

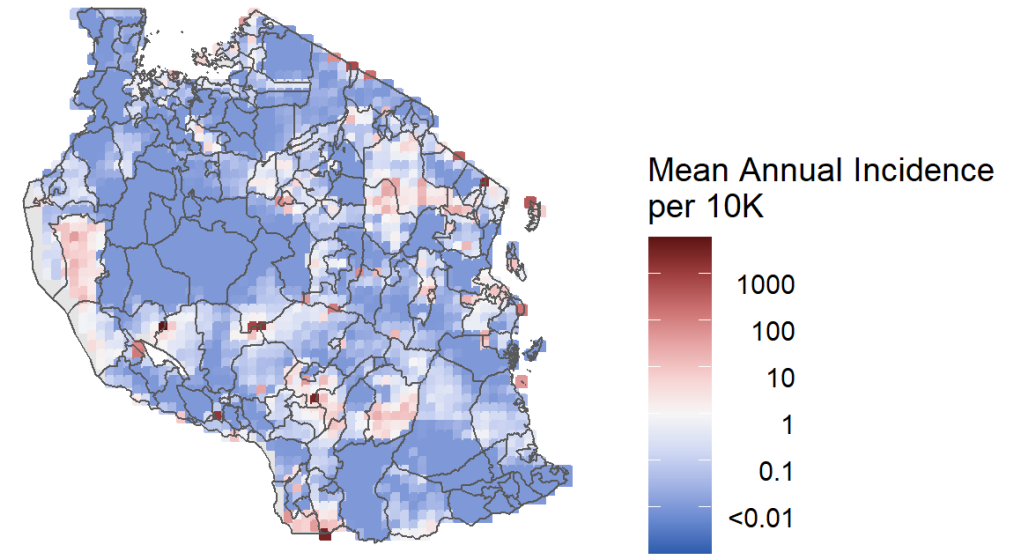
# Update on the GTFCC cholera database

Elizabeth C. Lee for the JHU Cholera Dynamics Team

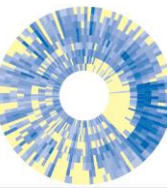
GTFCC Annual Meeting - October 20, 2020

# Monitoring progress towards *Roadmap* goals

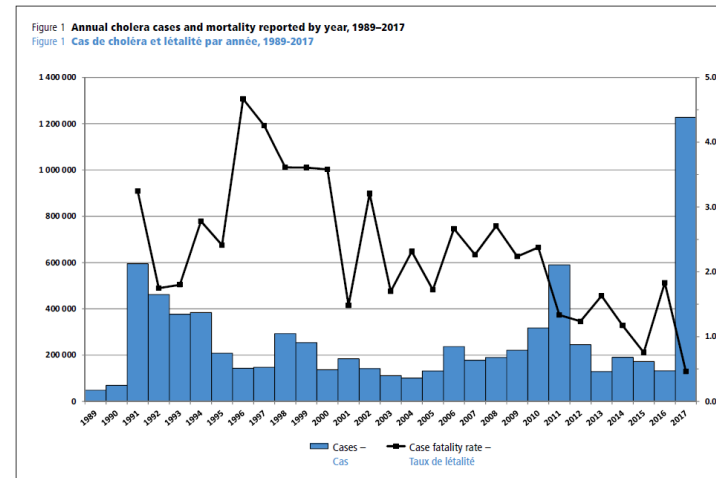
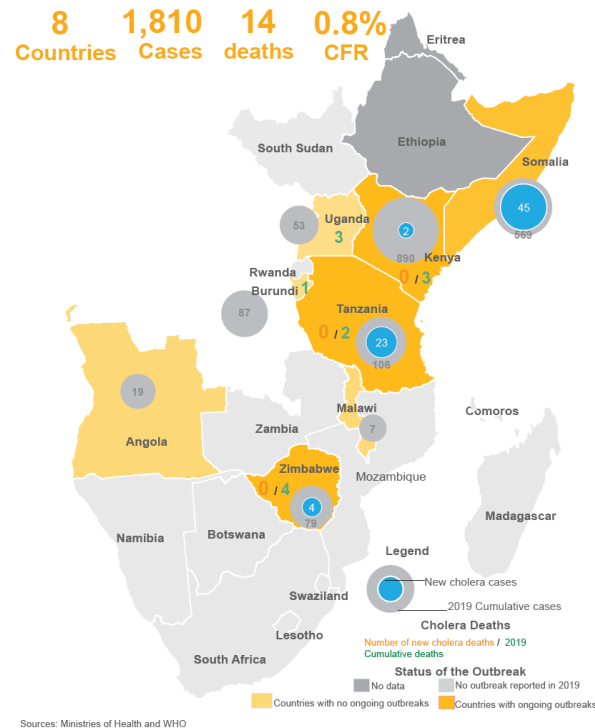
- Map the geographic burden of disease
- Monitor key GTFCC indicators and hotspots over time
- Track information on WASH and vaccination interventions



