



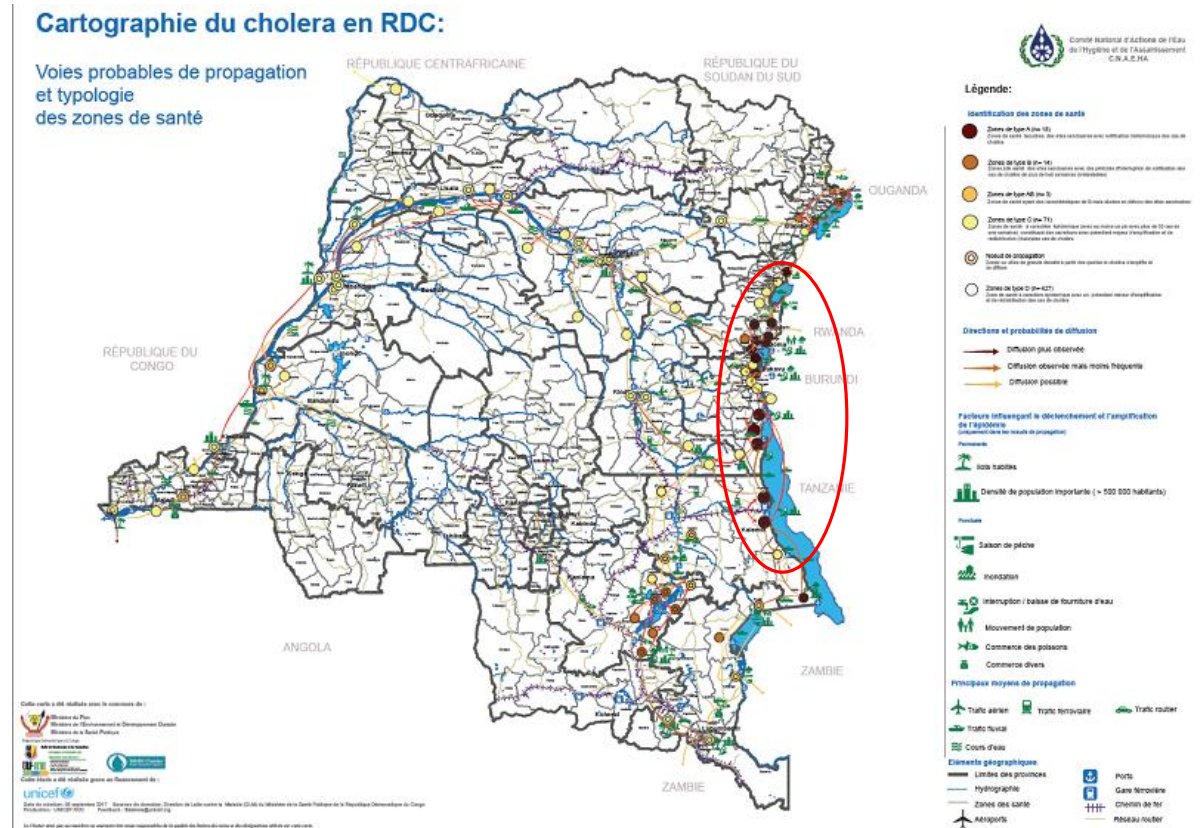
GLOBAL TASK FORCE ON
CHOLERA CONTROL

**CHOLERA HOTSPOTS: CONTROL, ELIMINATION
AND RISK OF RE-EMERGENCE**

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3-4 June 2019

MAIN CHOLERA EPIDEMIOLOGICAL PROFILES

- **Epidemic cholera:** areas suffering occurrence of sporadic cholera outbreaks usually associated with high morbidity and mortality (e.g.. Angola 2006, Zimbabwe 2008-09, Haiti 2010-2011, Yemen 2017)
- **Endemic areas:** areas suffering high cholera incidence rates in a persistent manner (e.g.. India, Bangladesh, DRC)



