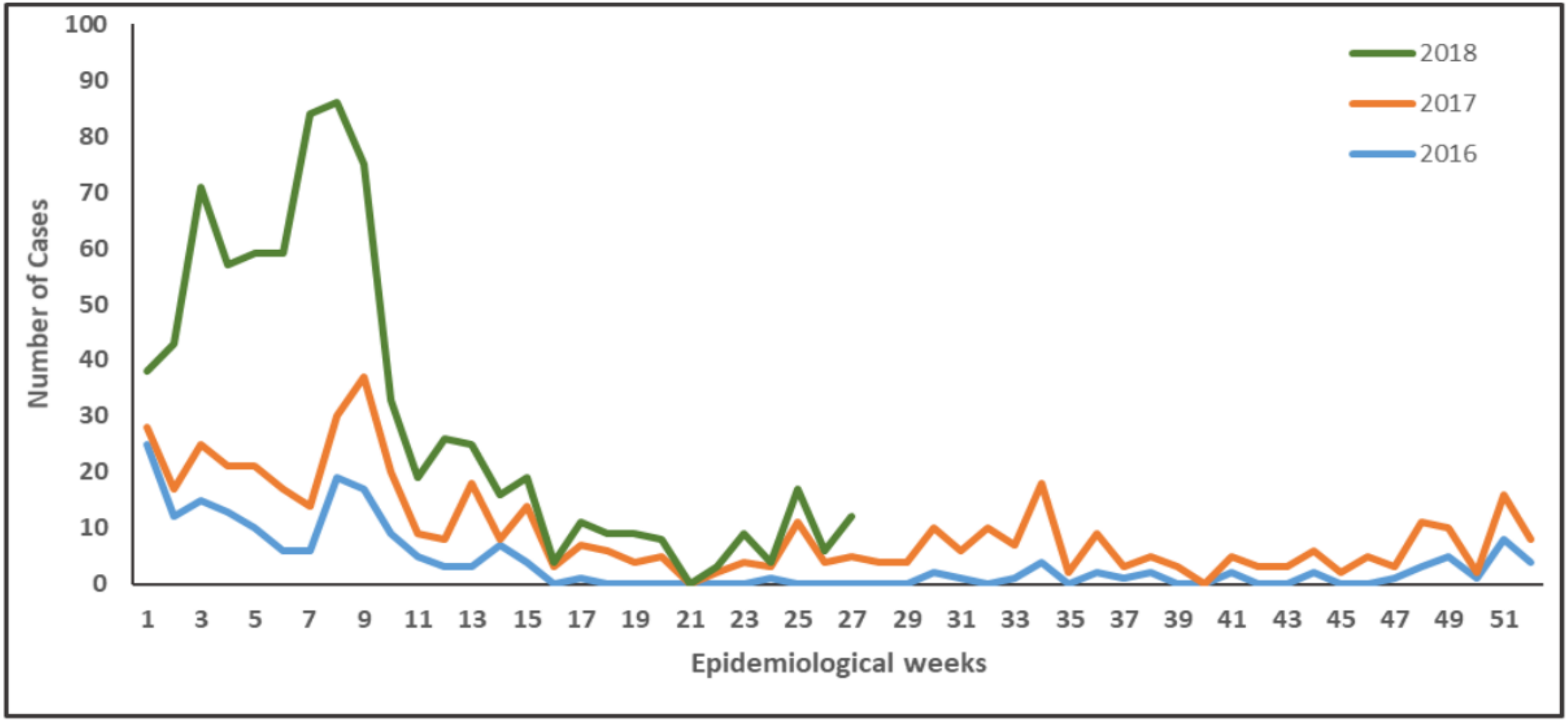
- Total cases: 434
  - Confirmed cases: 386
  - Probable cases: 48
- Deaths: 252
  - Confirmed: 204
  - Probable: 48



Nigeria Lassa Fever

Human pandemic

- Nigeria battles its largest Lassa Fever outbreak on record



(NCDC, 2018)