Tanzania, 2015-2019  
Preliminary estimates 20 km x 20 km



# Data come in many shapes and sizes



Published Date: 2019-05-09 12:55:05  
Subject: PRO/EDR> Cholera, diarrhea & dysentery update (12): Africa, Asia  
Archive Number: 20190509.6460944

CHOLERA, DIARRHEA AND DYSENTERY UPDATE (12): AFRICA, ASIA

A ProMED-mail post:

<http://www.promedmail.org>

ProMED-mail is a program of the

International Society for Infectious Diseases

<http://www.isid.org>

In this update:

Africa

[1] Cholera – Somalia: WHO

[2] Cholera – Zimbabwe

[3] Cholera – Mozambique (northern)

[4] Cholera – Kenya (Embu County)

[5] Cholera – Kenya (Embu County)

Asia

[6] Cholera – Nepal (Kathmandu)

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Africa

[1] Cholera – Somalia: WHO

Date: Tue 7 May 2019

Source: WHO Emergencies preparedness, response, Disease Outbreak News (DONs) [edited]

<http://www.emro.who.int/pandemic-epidemic-diseases/cholera/outbreak-update-cholera-in-somalia-28-april-2019.html>

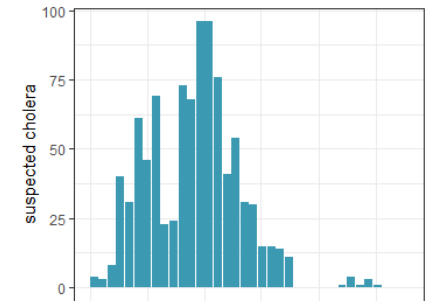
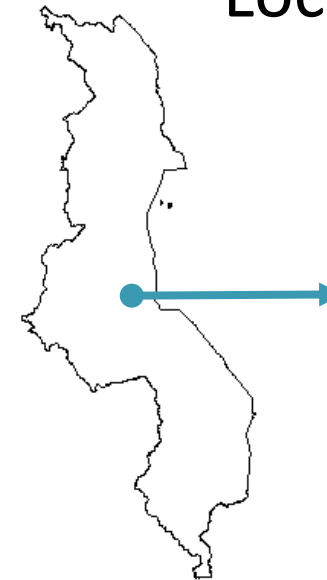
Outbreak update - Cholera in Somalia, 28 Apr 2019

The Ministry of Health (MoH) of Somalia has announced 36 new suspected cases of cholera, with no deaths, for epidemiological week 17 reported between epidemiological weeks 1 and 7 due to closure of the main cholera treatment center, from which data is collected the beginning of this outbreak in December 2017.

During the reporting period, cases occurred in 11 out of 17 districts in Banadir region, the worst affected district are Hodan (728) the cases (24) are children below 5 years of age.

WHO, MoH, and partners have contained the cholera outbreak in the districts of Jubaland, Hirshabelle, and South West states following (OCV) campaigns and other health interventions. However, active transmission is ongoing in 11 districts in Banadir -- Darkenley, D Bondere, Kahda, Kaaran, Waberi, and Warta nabada).

