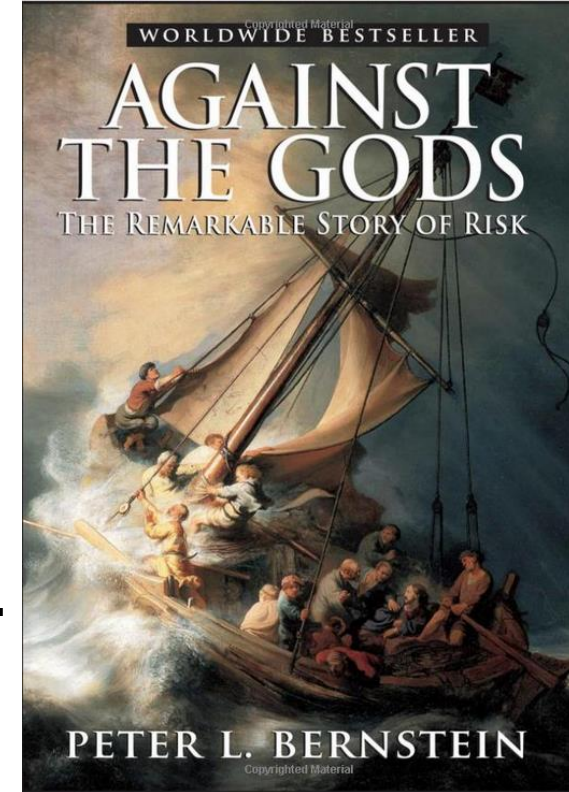
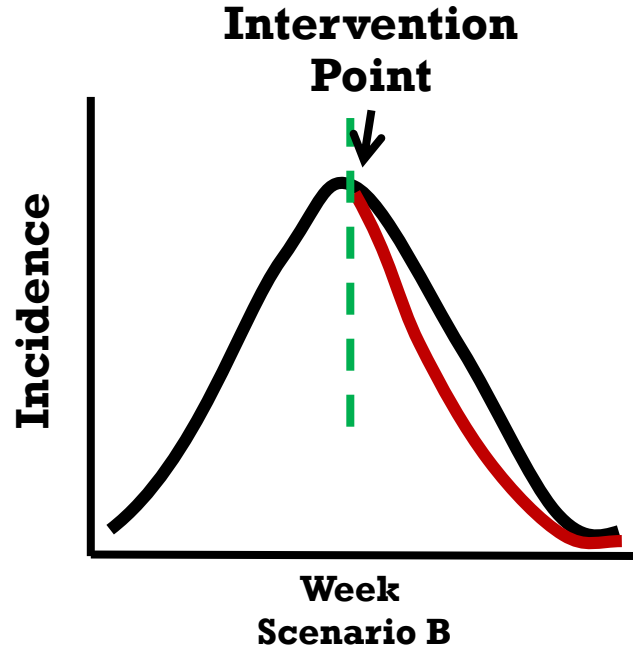
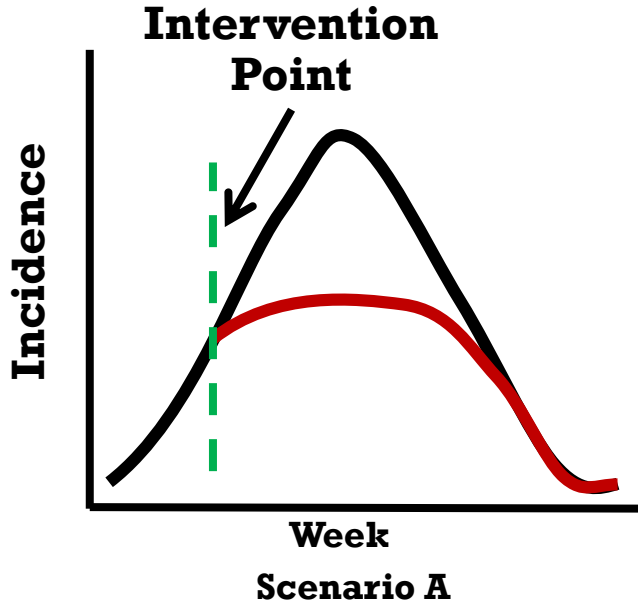


Predictive Assessment of Transmission Conditions of Cholera in the Environment and Human Population using Earth Observations