Avian Flu and H7N4

Human pandemic

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

– WHO, 2018

CNN Health » Food | Fitness | Wellness | Parenting | Live Longer International Edition +

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

By Mark Lieber, CNN

Updated 2018 GMT (0418 HKT) February 15, 2018

(Connor, 2012)

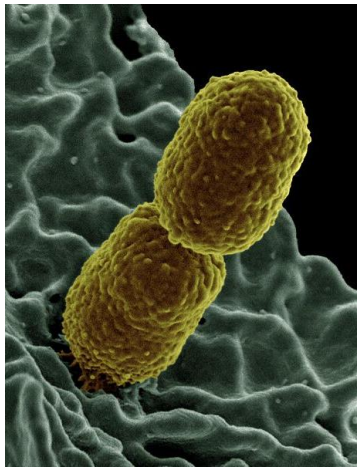
(Ducharme, 2018)

UNIVERSITY OF CAMBRIDGE Judge Business School | Centre for Risk Studies

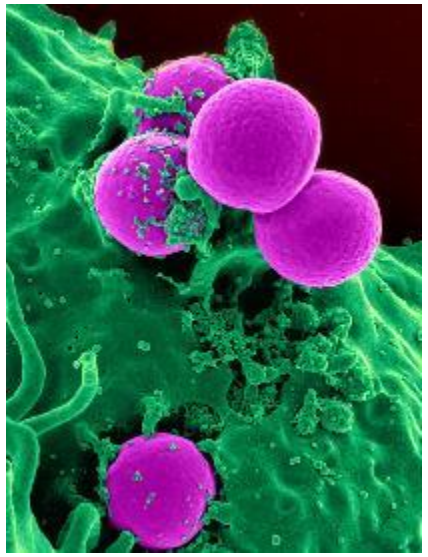
Anti-Microbial Resistance

“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

Human pandemic



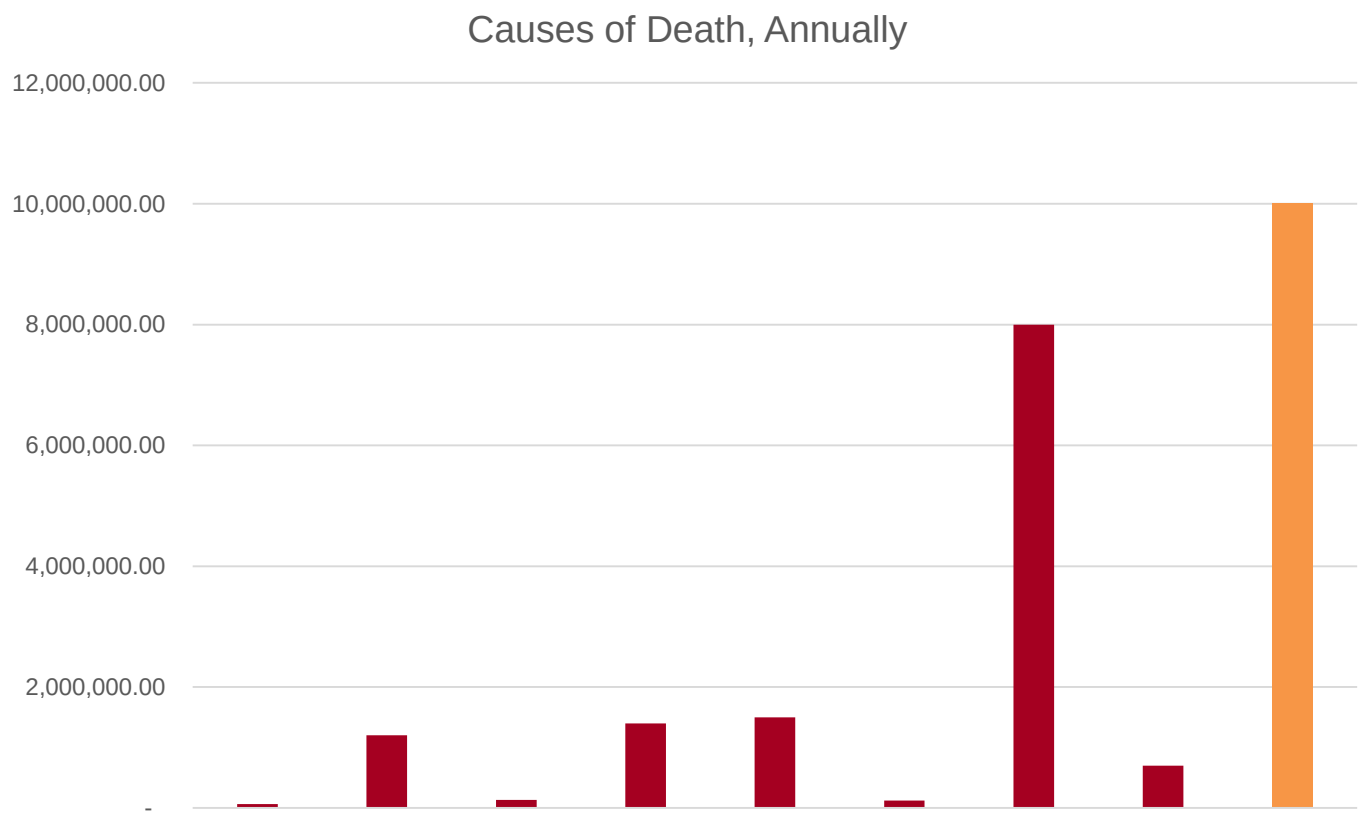
Klebsiella Pneumoniae
(NIAID, 2014)