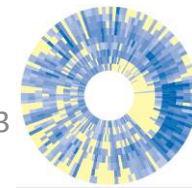
## Locations



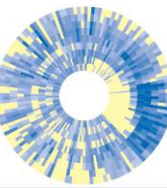
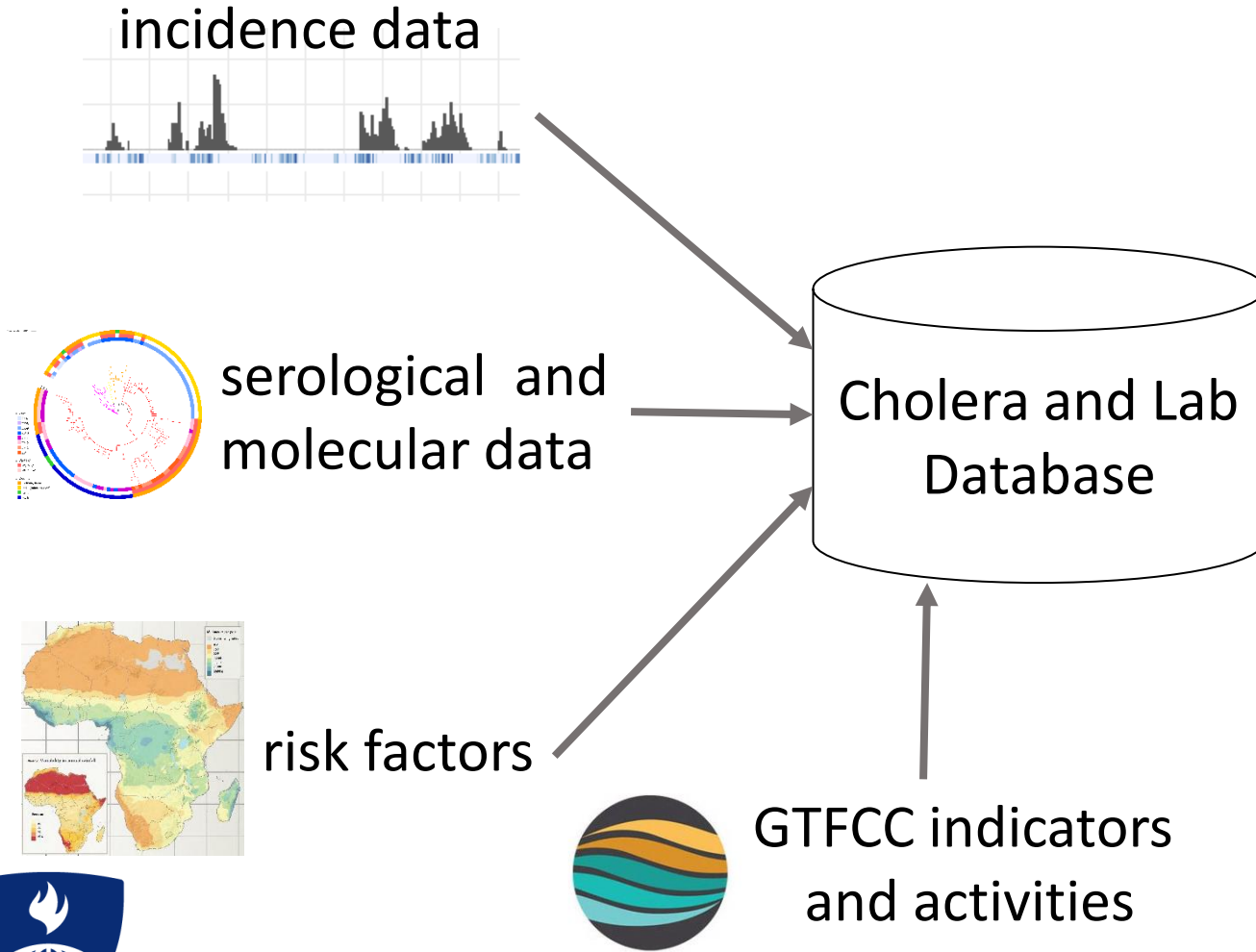
2010