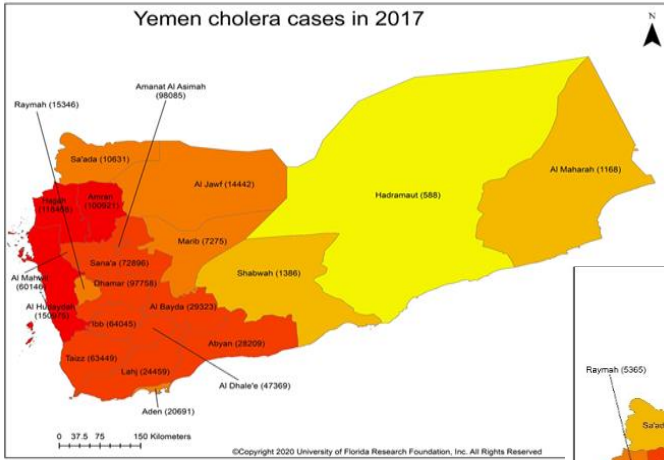
University of Florida, USA
University of Maryland, USA

Why Prediction?

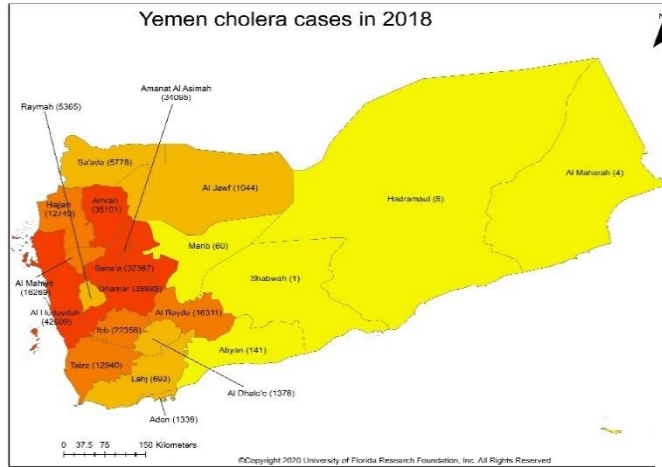


Schematic representation of the disease control measures implemented at the beginning (Scenario A) and after the peak (Scenario B) of an outbreak, and potential cases averted.

