Case Report Form, Data Dictionary and Key Variables

MenAfriNet

Toolkit

Use this form to collect standardized patient information to notify public health officials about suspected meningitis cases for both routine case-based surveillance and in outbreak situations.

INTRODUCTION

High quality surveillance and laboratory confirmation are critical for informing policy decisions, evaluating vaccine effectiveness and programs, detecting and responding to outbreaks, and monitoring changes in disease epidemiology. While many bacteria can cause bacterial meningitis, the most common pathogens are *Neisseria meningitidis* (Nm), *Streptococcus pneumoniae* (Sp), and *Haemophilus influenzae* (Hi). Determining the causative pathogen is essential to inform routine immunization programs and to guide an appropriate response during outbreaks.

With the introduction of the meningococcal serogroup A conjugate vaccine (MACV, MenAfriVac™) in the meningitis belt of sub-Saharan Africa, there was a drastic reduction of serogoup A *N. meningitidis* disease (NmA). Robust case-based surveillance is an effective strategy to monitor impact of new vaccination programs on disease incidence. Case-based surveillance aims to collect information on case demographics, clinical symptoms, and laboratory testing. This information can be used to monitor other meningococcal serogroups or pathogens, as well as assess MACV effectiveness, duration of immunity, and herd protection.

The target audience for this document includes all national stakeholders at the Ministry of Health (MoH) or private healthcare institutions working on epidemiology, microbiology, surveillance, disease control, and immunization. This includes all health providers/surveillance officers responsible for reporting suspected cases of meningitis to MoH surveillance departments. This MenAfriNet Case Report Form (CRF) can assist in the management of cases for both routine surveillance and in outbreak situations.

BEFORE YOU START:

The MenAfriNet CRF was created to include all priority variables for meningitis case-based surveillance. Prior to implementing this CRF it is recommended that you adapt the form to include only the diagnostics (cytology, rapid diagnostic test, gram stain, latex, culture, antibiogram, or PCR) that are available at the different levels of the healthcare system. To facilitate adapting this CRF, it is available both in Word and PDF formats. The Data Dictionary defines each variable and includes information about the data format and coding of responses to facilitate the development of meningitis surveillance data management system.

TOOL CONTENTS:

- A CRF for case-based meningitis surveillance
- A CRF with variable names
- A Data Dictionary with variable names, definitions, data formats, and whether the variables are Required or Optional for case-based surveillance

You can also find downloadable and modifiable versions of the documents on this website to adapt to specific country needs.

TOOL INSTRUCTIONS:

Complete the CRF in as much detail as possible for all **suspected cases of meningitis:**

Definition of suspected cases of meningitis:

- Any person with sudden onset of fever (>38.5°C rectal or 38.0°C axillary) and one of the following signs: neck stiffness, altered consciousness, or other meningeal signs.
- Any toddler with sudden onset of fever (>38.5°C rectal or 38.0°C axillary) and one of the following signs: neck stiffness, flaccid neck, bulging fontanel, convulsion, or other meningeal signs.

Source: WHO Regional Office for Africa's Standard Operating Procedures for Enhanced Meningitis Surveillance in Africa

All variables indicated as Required Variables were determined to be essential for meningitis surveillance in all situations, while Optional Variables are helpful in non-outbreak situations.

As part of case-based meningitis surveillance, a completed CRF should be accompanied by a cerebrospinal fluid specimen, according to the algorithm established by the MoH guidelines.

ACKNOWLEDGEMENTS

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UNIQUE IDENTIFIER NUMBER (EPID): (TO BE ASSIGNED AT DISTRICT LEVEL) | COUNTRY | REGION | DISTRICT | YEAR | DISEASE | CASE NUMBER

REPORTING HEALTH FACILITY NAME:

Sub-district: | **District:** | **Region:**

PATIENT IDENTIFICATION **Patient surname:** _____ **Patient other name(s):** _____

Date of birth: _____/_____/_____ *(dd/mm/yyyy)* **OR** Age in years: ____ If <12 months: Age in months: ____ **OR** Age in days: ____

Sex: ☐ Female ☐ Male **Occupation:** _____

Patient's residence (Address) **District of residence:** **Sub-district:** **Community:**

Neighborhood: **House number:** **Location:** ☐ Urban / ☐ Rural

Father's/mother's/caregiver's name: **Telephone number of the patient/parents/caregiver:**

Date seen at health facility: _____/_____/_____ *(dd/mm/yyyy)* **Date of disease onset:** _____/_____/_____ *(dd/mm/yyyy)*