HOTSPOT DEFINITION

A geographically limited area (e.g. city, administrative level 2 or health district catchment area) where environmental, cultural and/or socioeconomic conditions facilitate the transmission of the disease **and where cholera persists or re-appears regularly**

SITUATIONAL ANALYSIS — KEY COMPONENT OF THE NATIONAL CHOLERA CONTROL PLANS

1. Epidemiological analysis to identify **cholera burden hotspots**
 - Hotspots are a subset of areas at risk: other areas with low or no cholera presenting conditions conducive for transmission might be also targeted in the NCP
 2. Contextual factors to refine the areas at risk: vulnerability (eg. displaced populations), amplification (eg. urban hubs) or cultural behavioral (eg. nomadic populations)
 3. WaSH indicators
 - Proportion of the population using safely managed drinking water services (SDG 6.1.1)
 - Proportion of population using safely managed sanitation services including a hand washing facility (SDG 6.2.1)
- Dynamic process: baseline analysis followed by annual updates

EPI INDICATORS TO IDENTIFY CHOLERA BURDEN HOTSPOTS

- **Source of information:** Country data on suspected cholera cases
- **Indicator:** Mean annual cholera incidence
- **Recommended administrative area:** level-2 (district level)
- **Period of analysis:** 5 years (sensitivity analysis may be considered 3-10 years)

