

Example: Cholera Epidemiological Report–National Level

Below is an example of a cholera epidemiological report for a fictional country (country X) composed of four surveillance units (A, B, C, and D). This report was prepared using imaginary data, and its purpose is to illustrate how surveillance data can be analysed and interpreted at the national level.

Example of a National Cholera Epidemiological Report

Country X

Weekly epidemiological report n°20

Epidemiological Week 20, 2023 (May 15 to 21, 2023)

1. HIGHLIGHTS

Table 1. Summary of cumulative data, country X, epidemiological weeks 1-20, 2023

Health facility-based surveillance			Community-based surveillance		
Suspected cases	Deaths (institutional)	Case fatality ratio (%)	Cumulative incidence rate	Community cases	Community deaths
300	6	2.0%	0.3%	92	15

Table 2. Summary of data for the reporting week, country X, epidemiological week 20, 2023

Health facility-based surveillance				Community-based surveillance		Number of surveillance units per epidemiological situation	
Suspected cases	Deaths (institutional)	Case fatality ratio (%)	Weekly incidence rate	Community cases	Community deaths	Absence of probable or confirmed cholera outbreak	Presence of probable or confirmed cholera outbreak (community transmission)
26	1	3.8%	0.6 per 1000 inhabitants	13	0	2 (50%)	2 (50%)

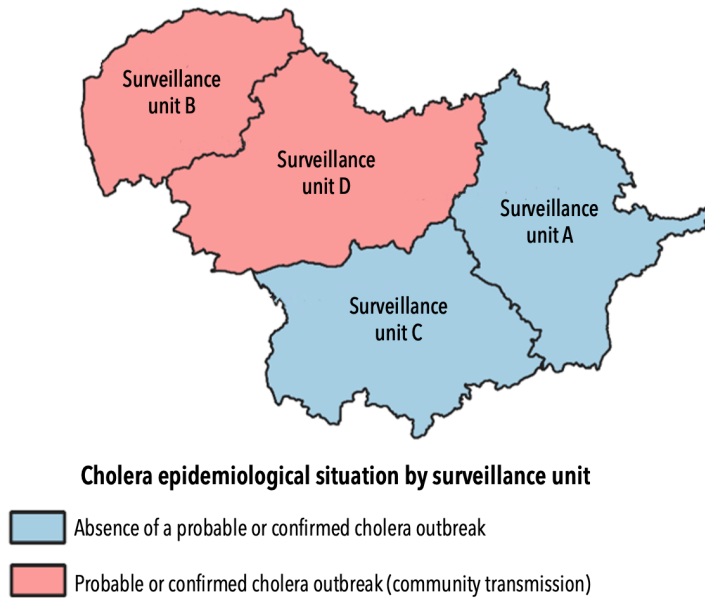


Figure 1. Classification of cholera epidemiological situation by surveillance unit, country X, epidemiological week 20, 2023

Describe key points, such as:

- Number of suspected cholera cases and deaths reported at health facilities, and case fatality ratios for the reporting week and for the cumulative period (since the beginning of the year)
- Number of cholera cases and deaths reported in the community for the reporting week and for the cumulative period (since the beginning of the year)
- Number and proportion of surveillance units per cholera epidemiological situation (i.e., absence of a probable or confirmed cholera outbreak, presence of a probable or confirmed cholera outbreak (community transmission), clustered transmission (if applicable, depending on country's strategy))

Example:

- In week 20, 26 suspected cases including 1 death (CFR 3.8%) were reported in health facilities, and 13 cases and zero deaths were reported in the community.
- From January 1, 2023 to May 21, 2023, a total of 300 suspected cholera cases including 6 deaths (CFR 2.0%) were reported in health facilities. During the same period, 92 cases and 15 deaths were reported in the community.
- Two out of four surveillance units (Units B and D) reported a probable or confirmed cholera outbreak with community transmission.

2. BACKGROUND

Provide a brief description of:

- Ongoing probable or confirmed outbreaks in the country
- Key context about the country relevant to cholera (e.g., seasonality of cholera, previous OCV campaigns if any, etc.)

3. ANALYSIS AND INTERPRETATION OF EPIDEMIOLOGICAL AND LABORATORY DATA

DESCRIPTION OF CASES BY TIME

Draw and describe the epidemic curve and the case fatality ratio.