Signs and symptoms: ☐ Fever ☐ Neck stiffness ☐ Headache ☐ Bulging fontanel ☐ Seizure/convulsion ☐ Altered consciousness ☐ Rash ☐ Photophobia ☐ Nausea ☐ Vomiting ☐ Diarrhea ☐ Other (*specify*): _____ ☐ Unknown

Antibiotic treatment: ☐ Amoxicillin ☐ Ceftriaxone ☐ Chloramphenicol ☐ Penicillin G ☐ Oxacillin ☐ Others (*specify*): _____ ☐ Unknown

Date of first dose: _____/_____/_____ *(dd/mm/yyyy)*

Hospitalization status: ☐ Patient hospitalized ☐ Outpatient ☐ Unknown

Patient outcome: ☐ Recovered ☐ Dead ☐ On treatment ☐ Referred ☐ Unknown

VACCINATION STATUS **Vaccinated:** ☐ **YES** ☐ **NO** ☐ **UNKNOWN** *(If vaccinated, please complete the rest of this section)*

Vaccine	*Received*	*Date received(dd/mm/yyyy)*	*No*	*Unknown*	*If Yes, source of vaccination information:*
MenAC	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown
MenACW	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown
MenACWY	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown
MenA(conj.)	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown
MenC(conj.)	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown
Menactra	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown
PCV13 – dose 1	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown
PCV13 – dose 2	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown
PCV13 – dose 3	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown
Hib – dose 1	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown
Hib – dose 2	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown
Hib – dose 3	☐ Yes:	_____/_____/_____	☐ No	☐ Unknown	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown

Specimen source: ☐ CSF ☐ Blood ☐ Urine ☐ Other (*specify*): _____

CSF SPECIMEN COLLECTED: ☐ **YES** ☐ **NO** *(Note : IF NO, please STILL complete the form and send to district disease control officer)*

IF NO: **Reason:** ☐ Lack of LP kit ☐ Lack of provider with LP collection skill ☐ LP contraindicated ☐ Other (*specify*): _____

IF YES: **Date of specimen collection:** _____/_____/_____ *(dd/mm/yyyy)* **Time of specimen collection:** /____/____/ ☐ AM ☐ PM

Appearance of CSF: ☐ Clear ☐ Turbid ☐ Bloody ☐ Xanthochromic ☐ Viscous ☐ Purulent ☐ Not done

Time of inoculation into transport media: /____/____/ ☐ AM ☐ PM

Specimen(s) sent to the laboratory: ☐ Yes ☐ No If **No**, why?: _____

If **Yes, date specimen sent to the:** District laboratory: _____/_____/_____ *(dd/mm/yyyy)*

Regional laboratory: _____/_____/_____ *(dd/mm/yyyy)*

National reference laboratory: _____/_____/_____ *(dd/mm/yyyy)* Name of laboratory: _____

Specimen container used: ☐ Dry tube ☐ Trans-Isolate (T-I) ☐ Cryotube ☐ Other (*specify*): _____

Date of notification to district/region/national surveillance office: _____/_____/_____ *(dd/mm/yyyy)*

Name of person filling the form: **Telephone:**

Date form sent to surveillance office: _____/_____/_____ **Date form received at surveillance office:** _____/_____/_____

DISTRICT LABORATORY NAME: | **Specimen ID District:**

Specimen date received: ____/____/____ **Time:** /____/____/ ☐ AM ☐ PM | **Specimen container received:** ☐ Dry tube ☐ Trans-Isolate ☐ Cryotube ☐ Other (*specify*): _____ | **Specimen condition:** ☐ Adequate ☐ Not adequate

CSF appearance: ☐ Clear ☐ Turbid ☐ Bloody ☐ Xanthochromic ☐ Viscous ☐ Purulent ☐ Not done

Type of tests performed: ☐ Cytology ☐ Gram stain ☐ RDT (dipstick/other) ☐ Latex ☐ Other (*specify*): _____

Cytology: Leucocytes: _____/mm³ PMN: _____% LYMPH: _____% ☐ Not done

Gram: ☐ GPD ☐ GND ☐ GPB ☐ GNB ☐ Other pathogens (*specify*): _____ ☐ No organism seen ☐ Not done

RDT performed: ☐ Yes ☐ No ☐ Not done
Type RDT: ☐ Pastorex ☐ CERMES dipstick ☐ Other (*specify*): _____ **RDT results:** _____

Latex: ☐ NmA ☐ NmC ☐ NmW/Y ☐ NmB/*E. coli* K1 ☐ *S. pneumoniae* ☐ Hib ☐ StrepB ☐ Negative ☐ Not done

Date results sent to reporting health facility: ____/____/____ | **Date specimen sent to regional lab/NRL:** ____/____/____