2018

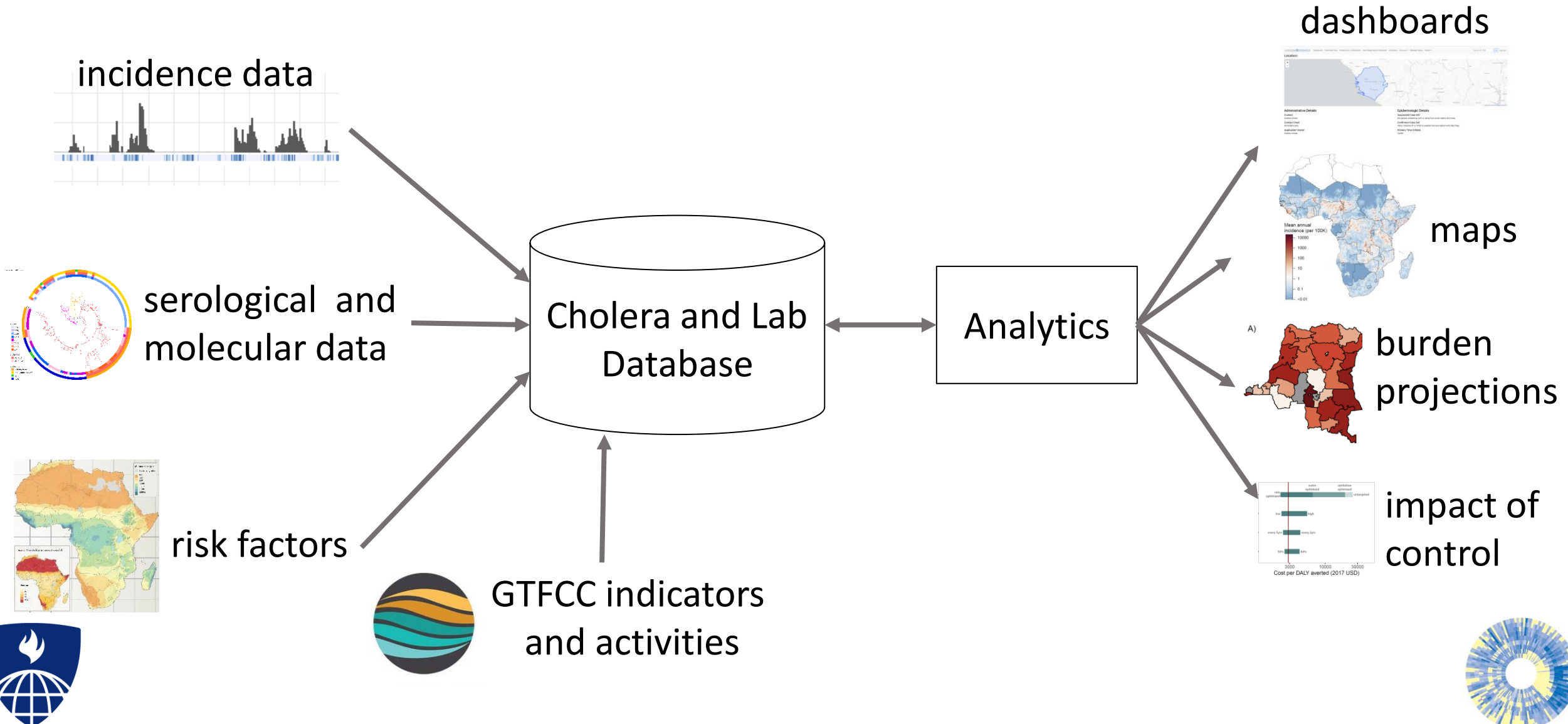
## Time Periods

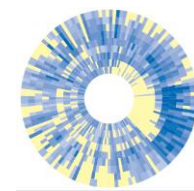
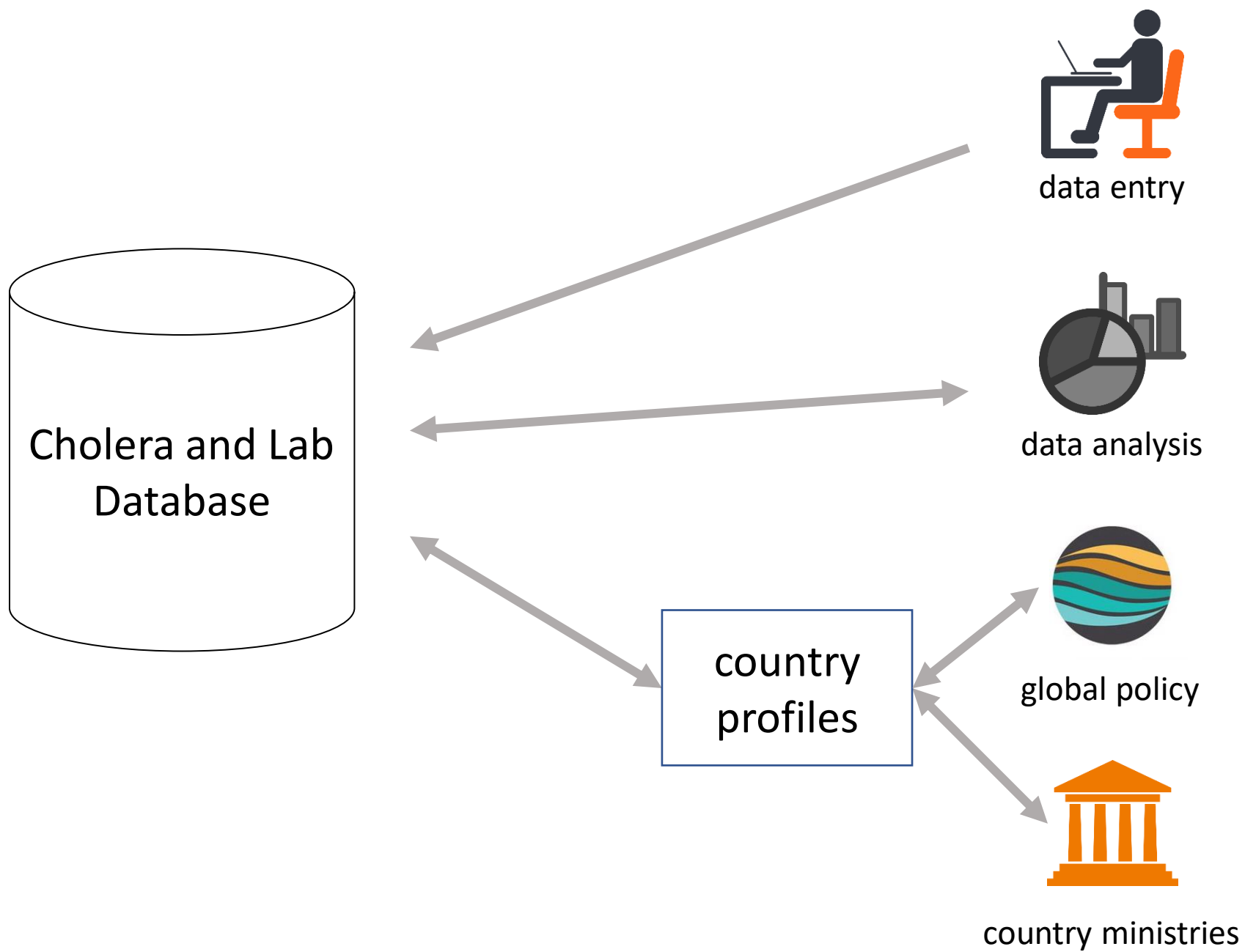


# Role of the Database

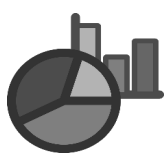


# Role of the Database





# Back-end for data entry and analysis



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cholera-taxonomy.middle-distance.com/observation\_collections

CHOLERA DYNAMICS

GLOBAL TASK FORCE ON CHOLERA CONTROL

Country Search

Go

Go to OC UID

Go

DashboardOverview DataObservation CollectionsAdd Observation CollectionWorkspaceInterest ListLocations

Observation Collections

Note: When multiple pages of results are present column sorting only affects the current page.

