GLOBAL TASK FORCE ON
CHOLERA CONTROL

Cholera reporting
to the regional and global levels

GTFCC interim technical recommendations on

standard data and metadata sets

February 2023

Surveillance Working Group

Acknowledgments

Contents

I. Objective and scope

Enhancing cholera reporting to the regional and global level is critical in order to **provide information for evidence-based operational decision-making for the prevention and control of cholera outbreaks** and to achieve the objectives of the Global Roadmap to 2030 to end cholera.

This document provides interim technical recommendations of the Global Taskforce on Cholera Control (GTFCC) to **foster the harmonization of cholera data and metadata reported to the regional and global levels**. These recommendations should be interpreted in conjunction with the GTFCC Interim guidance on public health surveillance for cholera (February 2023).

These recommendations are primarily addressed to stakeholders involved in cholera surveillance at the global or regional level and to public health professionals involved in cholera surveillance at the country level (Ministries of Health, Public Health Institutes, WHO Country Offices, and other partners involved in cholera surveillance).

Of note, this document does not address operating mechanisms to enhance cholera reporting to the regional and global levels (e.g., reporting channel(s) and platform(s), operational reporting procedures). These shall be operationalized by relevant stakeholders at the regional and global levels in close consultation with countries, building on existing mechanisms.

Furthermore, operating mechanisms for cholera surveillance at the regional and global levels (e.g., data management and information system(s), data access policy, analysis plan, creation and dissemination of information products) are beyond the scope of this document and are anticipated to be operated under the responsibility of relevant stakeholders at the regional and global levels, building on existing systems and process.

II. Cholera reporting to the regional and global levels

1. Countries

Any country that experienced locally acquired cholera cases in the previous calendar year, or imported or locally acquired cholera cases in the current calendar year, should report its cholera situation to the regional and global levels on a **weekly basis**, even if no new cases were reported during the week (zero reporting).

2. Format

To this end, countries should, as a minimum, carry out **aggregate reporting** by providing once a week the core set of aggregate data described in Annex 1 for each surveillance unit in the country (see Section 'Weekly aggregate reporting').

Alternatively, countries may carry out case-based reporting on a voluntary basis (see Section 'Case-based reporting').

3. Harmonization

Reported counts should be consistent with the **definitions recommended by the GTFCC** provided in the GTFCC Interim guidance on public health surveillance for cholera (February 2023) and in accordance with the core weekly aggregate data set recommended by the GTFCC (Annex 1).

The deadline for submission of weekly data for each epidemiological week should be by the end the following week -if no other deadline is specified in established reporting mechanisms.

4. Channels and procedures

Reporting channel(s)/platform(s) and reporting procedures are beyond the scope of this document and shall be operationalized by relevant stakeholders at the regional and global levels in close consultation with countries, building on existing mechanisms.

III. Weekly aggregate reporting

1. Aggregation

▪ **Time**

Countries should report cholera surveillance data aggregated on the ISO week of reporting to the health system ('**epidemiological week'**).

▪ **Space**

Countries should report surveillance data aggregated at the level of **surveillance units** (see GTFCC Interim guidance on public health surveillance for cholera (February 2023). The corresponding administrative level is country specific. Surveillance units may correspond to different administrative levels in different countries and shall be consistent with the geographic operational units defined in a country National Cholera Plan (NCP) (e.g., commonly second-level administrative units (e.g., "counties" or "districts")).

2. New weekly counts

The weekly aggregate data set should provide new counts for the epidemiological week reported on.

3. Retrospective updates

Cholera surveillance data at country-level should be subject to continuous review, retrospective data consolidation (e.g., reporting delays or back logs) and retrospective updating of some variables (e.g., patient outcome, laboratory results) as appropriate. Countries should update and correct accordingly data reported from the previous week(s) to the regional and global levels.

4. Core weekly aggregate data set

The core weekly aggregate data set should provide, for each surveillance unit in the country, new counts for the epidemiological week reported on, even if no new cases were reported during the week (zero reporting).

The following should be considered as the core list of variables to be included in weekly reporting to the regional and global levels:

For each surveillance unit:

- Number of suspected cholera **cases**
- Number of suspected cholera cases **tested,** stratified by test method (i.e., Rapid Diagnostic Test (RDT), culture and seroagglutination, Polymerase Chain Reaction (PCR) for serogroup)
- Number of suspected cases tested **positive,** stratified by test method (i.e., RDT, culture and seroagglutination, PCR for serogroup)
- Number of cholera **cases**[*] stratified by **sex** and **age group** (see below)
- Number of cholera cases[*] **hospitalized** for treatment (i.e., admitted to health facility for at least one night)
- Number of cholera cases[*] with **severe dehydration** (i.e., treatment plan C - intravenous rehydration)
- Number of cholera **deaths**[*] stratified by place of death (i.e., in health facility, on arrival at health facility, in the community)
- Number of cholera **deaths**[*] that occurred at health facility stratified by **sex** and **age group** (see below)

The following age categories (in years) are requested: 0-4, 5-59, 60 and over.