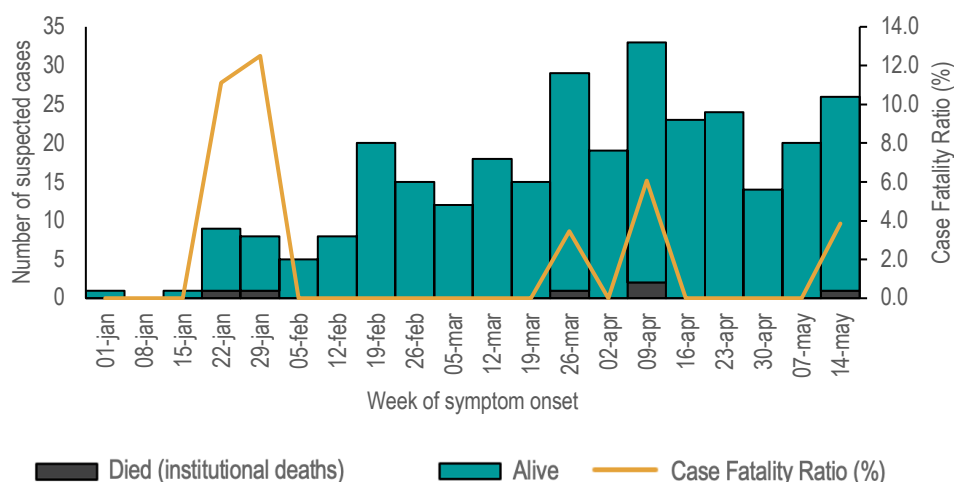


Figure 2. Distribution of suspected cholera cases by outcome status (n=300), and case fatality ratio, by week of symptom onset, country X, weeks 1-20, 2023

CHOLERA TESTING

Report and produce a graph showing the number of suspected cases tested by RDT, the number of suspected cases that tested positive by RDT, and the RDT positivity rate, in each surveillance unit.

Similarly, report and produce a graph showing the number of suspected cases tested by culture or PCR, the number of suspected cases that tested positive by culture or PCR, and the culture or PCR test positivity rate, in each surveillance unit.

Table 3. Number of suspected cholera cases tested by RDT, number with a positive RDT result, and RDT positivity rate by surveillance unit, country X, weeks 1 to 20, 2023

Surveillance unit	Weeks 1-20			Week 19 (previous week)			Week 20 (reporting week)		
	Tested by RDT	RDT+	RDT positivity rate (%)	Tested by RDT	RDT+	RDT positivity rate (%)	Tested by RDT	RDT+	RDT positivity rate (%)
A	74	43	58%	5	2	40%	43	21	49%
B	79	61	77%	1	0	0%	61	45	74%
C	61	29	48%	3	1	33%	29	0	0%
D	72	40	56%	9	7	78%	36	29	81%
Total	286	173	60%	5	2	40%	169	95	56%

Table 4. Number of suspected cholera cases tested by culture, number with a positive culture result, and culture test positivity rate by surveillance unit, country X, weeks 1 to 20, 2023

	Weeks 1-20			Week 19 (previous week)			Week 20 (reporting week)		
Surveillance unit	Tested by culture	Culture+	Culture positivity rate (%)	Tested by culture	Culture+	Culture positivity rate (%)	Tested by culture	Culture+	Culture positivity rate (%)
A	43	21	49%	2	0	50%	2	0	0%
B	61	45	74%	1	0	0%	1	1	100%
C	29	0	0%	2	1	50%	1	0	0%
D	36	29	81%	6	4	67%	5	3	60%
Total	169	95	56%	11	6	55%	9	4	44%