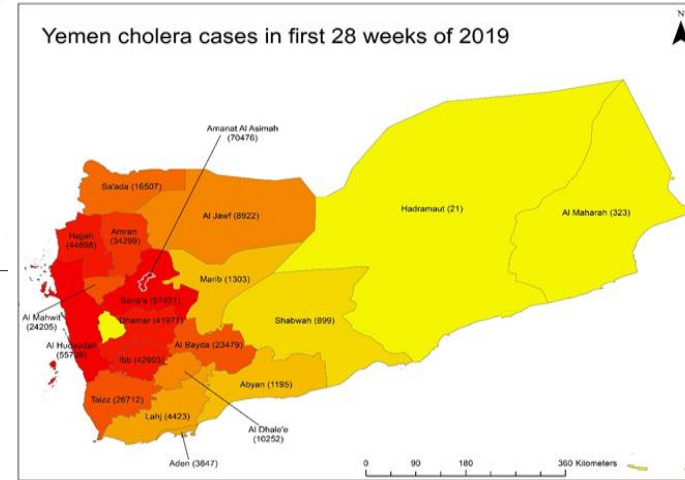
Yemen cholera cases in 2017

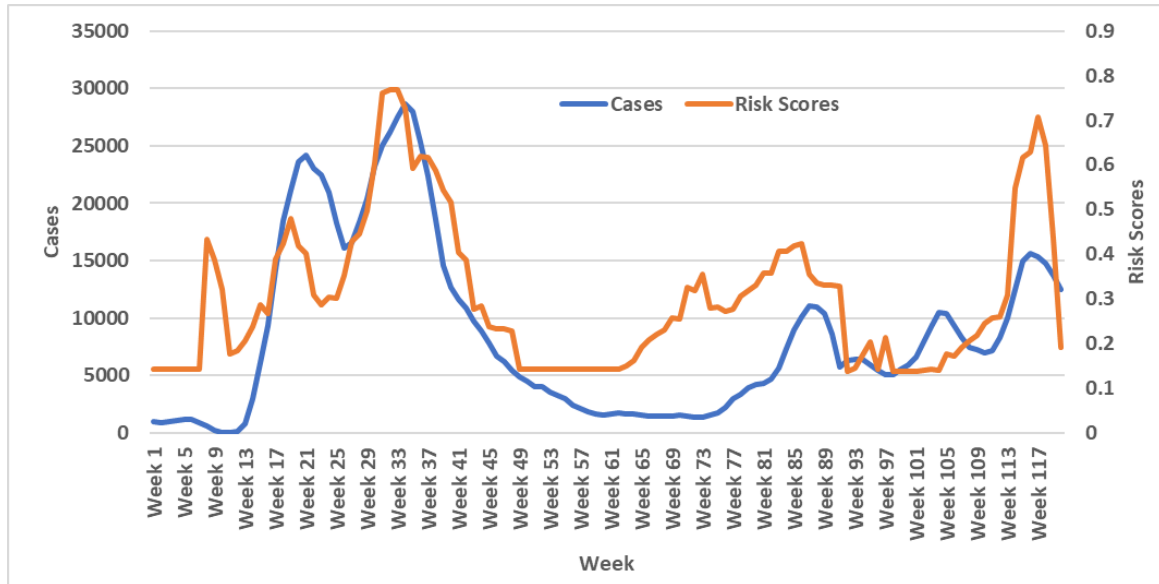


Yemen cholera cases in 2018

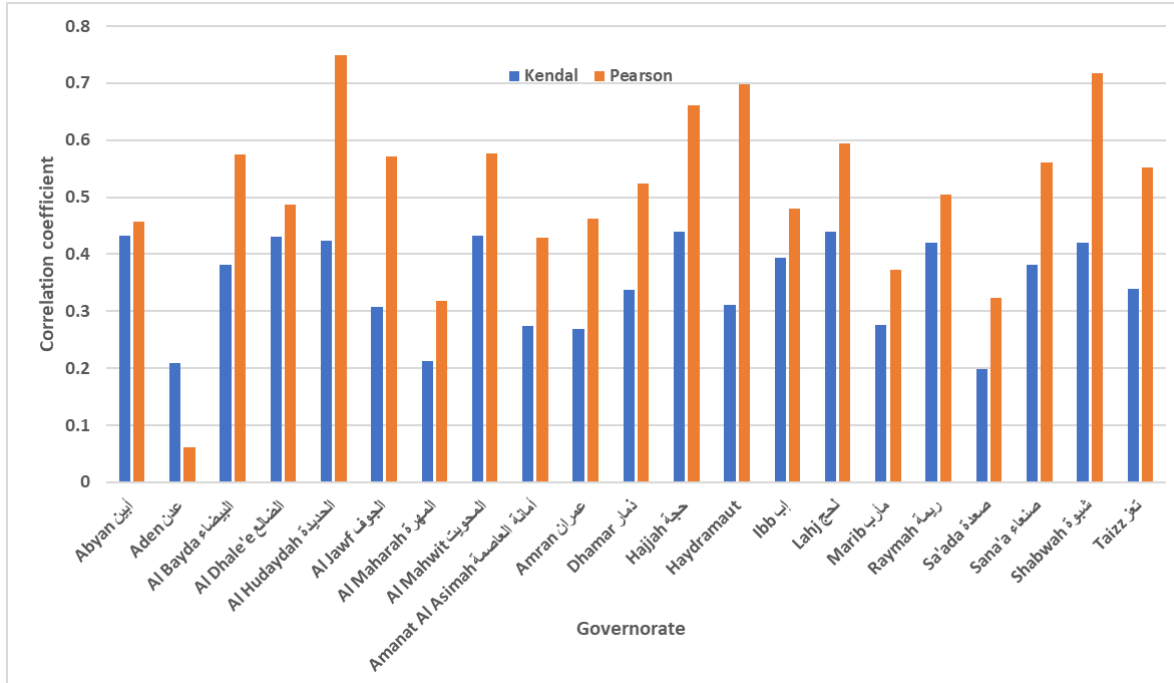