UID	Location	Observation Count	Observation Range	Created Date	Updated Date
21127	SEAR::BGD	174	2017-06-26 - 2020-10-04	10/15/2020	10/15/2020
21126	AFR::BEN	0	-	10/13/2020	10/13/2020
21125	AFR::ETH	27618	2019-06-06 - 2020-05-14	10/08/2020	10/16/2020
21124	AFR::ETH	835855	2015-09-06 - 2019-11-21	10/08/2020	10/16/2020
21123	AFR::NGA	30	2015-01-01 - 2017-09-12	10/07/2020	10/07/2020
21122	AFR::NGA::Borno	178	2017-03-01 - 2017-09-12	10/06/2020	10/07/2020
21121	AMR::HTI	228	2010-01-01 - 2017-12-31	09/23/2020	10/07/2020
21120	AFR::MWI	12	2017-03-11 - 2017-04-23	09/22/2020	10/07/2020
21119	AFR::MWI	51	2017-01-02 - 2017-11-19	09/22/2020	09/22/2020
21118	AFR::MWI	51	2017-11-20 - 2017-12-18	09/22/2020	09/22/2020
21117	AFR::ZMB	83	2017-09-04 - 2017-11-07	09/22/2020	09/22/2020
21116	AFR::CMR	377	2019-12-30 - 2020-09-27	09/18/2020	10/13/2020
21115	AFR::MOZ	13	2020-01-27 - 2020-09-06	09/15/2020	09/18/2020
21114	AFR::BDI	2572	2019-12-30 - 2020-09-27	09/14/2020	10/15/2020
21113	AFR::AGO	55	2016-12-11 - 2017-06-04	09/04/2020	09/04/2020
21112	EMR::YEM	2337	2018-12-31 - 2020-08-16	09/02/2020	09/11/2020
21111	AFR::KEN	588	2020-01-01 - 2020-08-26	08/31/2020	09/01/2020
21110	AFR::TZA	240	2015-08-17 - 2016-11-13	08/28/2020	09/03/2020
21109	AFR::TZA	215	2016-10-03 - 2016-12-11	08/28/2020	08/28/2020
21108	AFR::TZA	234	2015-08-01 - 2016-12-12	08/26/2020	08/26/2020
21107	EMR::SDN	85	2019-08-28 - 2019-11-07	08/25/2020	08/25/2020
21106	AMR::HTI	1	2010-10-01 - 2018-02-28	08/25/2020	08/25/2020
21105	AFR::MOZ	1	2017-01-01 - 2018-04-08	08/25/2020	08/25/2020
21104	AFR::MWI	1	2017-11-01 - 2018-04-30	08/25/2020	08/25/2020
21103	AFR::ZWE	1	2018-01-01 - 2018-04-30	08/21/2020	08/21/2020
21102	AFR::ZMB	1	2017-10-01 - 2018-04-30	08/21/2020	08/21/2020
21101	AFR::AGO	1	2017-12-01 - 2018-03-31	08/21/2020	08/21/2020

Filters

WHO Region

Application Owner

Minimum # of observations

Maximum # of observations

Earliest observation

Latest observation

Sort Order

Status

Options

Update

Clear Filters

# First look at the country profiles



CholeraTaxonomy

cholera-taxonomy.middle-distance.com/locations/14/country\_profile

CHOLERA DYNAMICS  
TAXONOMY • BURDEN • MAPPING • MODELLING  
JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH

GLOBAL TASK FORCE ON CHOLERA CONTROL

Country Search Go Go to OC UID Go

Dashboard Overview Data Observation Collections Add Observation Collection Workspace Interest List Locations

## Ethiopia Country Profile

Remove from Interest List Download Report

### Maps and figures

Open Side-by-Side Comparator

#### Maps

Sanitation access

Water access

Cases

Rates

Clear overlays

#### Figures

### National Cholera Control Plan

INCEPTION	DEVELOPMENT	IMPLEMENTATION	MONITORING & REPORTING
<b>Preparatory phases</b> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Declare country commitment</li><li><input checked="" type="checkbox"/> Identify &amp; prioritize hotspots</li><li><input checked="" type="checkbox"/> Conduct situational analysis</li><li><input checked="" type="checkbox"/> Define leadership and coordination mechanism</li><li><input checked="" type="checkbox"/> Formulate goal</li></ul>	<b>For each of the 5 pillars</b> <ul style="list-style-type: none"><li><input checked="" type="checkbox"/> Formulate &amp; prioritize activities</li><li><input type="checkbox"/> Develop operational plans &amp; associated budgets</li><li><input type="checkbox"/> Develop a monitoring &amp; evaluation framework, including definition of indicators &amp; milestones</li></ul>	<b>For each of the 5 pillars</b> <ul style="list-style-type: none"><li><input type="checkbox"/> Prioritized activities</li><li><input type="checkbox"/> Established timelines</li><li><input type="checkbox"/> Available budget</li></ul>	<b>For each of the 5 pillars</b> <ul style="list-style-type: none"><li><input type="checkbox"/> Conduct quarterly monitoring of indicators across each pillar</li><li><input type="checkbox"/> Provide an annual report of progress against targets and indicators</li><li><input type="checkbox"/> Prioritize activities for next period</li></ul>