REGIONAL LABORATORY NAME: | **Specimen ID Region:**

Specimen date received: ____/____/____ **Time:** /____/____/ ☐ AM ☐ PM | **Specimen container received:** ☐ Dry tube ☐ Trans-Isolate ☐ Cryotube ☐ Other (*specify*): _____ | **Specimen condition:** ☐ Adequate ☐ Not adequate

CSF appearances: ☐ Clear ☐ Turbid ☐ Bloody ☐ Xanthochromic ☐ Viscous ☐ Purulent ☐ Not done

Type of tests performed: ☐ Cytology ☐ Gram stain ☐ RDT (dipstick/other) ☐ Latex ☐ Culture ☐ Other (*specify*): _____

Cytology: Leucocytes: _____/mm³ PMN: _____% LYMPH: _____% ☐ Not done

Gram: ☐ GPD ☐ GND ☐ GPB ☐ GNB ☐ Other pathogens (*specify*): _____ ☐ No organism seen ☐ Not done

RDT performed: ☐ Yes ☐ No ☐ Not done
Type RDT: ☐ Pastorex ☐ CERMES dipstick ☐ Other (*specify*): _____ **RDT results:** _____

Latex: ☐ NmA ☐ NmC ☐ NmW/Y ☐ NmB/*E. coli* K1 ☐ *S. pneumoniae* ☐ Hib ☐ StrepB ☐ Negative ☐ Not done

Culture:
☐ NmA ☐ NmC ☐ NmW ☐ NmY ☐ NmB
☐ NmX ☐ Nm indeterminate ☐ StrepB
☐ *S. pneumoniae* ☐ Hib ☐ Hi non-b
☐ Other germ (*specify*): _____
☐ Contaminated ☐ Negative ☐ Not done ☐ NA

Antibiogram:

Amoxicillin	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Ceftriaxone	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Chloramphenicol	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Penicillin G	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Oxacillin	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Other: _____	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done

Date results sent to reporting health facility: ____/____/____ **Date specimen sent to NRL:** ____/____/____

NATIONAL REFERENCE LABORATORY NAME: | **Specimen ID NRL:**

Specimen date received: ____/____/____ **Time:** /____/____/ ☐ AM ☐ PM | **Specimen container received:** ☐ Dry tube ☐ Trans-Isolate ☐ Cryotube ☐ Other (*specify*): _____ | **Specimen condition:** ☐ Adequate ☐ Not adequate

CSF appearances: ☐ Clear ☐ Turbid ☐ Bloody ☐ Xanthochromic ☐ Viscous ☐ Purulent ☐ Not done

Type of tests performed: ☐ Cytology ☐ Gram stain ☐ RDT (dipstick/other) ☐ Latex ☐ Culture ☐ Other (*specify*): _____

Cytology: Leucocytes: _____/mm³ PMN: _____% LYMPH: _____% ☐ Not done

Gram: ☐ GPD ☐ GND ☐ GPB ☐ GNB ☐ Other pathogens (*specify*): _____ ☐ No organism seen ☐ Not done

RDT performed: ☐ Yes ☐ No ☐ Not done
Type RDT: ☐ Pastorex ☐ CERMES dipstick ☐ Other (*specify*): _____ **RDT results:** _____

Latex: ☐ NmA ☐ NmC ☐ NmW/Y ☐ NmB/*E. coli* K1 ☐ *S. pneumoniae* ☐ Hib ☐ StrepB ☐ Negative ☐ Not done

Culture:
☐ NmA ☐ NmC ☐ NmW ☐ NmY ☐ NmB
☐ NmX ☐ Nm indeterminate ☐ StrepB
☐ *S. pneumoniae* ☐ Hib ☐ Hi non-b
☐ Other germ (*specify*): _____
☐ Contaminated ☐ Negative ☐ Not done ☐ NA

Antibiogram:

Amoxicillin	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Ceftriaxone	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Chloramphenicol	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Penicillin G	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Oxacillin	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Other: _____	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done

PCR: ☐ NmA ☐ NmC ☐ NmW ☐ NmY ☐ NmB ☐ NmX ☐ Nm indeterminate ☐ *S. pneumoniae* (specify *genotype*): _____
☐ Hib ☐ Hi non-b ☐ Contaminated (*specify*): _____ ☐ Negative ☐ Not done ☐ NA

Type of PCR: ☐ **Conventional** ☐ **Real time** **Date PCR performed:** ____/____/____

Observations:

Final laboratory result: **Date results sent to:** Health facility: ____/____/____ Disease Surveillance Department/MoH: ____/____/____ | **Final classification (national level):** ☐ Confirmed ☐ Probable ☐ Suspect