Yemen cholera cases in first 28 weeks of 2019



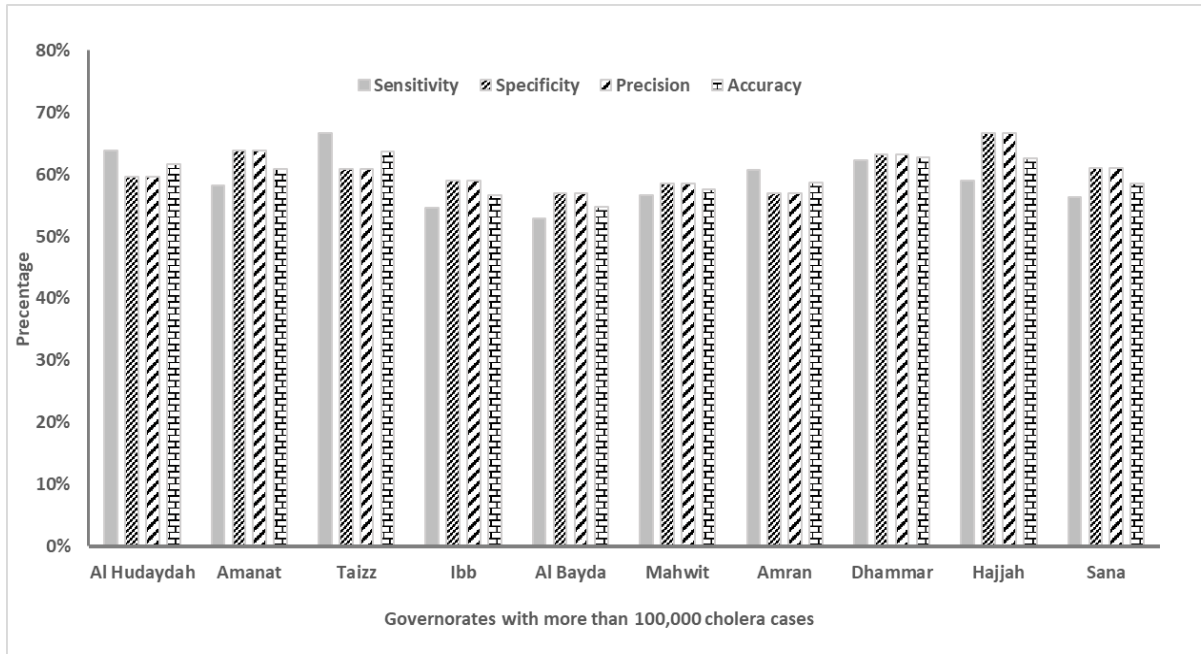


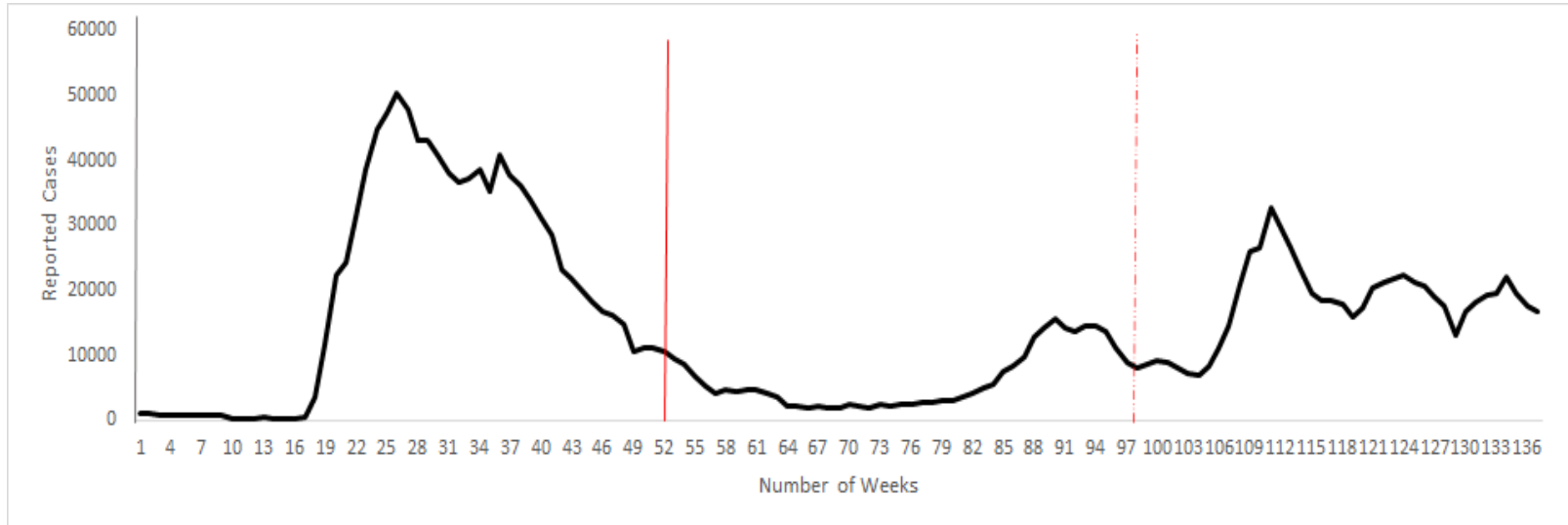
Sample time series of average four week cholera cases and computed risk scores