### Vaccination Campaigns

TARGET AREAS	DATES	TARGET POPULATION	DOSES DISTRIBUTED	SURVEY COVERAGE
10 selected districts of Shashamene rural district	02-02-2020 - 10-02-2020	62,000	47,137	
10 selected districts of Shashamene rural district	02-02-2020 - 10-02-2020	62,000	40,707	

### Key Summary Statistics

**Most recent observation with suspected cases**

Location	AFR::ETH::SNNP::Gedeo
Start Date	2020-05-14
End Date	2020-05-14

**Most recent observation with confirmed cases**

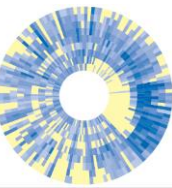
Location	AFR::ETH::Somali::Alder
Start Date	2020-04-06
End Date	2020-04-06

**Most recent Observation Collection**

ID	21125
Source	Ethiopian Public Health Institute
Contact	Elizabeth Lee

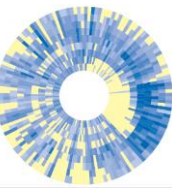
# Key database features

- Centralized repository for cholera surveillance data
- Flexible structure supports any kind of data that can be linked to locations and time periods (e.g., incidence, deaths, hotspots from situational analysis, documents, OCV use, seroincidence data)
- Hosts raw data and visualizations of modeled output
- Development of country and regional profiles that summarize key cholera data and risk factors

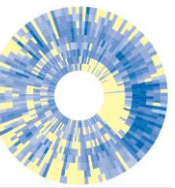


# Future of the GTFCC cholera database

- Streamlined management and entry of cholera incidence data reported to the GTFCC Secretariat
- Generation of country profiles for all cholera-affected countries contributing data to the database
- Expansion of country profiles to wider regions
- Regular updates to burden maps and other outputs
- Linkage to serological and molecular data and OCV campaigns