- **Procedure:**

Step 1. Districts ranked by the cholera mean annual incidence

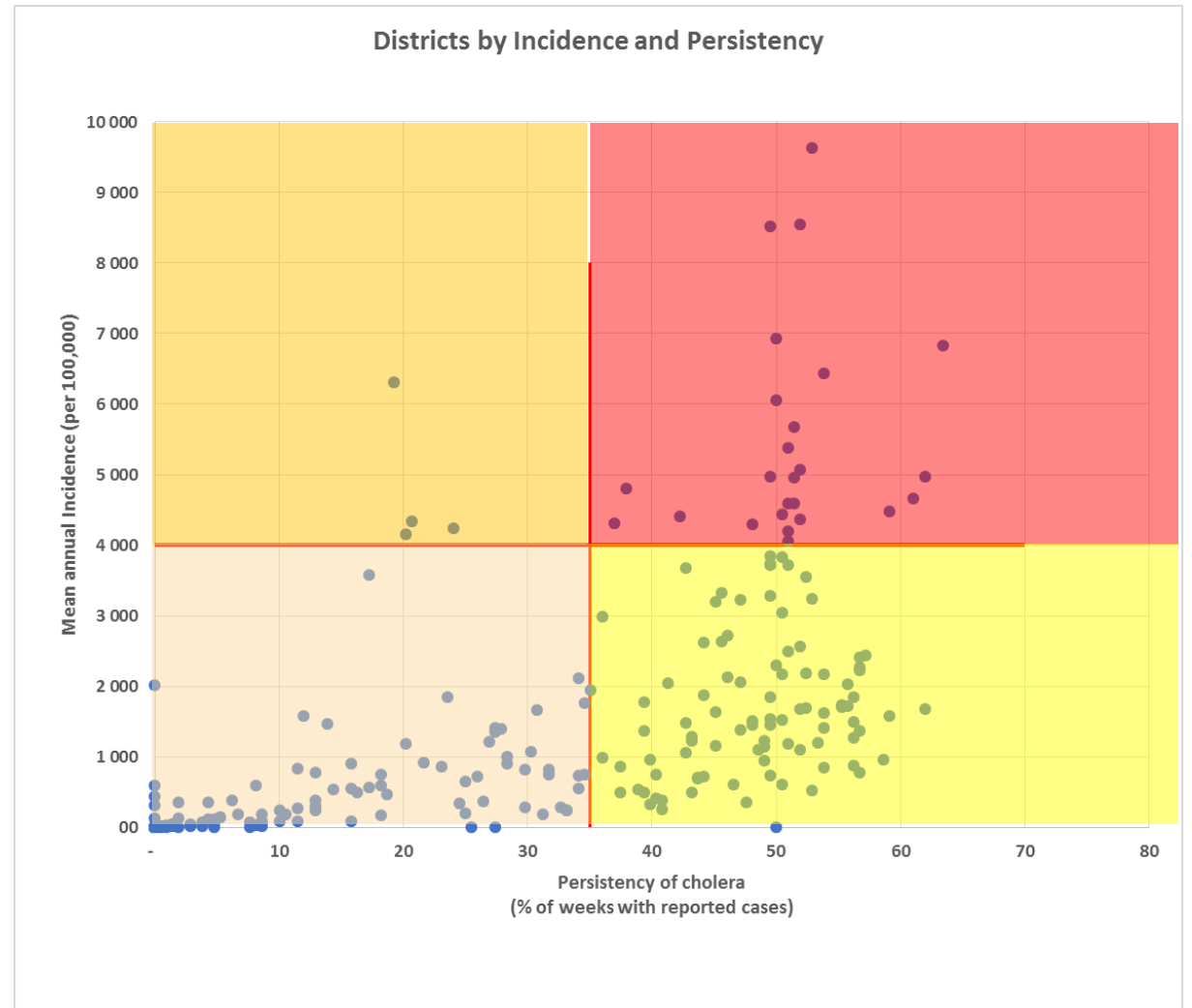
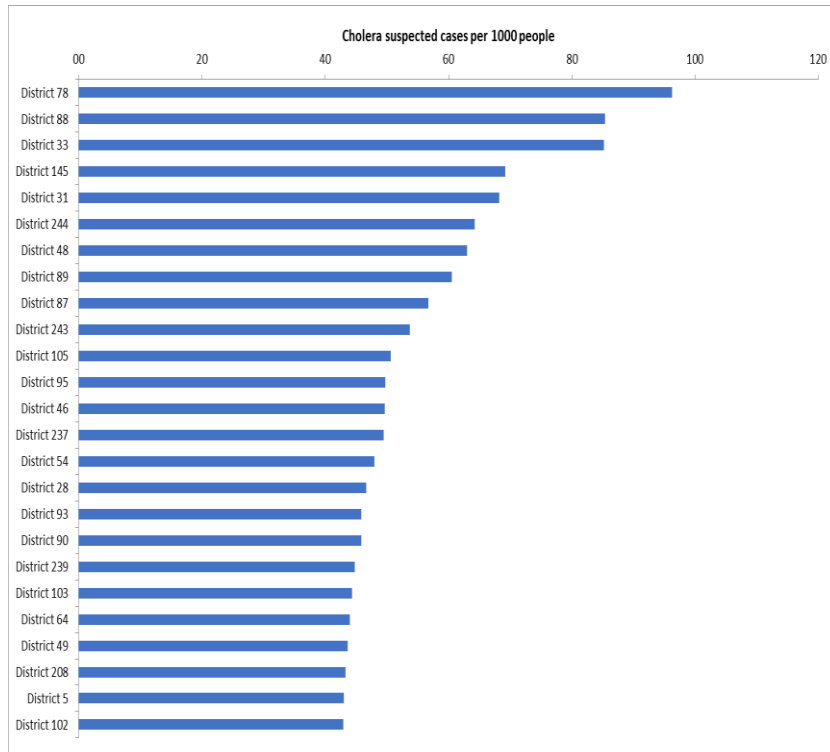
Step 2: Calculate the persistence of cholera: percentage of months/weeks per year with reported cholera suspected cases

Step 3. Plot mean annual incidence vs persistence to establish the level of the risk