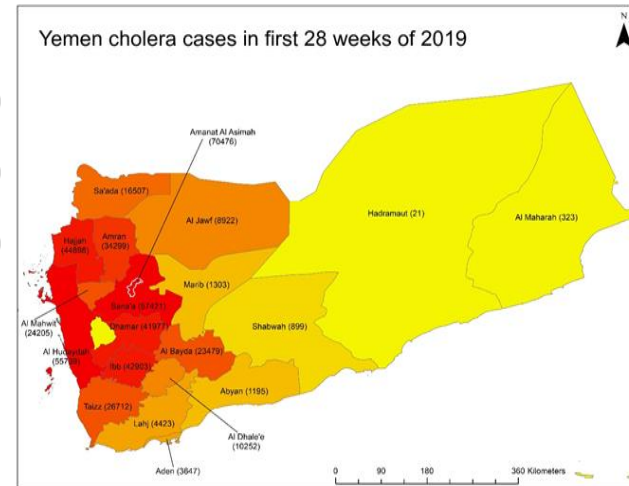
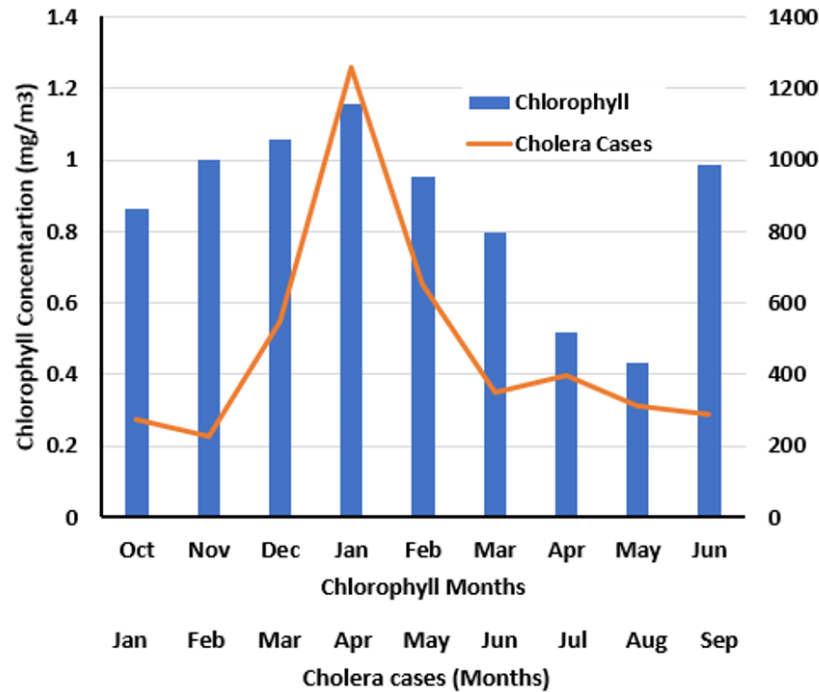
Correlation coefficients between cholera cases and risk values for all governorates

Real time performance of cholera prediction model using data from Yemen (2017-2019)