* Combining suspected cholera cases and confirmed cholera cases

Templates for reporting the recommended core weekly aggregate data set are provided in Annex 1 and Annex 3.

IV.   Case-based reporting

As an alternative to weekly aggregate reporting, weekly reporting of line lists to the regional and global levels may be carried out by countries on a voluntary basis, provided that the reported data are in accordance with the GTFCC recommendations for minimum case-based data collection (see GTFCC Interim guidance on public health surveillance for cholera (February 2023)).

All personal identifiers should be removed prior to reporting to the regional and global level.

V.   Metadata

Regardless of the reporting format (aggregate or case-based), countries should provide the metadata listed hereafter to facilitate the interpretation of the surveillance data submitted and should subsequently report updates as necessary. As a general principle, in the absence of significant changes, metadata should be updated on an annual basis. Any significant changes in the metadata should be subject to ad hoc timely updates.

Templates for reporting metadata are provided in Annex 2 and Annex 3.

1. Surveillance unit metadata

The following metadata should be provided for each surveillance unit in the country.

- ▪ Minimum metadata
  - **Geographic information**: administrative level of the surveillance unit and hierarchy of each surveillance unit up to the first administrative level
  - **Demographics**: population stratified by sex and by age-groups (0-4, 5-59, 60 and over) and date of last population census
  - **Reporting health facilities**: number of health facilities expected to report cholera cases

- ▪ Additional recommended metadata
  - **Oral Cholera Vaccination** (OCV): year of last OCV campaign (if applicable)
  - **Health facilities**: number and type of health facilities (e.g., Cholera Treatment Centers (CTCs) or Cholera Treatment Units (CTUs), Oral Rehydration Points (ORPs))
  - **Setting:** rural, urban, periurban
  - **Accessibility**: presence of remote or difficult to reach areas
  - **Humanitarian setting**: including man-made or natural disasters
  - **Vulnerable populations**: presence of internally displaced people (IDP) camps or of refugee camps, and population in camps
  - **Additional contextual information**: description of any other contextual factors that may increase the risk of cholera transmission (e.g., climatic events) or the impact of the disease (e.g., prevalence of malnutrition, other ongoing outbreak(s))

2. National level metadata

The following metadata should be provided at the national level:
  - Case and outbreak **definitions** used by the country and the date these definitions came into effect
  - Cholera **surveillance strategy** in place in the country (description of surveillance streams and assessment of their respective coverage)
  - **Testing** strategy(ies) in place in the country
  - Information on frequency and distribution of **situation reports** (including links if available)

In addition, a shapefile of surveillance units in the country should be provided.

VI. Management, analysis and use of reported data for public health action

Stakeholders performing cholera surveillance at the regional or at the global level should compile the reported data in regional and global databases and routinely consolidate, analyze and interpret the reported data.

Outcomes should be widely disseminated in information products published at a predefined frequency (e.g., situation update, epidemiological bulletin, dashboard) to guide the coordination of interventions for the prevention and control of cholera outbreaks. Consideration should also be given to providing access to aggregated data.

Detailed recommendations for the management and analysis of the cholera data reported to the regional and global level are beyond the scope of this document.

VII. Annexes

Annex 1. GTFCC recommended weekly aggregate cholera data set for reporting to the regional and global levels

Information	Variable	List
Reporting country and reporting period		
Reporting Country	REP_COUNTRY	[Countries or territories]
Date of submission of the report	DATE_REPORT	DATE (yyyy-mm-dd)
Start date of the epidemiological week reported on (ISO WEEK)	WEEK_STRT_DATE	DATE (yyyy-mm-dd)
Surveillance unit		
ISO code of the geographic unit	UNIT_CODE	[country ISO geographic units]
Name of the geographic unit	UNIT_NAME	[country geographic units]
Cholera situation		
Cholera situation in the surveillance unit	STATUS	☐ Suspected cholera outbreak ☐ Probable cholera outbreak ☐ Confirmed cholera outbreak ☐ Imported cholera case(s) only ☐ None of the above
If cholera situation is suspected, probable or confirmed cholera outbreak, date of onset of symptoms of the first locally acquired suspected cholera case	START_DATE	DATE (yyyy-mm-dd)
If cholera situation is 'none of the above', end date of previous cholera outbreak (if applicable)	END_DATE	DATE (yyyy-mm-dd)
If new confirmed cholera outbreak, *Vibrio cholerae* serogroup	VC_SEROGROUP	☐ O1 ☐ O139 ☐ O1 and O139 ☐ Unknown
If new confirmed cholera outbreak, *Vibrio cholerae* toxigenicity	VC_TOXIGEN	☐ Toxigenic ☐ Nontoxigenic ☐ Unknown
Incidence		
Number of new suspected cholera cases	CASES_SUSP	Integer
Testing		
Number of new suspected cholera cases tested by RDT	TESTED_RDT	Integer
Number of new suspected cholera cases tested positive by RDT	TESTED_RDT_POS	Integer
Number of new suspected cholera cases tested by culture and seroagglutination	TESTED_CULTURE	Integer
Number of new suspected cholera cases tested positive by culture and seroagglutination	TESTED_CULTURE_POS	Integer
Number of new suspected cholera cases tested by PCR for serogroup (minimum)	TESTED_PCR	Integer
Number of new suspected cholera cases tested positive by PCR for serogroup (minimum)	TESTED_PCR_POS	Integer
Deaths		
[Combining suspected cholera cases and confirmed cholera cases]		
Number of new cholera deaths that occurred in health facilities	DEATHS_FAC	Integer
Number of new cholera deaths in the community	DEATHS_COMMU	Integer
Number of new cholera deaths on arrival at heath facility	DEATHS_ARRI	Integer