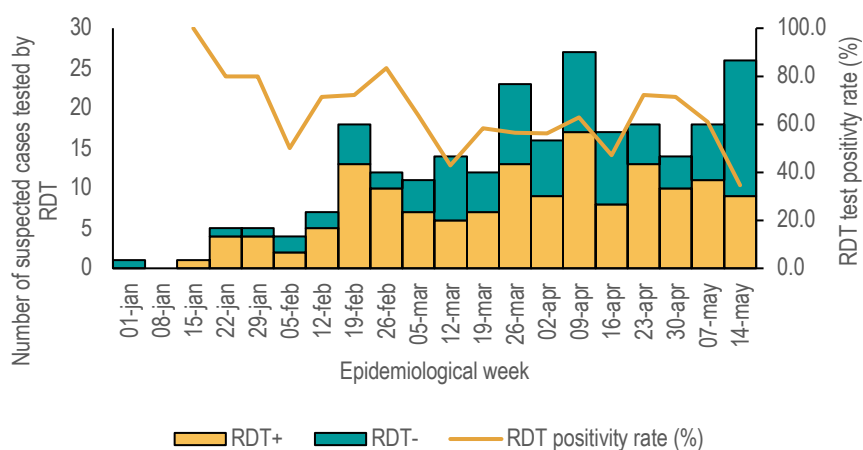


Figure 3. Distribution of suspected cholera cases tested by RDT by test result (n=286), and RDT test positivity rate by epidemiological week, country X, weeks 1 to 20, 2023

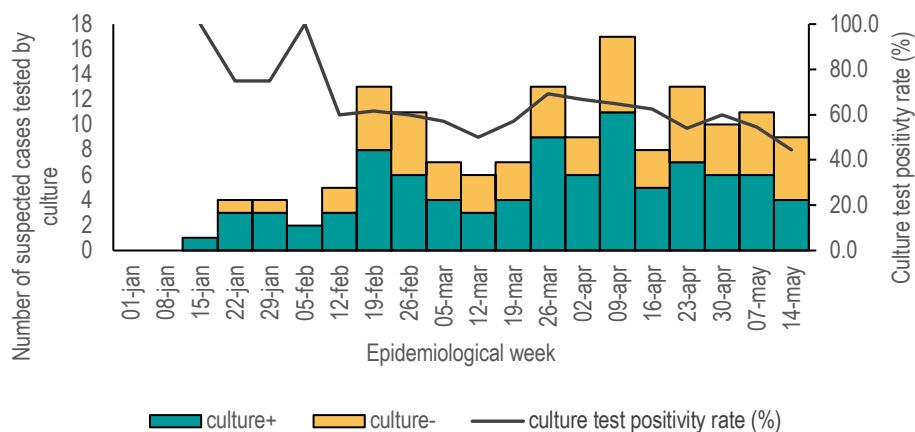


Figure 4. Distribution of suspected cholera cases tested by culture by test result (n=169), and culture test positivity rate by epidemiological week, country X, weeks 1 to 20, 2023

SPATIAL DISTRIBUTION OF CASES AND DEATHS

Describe the geographical distribution of suspected cholera cases and deaths in each surveillance unit. It is preferable to display this distribution using maps and bar charts.

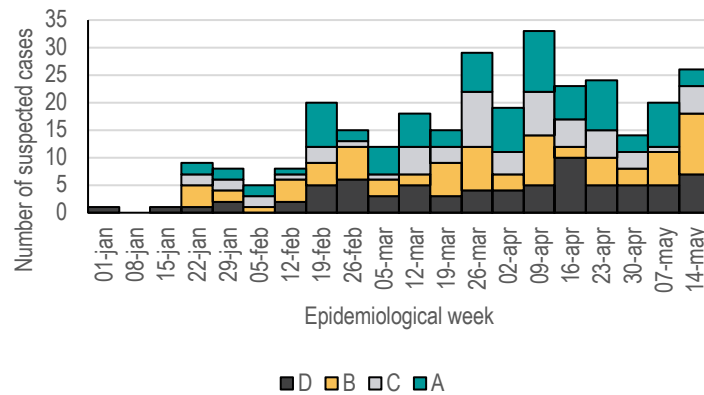


Figure 5. Distribution of suspected cholera cases by surveillance unit (n=300), country X, weeks 1 to 20, 2023