Step 4. Consider additional indicators to refine the ranking

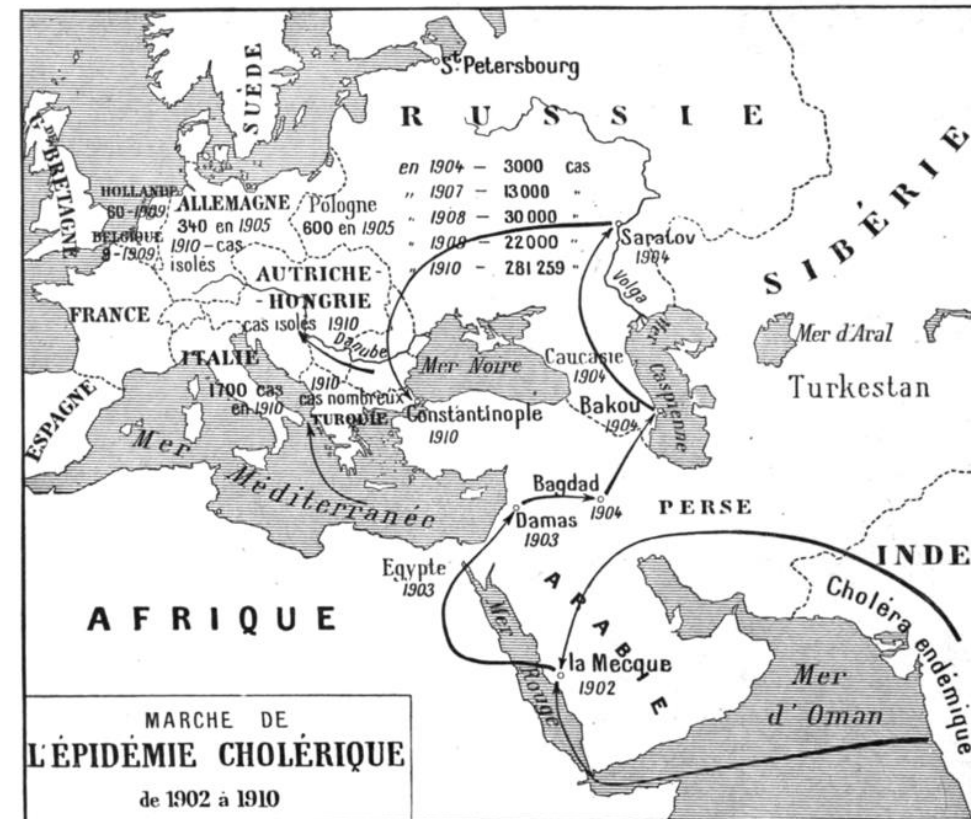
- Case fatality risk
- Percentage of suspected cases lab tested and percentage of positive results