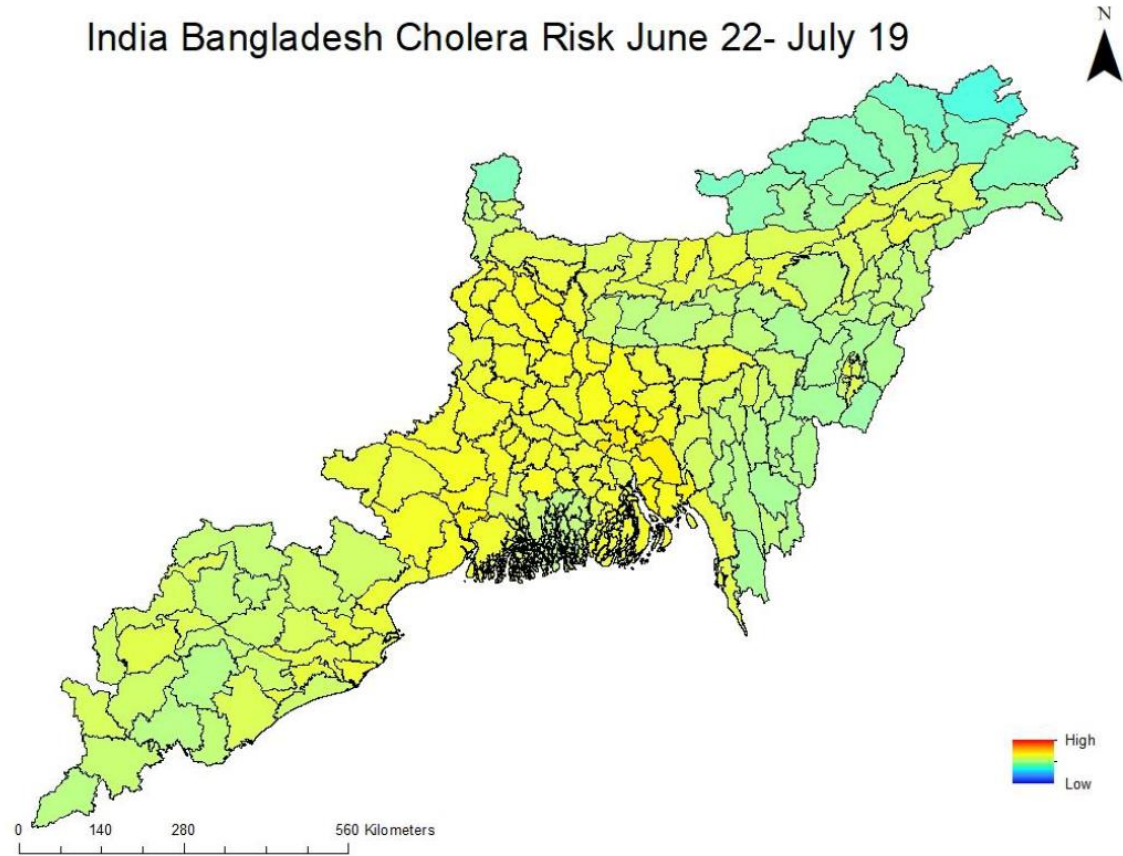
Total number of cholera cases from 2017 to 2019 in Yemen.



Cholera in Aden. This figure has two x-axes, one for chlorophyll and the other from cholera cases

- Week 1: May 25-June 21
Low
- Week 2: June 1- June 28
Low
- Week 3: June 8- July 5
Low
- Week 4: June 15- July 12
Low
- Week 5: June 22- July 19
Low