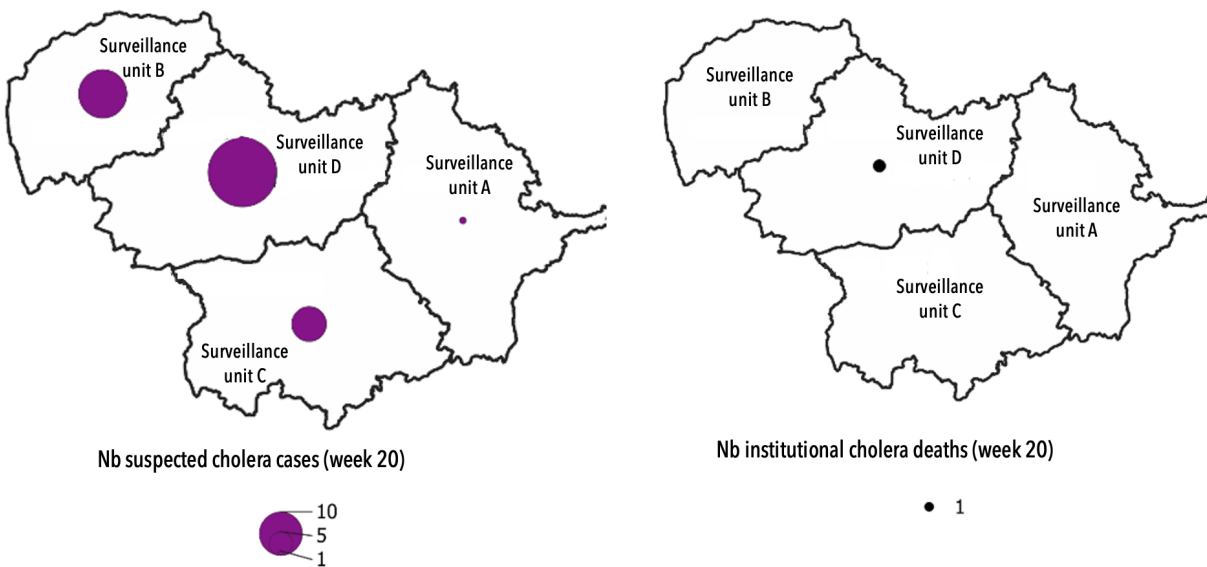


Figure 6. Spatial distribution of suspected cholera cases and deaths reported in health facilities in week 20 in each surveillance unit, country X, 2023

Table 5. Number of suspected cholera cases and deaths reported in health facilities, case fatality ratio and incidence rate, and number of community cases and deaths by surveillance unit, country X, weeks 1 to 20, 2023

Surv.unit	Weeks 1-20						Week 20					
	Suspected cases	Institutional deaths	CFR (%)	Cumulative incidence rate (%)	Community cases	Community deaths	Suspected cases	Institutional deaths	CFR (%)	Weekly incidence rate (/10,000)	Community cases	Community deaths
A	74	2	2.7%	0.2%	24	6	7	0	0%	2.1	3	0
B	79	2	2.5%	0.2%	29	6	3	0	0%	2.5	3	0
C	61	1	1.6%	0.1%	12	2	5	0	0%	0.7	2	0
D	86	1	1.2%	0.7%	27	1	11	1	9.1%	2.9	5	0
Total	300	6	2.0%	0.3%	92	15	26	1	3.8%	2.6	13	0

DESCRIPTION OF CASES AND DEATHS REPORTED IN HEALTH FACILITIES BY AGE AND SEX

Describe the number of suspected cases and deaths reported in health facilities, as well as the case fatality ratio by age group and sex.

Table 6. Cumulative number and proportion of suspected cholera cases and deaths reported in health facilities, and case fatality ratio by age group and sex, country X, weeks 1-20, 2023

Age group	Suspected cases				Institutional deaths				Case fatality ratio (%)		
	M	F	Total n	%	M	F	Total n	%	M	F	Total
<2 years old	6	3	9	3%	0	0	0	0%	0%	0%	0.0%
2-4 years old	7	12	19	6%	0	0	0	0%	0%	0%	0.0%
5-14 years old	27	24	52	17%	0	0	0	0%	0%	0%	0.0%
15-44 years old	60	64	123	41%	2	1	3	50%	3%	2%	2%
45-59 years old	17	32	49	16%	0	1	1	17%	0%	3%	2.0%
≥60 years old	25	23	48	16%	1	1	2	33%	4.0%	4%	4%
Total	142 (47%)	158 (51%)	300	-	3 (50%)	3 (50%)	6	-	2%	2%	2.0%