EPI INDICATORS TO IDENTIFY CHOLERA BURDEN HOTSPOTS

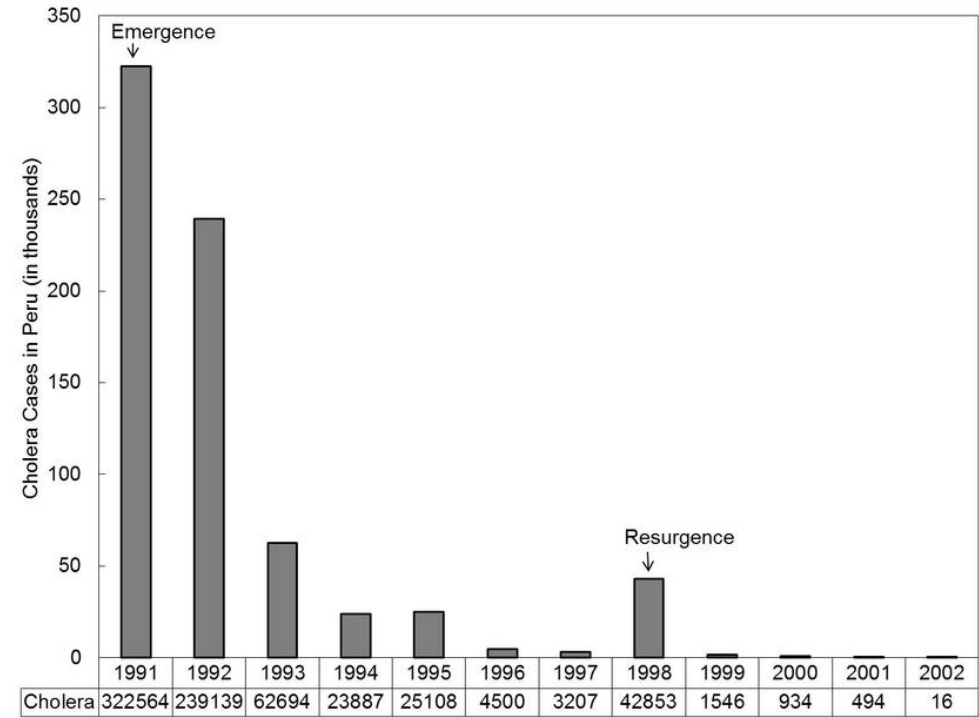
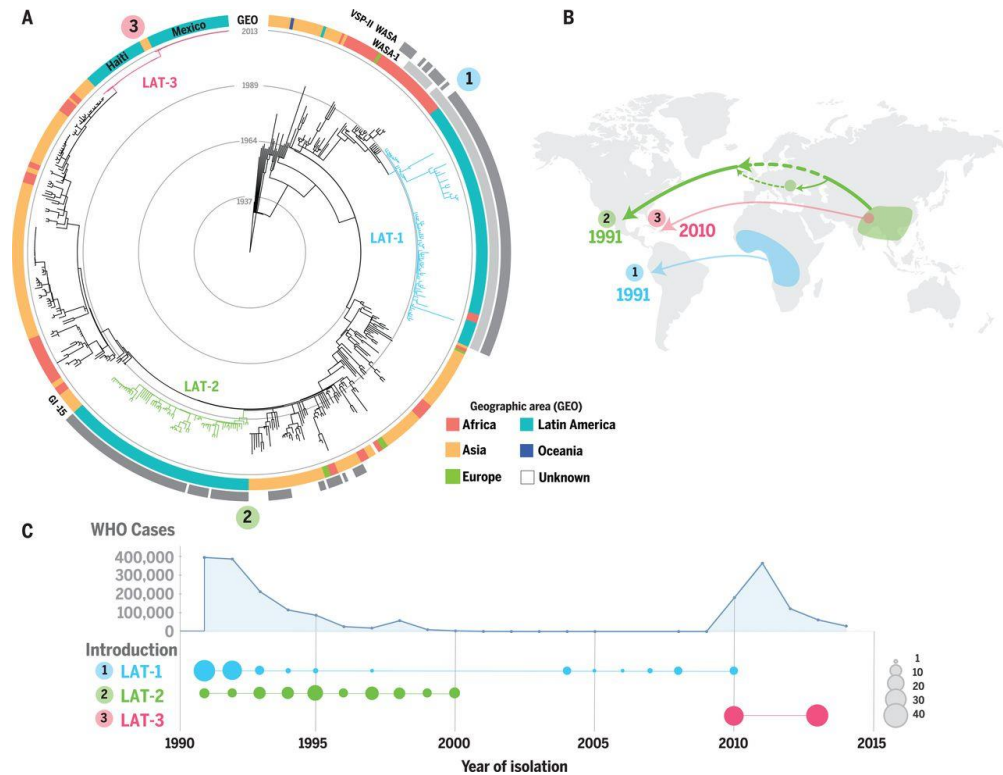


CAN CHOLERA BE “ELIMINATED” BY COUNTRIES?