India Bangladesh Cholera Risk June 22- July 19



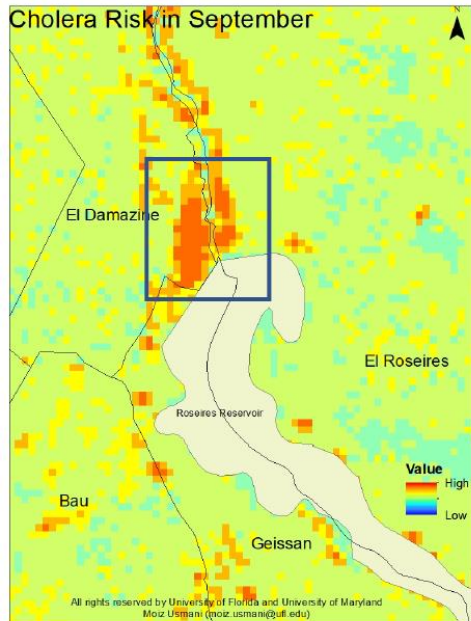
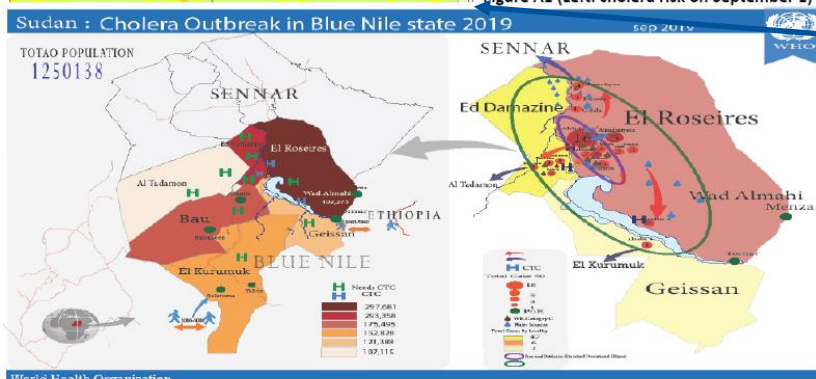
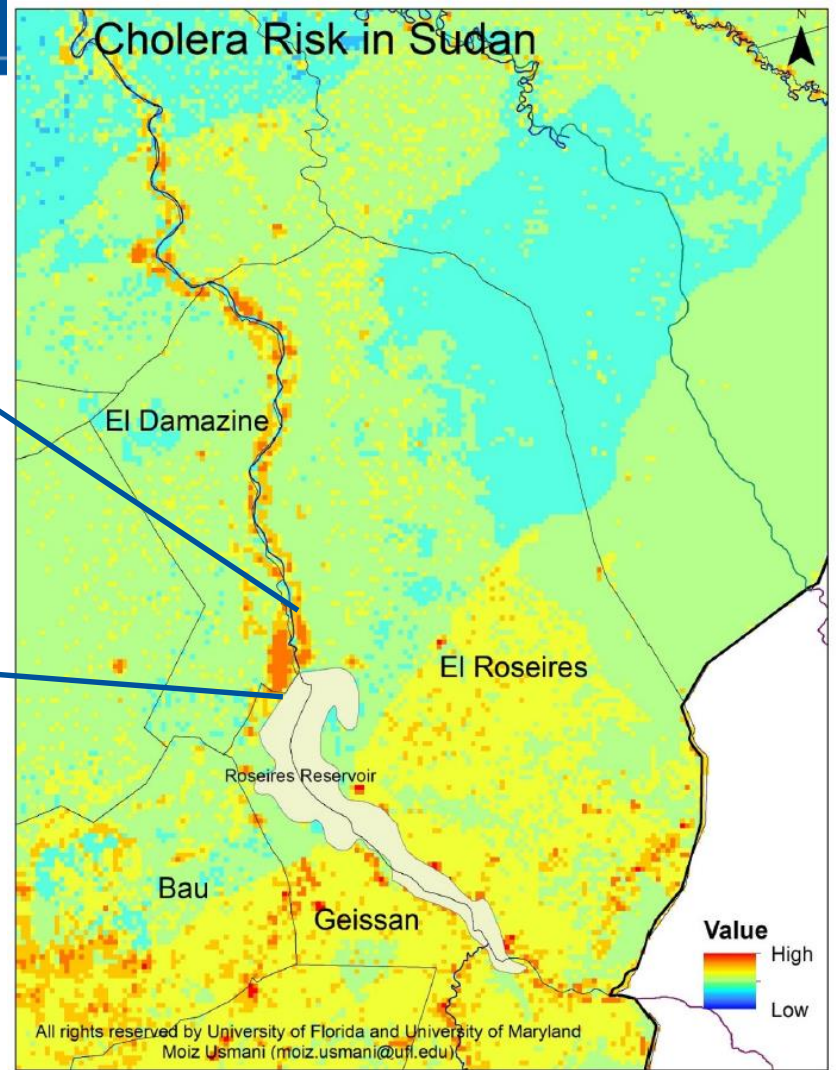


Figure A1 (Left: cholera risk on September 1)



Affected localities in Blue Nile State, Health Cluster, 26th September 2019
<https://reliefweb.int/sites/reliefweb.int/files/resources/MDRSD027do.pdf>
 Figure A2 (Actual cholera cases on September 30th)