Burden
[Combining suspected cholera cases and confirmed cholera cases]

Number of new cholera cases hospitalized for treatment (admitted to health facility for at least one night)	CASES_HOSPI	Integer
Number of new cholera cases with severe dehydration (Treatment plan C - intravenous rehydration)	CASES_SEVERE	Integer

Demographics of cholera cases
[Combining suspected cholera cases and confirmed cholera cases]

Number of new cholera cases in females aged < 5 years	CASES_0_4_F	Integer
Number of new cholera cases in males aged < 5 years	CASES_0_4_M	Integer
Number of new cholera cases in females aged 5 to 59 years	CASES_5_59_F	Integer
Number of new cholera cases in males aged 5 to 59 years	CASES_5_59_M	Integer
Number of new cholera cases in females aged ≥ 60 years	CASES_60PLUS_F	Integer
Number of new cholera cases in males aged ≥ 60 years	CASES_60PLUS_M	Integer

Demographics of cholera deaths that occurred at health facility
[Combing suspected cholera cases and confirmed cholera cases]

Number of new cholera deaths in females aged < 5 years	DEATHS_0_4_F	Integer
Number of new cholera deaths in males aged < 5 years	DEATHS_0_4_M	Integer
Number of new cholera deaths in females aged 5 to 59 years	DEATHS_5_59_F	Integer
Number of new cholera deaths in males aged 5 to 59 years	DEATHS_5_59_M	Integer
Number of new cholera deaths in females aged ≥ 60 years	DEATHS_60PLUS_F	Integer
Number of new cholera deaths in males aged ≥ 60 years	DEATHS_60PLUS_M	Integer

Completeness of health facility-based surveillance

Number of health facilities that reported (including zero reporting)	COMPLETENESS_NUMERATOR	Integer

Annex 2. GTFCC recommended cholera metadata for reporting to the regional and global levels

- **Metadata at the surveillance unit level**

- Minimum metadata

Information	Variable	List
Date of update of the surveillance unit metadata	DATE_METADATA_UNIT	DATE (yyyy-mm-dd)
Geographic information		
ISO Code of the geographic unit	UNITCODE	[country ISO geographic units]
Name of the geographic unit	UNITNAME	[country geographic units]
Administrative level of the geographic unit	UNITADMINLEVEL	☐ Admin-2 ☐ Admin-3 ☐ Admin-4
ISO code of first administrative level unit	ADMIN1ISO	[country Admin-1 ISO codes]
Name of first administrative level unit	ADMIN1NAME	[country Admin-1 geographic units]
If surveillance unit level is below the second administrative level		
ISO code of second administrative level unit	ADMIN2ISO	[country Admin-2 ISO codes]
Name of second administrative level unit	ADMIN2NAME	[country Admin-2 geographic units]
If surveillance unit level is below the third administrative level		
ISO code of third administrative level unit	ADMIN3ISO	[country Admin-3 ISO codes]
Name of third administrative level unit	ADMIN3NAME	[country Admin-3 geographic units]
Demographics		
Date of last population census	CENSUS_DATE	DATE (yyyy-mm-dd)
Population of females aged < 5 years	POP_0_4_F	Integer
Population of males aged <5 years	POP_0_4_M	Integer
Population of females aged 5 to 59 years	POP_5_59_F	Integer
Population of males aged 5 to 59 years	POP_5_59_M	Integer
Population of females aged ≥ 60 years	POP_60PLUS_F	Integer
Population of males aged ≥ 60 years	POP_60PLUS_M	Integer
Reporting sites		
Total number of health facilities expected to report	COMPLETENESSDENOMINATOR	Integer