- Europe and North-America were highly affected in prior pandemics
- Not the case in the 7th pandemic: **cholera has been eliminated as a public health problem in many countries in the world**
- Despite to regular introduction from endemic countries

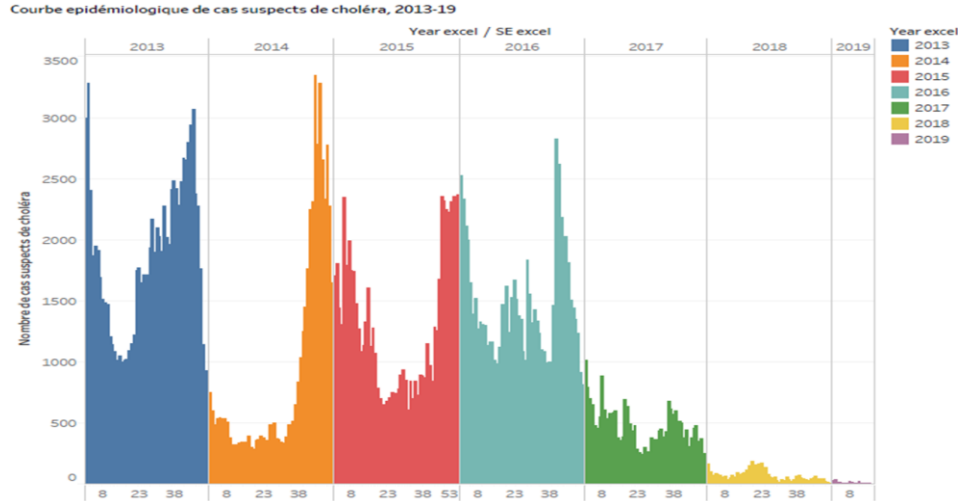


CHOLERA HAS BEEN ELIMINATED AS PUBLIC HEALTH PROBLEM IN CENTRAL AND SOUTH AMERICA IN THE CONTEXT OF THE 7TH PANDEMIC

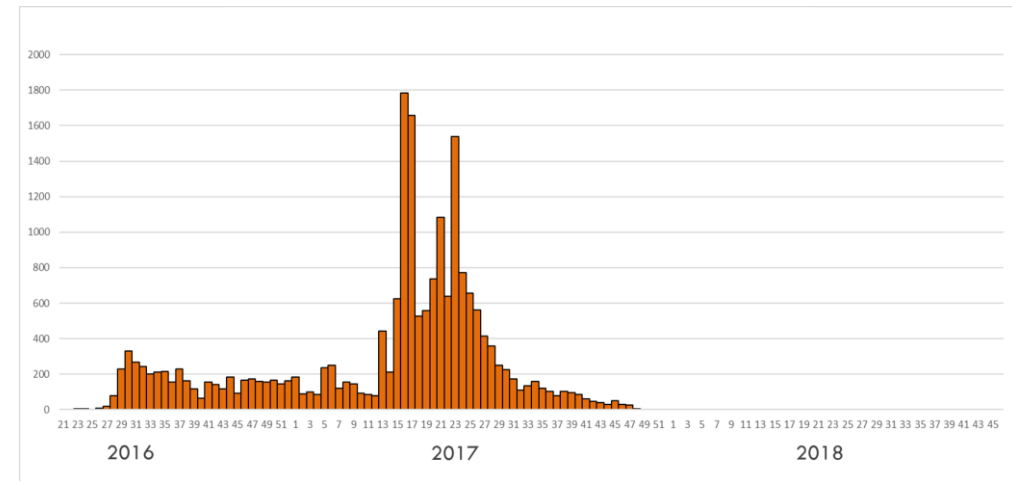


SOME COUNTRIES HEAVILY AFFECTED IN THE PAST ARE ACHIEVING CONTROL AND NOW TARGETING ELIMINATION

Haiti



South Sudan



DEFINITION OF CHOLERA ELIMINATION

A country reporting absence of confirmed cholera cases result of local transmission for at least three consecutive years and has a well-functioning epidemiologic and laboratory surveillance system able to detect and confirm cases

- Develop the process of Certification of Elimination
 - The country must have **a validated NCP**
 - **Well-functioning surveillance system**: epi and lab criteria
 - Capacity to mitigate the risk following introduction
 - *Absence of conducive factors for cholera spread*
 - Other performance indicators (e.g.. number of cholera alerts investigated per year)



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THANKS |