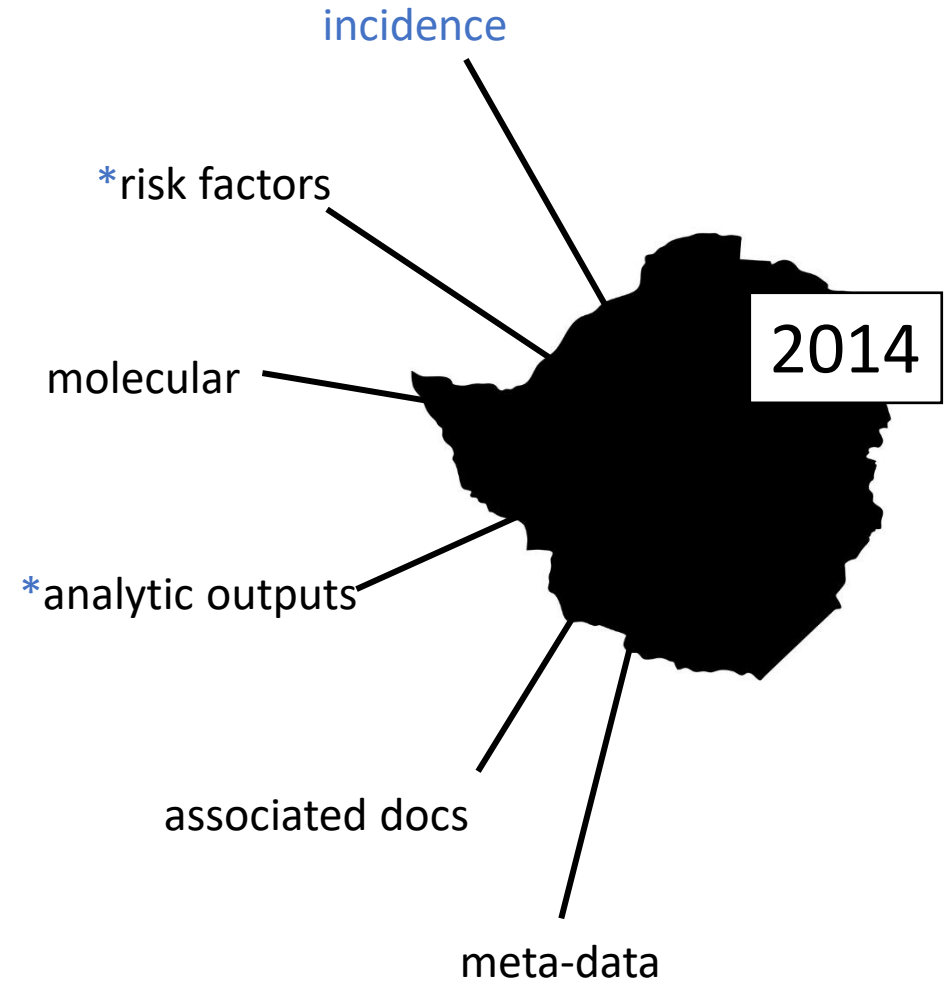


# Backup Slides



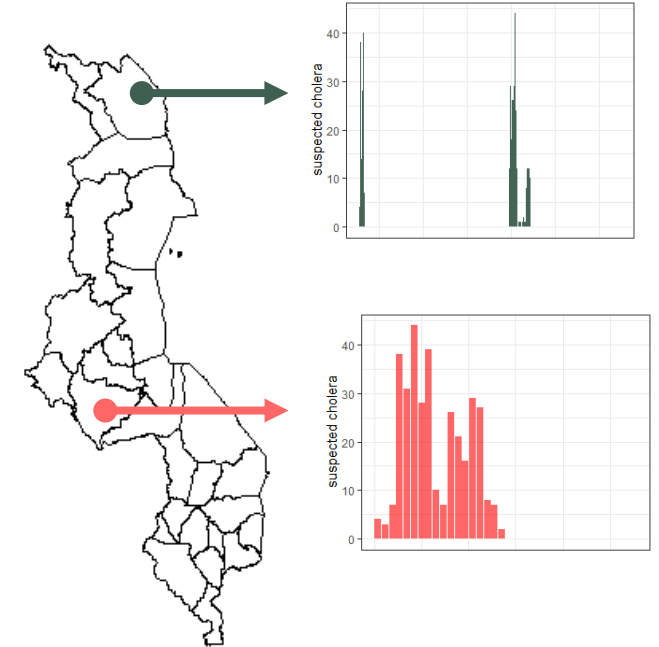
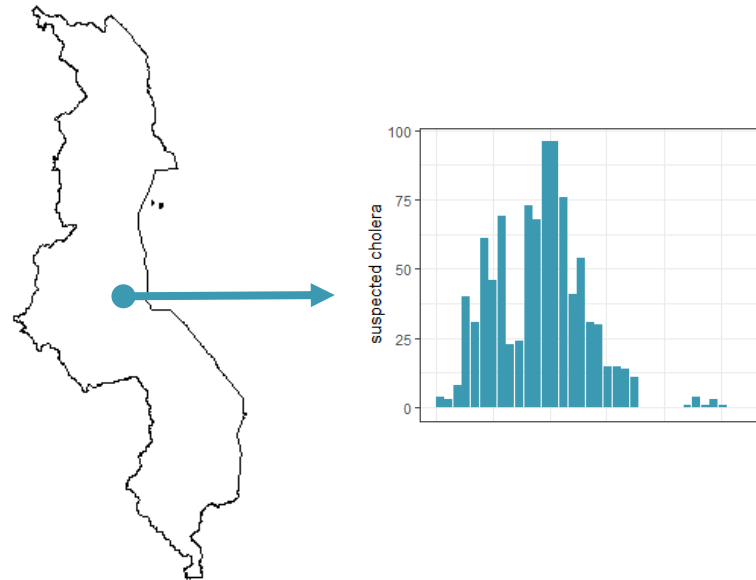
# Organizing principles

- All data is indexed by location periods.
  - A location (which may contain other locations)
  - A defined period of time
- Database is “weakly typed”
  - Few restrictions on the types of data that can be associated with location periods.
- Flexible access



# Data are linked to locations and time periods

Locations



Time Periods