■ Additional recommended metadata

Information	Variable	List
Health facilities		
Number of Cholera Treatment Centers (CTCs) and Cholera Treatment Units (CTUs)	CTC_CTU	Integer
Number of Oral Rehydration Points (ORPs)	ORP	Integer
Type of other health facilities reporting cholera cases	FACI_OTHER_TYPE	Free text
Number of other health facilities reporting cholera cases	FACI_OTHER_NUMBER	Integer
Oral Cholera Vaccination (OCV) campaigns		
Year of last OCV campaign, if applicable	OCV_YEAR	DATE (yyyy-mm-dd)
Contextual information, vulnerability factors		
Type of setting	SETTING	☐ Rural ☐ Urban ☐ Periurban
Presence of remote or difficult to reach areas	ACCESSIBILITY	☐ Yes ☐ No ☐ Unknown
Humanitarian setting, including man-made or natural disasters	HUMANITARIAN	☐ Yes ☐ No ☐ Unknown
Number of internally displaced people (IDP) camps	IDP	Integer
Population in internally displaced people (IDP) camps	IDP_POP	Integer
Number of refugee camps	REFUGEE	Integer
Population in refugee camps	REFUGEE_POP	Integer
Other contextual factor that might increase the risk of cholera transmission (e.g., climatic event) or the impact of the disease (e.g., prevalence of malnutrition, other ongoing outbreak(s))	CONTEXT_ADDI	Free text

- **Metadata at the national level**

Information	Variable	List
Date of update of the national metadata	DATE_METADATA_NAT	DATE (yyyy-mm-dd)
Case definition		
Definition of a suspected cholera case where there is no confirmed cholera outbreak	DEF_SUSP_CASE_NO_OUTBREAK	Free text
Date when the definition of a "suspected cholera case where there is no confirmed cholera outbreak" came into effect	DATE_DEF_SUSP_CASE_NO_OUTBREAK	DATE (yyyy-mm-dd)
Definition of a suspected cholera case where there is a confirmed cholera outbreak	DEF_SUSP_CASE_OUTBREAK	Free text
Date when the definition of a "suspected cholera case where there is a confirmed cholera outbreak" came into effect	DATE_DEF_SUSP_CASE_OUTBREAK	DATE (yyyy-mm-dd)
Definition of a confirmed cholera case	DEF_CONF_CASE	Free text
Date when the definition of a "confirmed cholera case" came into effect	DATE_DEF_CONF_CASE	DATE (yyyy-mm-dd)
Outbreak definition		
Definition of a suspected cholera outbreak	DEF_SUSP_OUTBREAK	Free text
Date when the definition of a "suspected cholera outbreak" came into effect	DATE_DEF_SUSP_OUTBREAK	DATE (yyyy-mm-dd)
Definition of a probable cholera outbreak	DEF_PROB_OUTBREAK	Free text
Date when the definition of a "probable cholera outbreak" came into effect	DATE_DEF_PROB_OUTBREAK	DATE (yyyy-mm-dd)
Definition of a confirmed cholera outbreak	DEF_CONF_OUTBREAK	Free text
Date when the definition of a "confirmed cholera outbreak" came into effect	DATE_DEF_CONF_OUTBREAK	DATE (yyyy-mm-dd)
Cholera surveillance strategy		
Surveillance strategy, including description of surveillance streams and assessment of their respective coverage	SURV_STRATEGY	Free text
Testing strategy		
Strategy for the use of RDT where there is no confirmed cholera outbreak	RDT_NO_OUTBREAK	Free text
Strategy for the use of RDT where there is a confirmed cholera outbreak	RDT_OUTBREAK	Free text
Type of RDT used	RDT_TYPE	☐ Direct RDT ☐ Enriched RDT ☐ Both
Strategy for the use of culture and seroagglutination where there is no confirmed cholera outbreak	CULT_SERO_NO_OUTBREAK	Free text
Strategy for the use of culture and seroagglutination where there is a confirmed cholera outbreak	CULT_SERO_OUTBREAK	Free text
Strategy for the use of PCR where there is no confirmed cholera outbreak	PCR_NO_OUTBREAK	Free text
Strategy for the use of PCR where there is a confirmed cholera outbreak	PCR_OUTBREAK	Free text
Situation reports		
Information on frequency and distribution of cholera situation reports (including links if available)	SIT_REP	Free text

Annex 3. Excel template for reporting the GTFCC recommended weekly aggregate cholera data set and metadata to the regional and global levels

An Excel-based template for reporting the GTFCC recommended weekly aggregate cholera data set and metadata to the regional and global levels is available at: **https://www.gtfcc.org/wp-content/uploads/2023/02/gtfcc-interim-cholera-regional-global-reporting-template.xlsx**

Any questions regarding its use can be directed to the Secretariat of the GTFCC
(gtfccsecretariat@who.int)