M: Male; F: Female

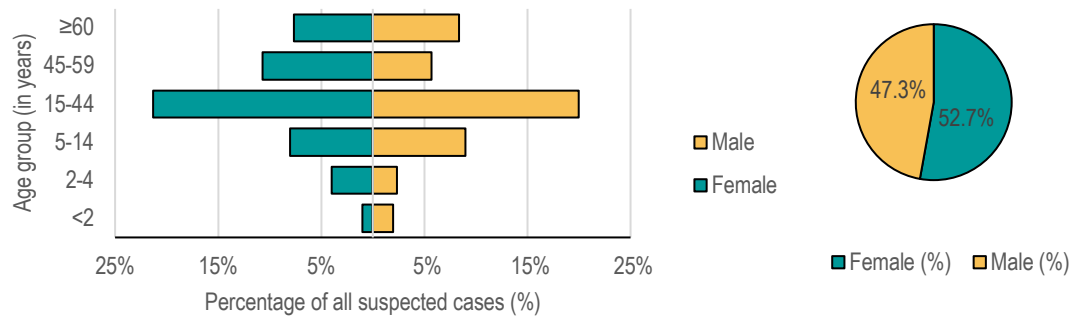


Figure 7. Distribution of suspected cholera cases reported in health facilities by age group and sex (n=300), country X, weeks 1-20, 2023

DESCRIPTION OF CASES AND DEATHS REPORTED IN THE COMMUNITY BY AGE AND SEX

Describe the number of cases and deaths reported in the community by age group and sex.

Table 7. Cumulative number and proportion of community cholera cases and deaths by age group and sex, country X, weeks 1-20, 2023

Age group	Community cases (n)				Community deaths (n)			
	Male	Female	Total		Male	Female	Total	
			n	%			n	%
<2 year-old	1	2	3	3%	0	0	0	0.0%
2-4 year-old	3	5	8	9%	0	0	0	0.0%
5-14 year-old	13	11	24	26%	1	0	1	7%
15-44 year-old	16	16	32	35%	3	3	6	40%
45-59 year-old	9	9	18	20%	0	3	3	20%
≥60 year-old	2	5	7	8%	2	3	5	33%
Total	44 (48%)	48 (52%)	92	-	6 (40%)	9 (60%)	15	-

SEVERITY: INPATIENT HOSPITALISATION AND DEHYDRATION LEVEL

Describe the proportion of suspected cases hospitalised as inpatients and the proportion of suspected cases by level of dehydration (at least severe dehydration).

Table 8. Proportion of suspected cholera cases with severe dehydration, and proportion of suspected cases hospitalized as inpatients by surveillance unit, country X, weeks 1 to 20, 2023

	Weeks 1-20		Week 20	
Surveillance unit	% cases with severe dehydration	% cases hospitalised	% cases with severe dehydration	% cases hospitalised
A	19 (26%)	42 (57%)	3 (43%)	4 (57%)
B	16 (20%)	51 (65%)	1 (33%)	3 (100%)
C	10 (16%)	43 (71%)	1 (20%)	3 (60%)
D	21 (24%)	65 (76%)	1 (9%)	5 (46%)
Total	66 (22%)	201 (67%)	6 (23%)	15 (58%)

4. MONITORING OF SURVEILLANCE PERFORMANCE

Report relevant indicators for the monitoring of cholera surveillance performance at the national level.

Example:

In the past 4 weeks (weeks 17 to 20) and in week 20, the completeness and timeliness of reporting to the national level, as well as the timeliness of laboratory results, and the completeness of recording laboratory results surpassed the required target of 80%.

However, the completeness of publication of the national cholera epidemiological report was not satisfactory (60% since the beginning of the year, and 50% over the past 4 weeks). Corrective measures are being implemented, including the strengthening of data analysis pipelines and the mobilization of additional capacity for data analysis at the national level.

Table 9. Indicators and targets for routine performance monitoring of cholera surveillance, surveillance unit X, 2023

Indicator	Week 20	Average in the past 4 weeks (weeks 17-20)	Weeks 1-20	Minimum target
Completeness of reporting	80%	90%	-	80%
Timeliness of reporting	85%	80%	-	80%
Completeness of publication of national cholera epidemiological report	-	50%	70%	80%
Timeliness of laboratory results	81%	83%	85%	80%
Completeness of recording of laboratory results	90%	91%	90%	80%

5. CHALLENGES/GAPS

Explain the main challenges and/or gaps in epidemiological and laboratory surveillance.

6. RECOMMENDATIONS & PRIORITY FOLLOW-UP ACTIONS

State any recommendations and priority actions to be taken.

Echo key messages for urgent attention.

ANNEX

1. Case definitions

Provide the case definitions used for the country's cholera surveillance.

2. Testing strategy

Briefly describe the testing strategy used in the country (depending on the cholera situation at the surveillance unit level).