Staphylococcus Aureus
(National Institutes of Health, 2017)

Mycobacterium Tuberculosis
(NIAID, 2010)

Non-typhoidal Salmonella
(Eckert & Oosthuizen, 2013)



(O’Neill, 2014)

UNIVERSITY OF CAMBRIDGE Judge Business School | Centre for Risk Studies

Plant Epidemics

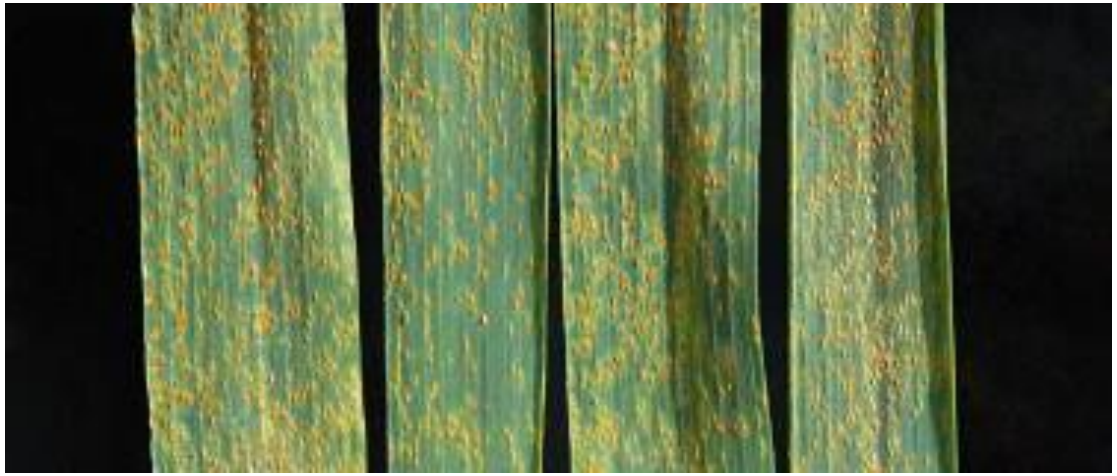
Plant epidemic

Panama Disease
Nelson, 2017

Xylella Fastidiosa
Australian Government, 2018

Potential to Impact:

- Olive Trees
- Lavender
- Rosemary
- Almond Trees



Wheat Rust
Agricultural Research Service, 2006

UNIVERSITY OF CAMBRIDGE Judge Business School | Centre for Risk Studies

Centre for
Risk Studies

UNIVERSITY OF
CAMBRIDGE
Judge Business School