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UNIQUE IDENTIFIER NUMBER (EPID): 1.EpidNumber | _____ | _____ | _____ | 2. Year | 3.Disease | 4.CaseNumber
(TO BE ASSIGNED AT DISTRICT LEVEL) | COUNTRY | REGION | DISTRICT | YEAR | DISEASE | CASE NUMBER

REPORTING HEALTH FACILITY NAME: 5.HealthFacility

Sub-district: 6.SubDistrict | **District:** 7.District | **Region:** 8.Region

PATIENT IDENTIFICATION **Patient surname:** 9.FamilyName **Patient other name(s):** 10.FirstName

Date of birth: 11.DateOfBirth ___/___/___ *(dd/mm/yyyy)* **OR** Age in years: 12. AgeYears If <12 months: Age in months: 13. AgeMonths **OR** Age in days: 14.AgeDays

Sex: 15.Sex ☐ Female ☐ Male **Occupation:** 16.Profession

Patient's residence (Address) District of residence: 17.DistrictOfResidence **Sub-district:** 18.SubDistrictOfResidence **Community:** 19. Village

Neighborhood: 20.Neighborhood **House number:** **Location:** 21. Address 22.UrbanRural ☐ Urban / ☐ Rural

Father's/mother's/caregiver's name: 23.ParentName **Telephone number of the patient/parents/caregiver:** 24.PhoneNum

Date seen at health facility: 25.DateConsultation ___/___/___ *(dd/mm/yyyy)* **Date of disease onset:** 26.DateOnset ___/___/___ *(dd/mm/yyyy)*

Signs and symptoms: 27.Fever ☐ Fever 28.NeckStiff ☐ Neck stiffness 29.Headache ☐ Headache 30.BulgFontanel ☐ Bulging fontanel 31.Convulsion ☐ Seizure/convulsion 32.AltConsciousness ☐ Altered consciousness
33.Rash ☐ Rash 34.Photophobia ☐ Photophobia 35.Nausea ☐ Nausea 36.Vomiting ☐ Vomiting 37.Diarrhea ☐ Diarrhea 38.OtherSx ☐ Other (*specify*): _____ 39.SxUnknown ☐ Unknown

Antibiotic treatment: ☐ Amoxicillin ☐ Ceftriaxone ☐ Chloramphenicol ☐ Penicillin G ☐ Oxacillin ☐ Others (*specify*): 41.OtherAbx ☐ Unknown
40.AntibioticTx
Date of first dose: 42.DateAbx ___/___/___ *(dd/mm/yyyy)*

Hospitalization status: ☐ Patient hospitalized ☐ Outpatient ☐ Unknown 43.InOutPatient

Patient outcome: 44.Outcome ☐ Recovered ☐ Dead ☐ On treatment ☐ Referred ☐ Unknown

VACCINATION STATUS 45.VaccinationStatus **Vaccinated:** ☐ **YES** ☐ **NO** ☐ **UNKNOWN** *(If vaccinated, please complete the rest of this section)*

Vaccine	*Received*	*Date received(dd/mm/yyyy)*	*No*	*Unknown*	*If Yes, source of vaccination information:*
MenAC	46.MenAC ☐ Yes:	___/___/___	☐ No	☐ Unknown 47.DateMenAC	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 48.SourceMenAC
MenACW	49.MenACW ☐ Yes:	___/___/___	☐ No	☐ Unknown 50.DateMenACW	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 51.SourceMenACW
MenACWY	52.MenACWY ☐ Yes:	___/___/___	☐ No	☐ Unknown 53.DateMenACWY	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 54.SourceMenACWY
MenA(conj.)	55.MenA ☐ Yes:	___/___/___	☐ No	☐ Unknown 56.DateMenA	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 57.SourceMenA
MenC(conj.)	58.MenC ☐ Yes:	___/___/___	☐ No	☐ Unknown 59.DateMenC	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 60.SourceMenC
Menactra	61.Menactra ☐ Yes:	___/___/___	☐ No	☐ Unknown 62.DateMenactra	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 63.SourceMenactra
PCV13 – dose 1	64.PCV1 ☐ Yes:	___/___/___	☐ No	☐ Unknown 65.DatePCV1	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 66.SourcePCV1
PCV13 – dose 2	67.PCV2 ☐ Yes:	___/___/___	☐ No	☐ Unknown 68.DatePCV2	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 69.SourcePCV2
PCV13 – dose 3	70.PCV3 ☐ Yes:	___/___/___	☐ No	☐ Unknown 71.DatePCV3	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 72.SourcePCV3
Hib – dose 1	73.Hib1 ☐ Yes:	___/___/___	☐ No	☐ Unknown 74.DateHib1	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 75.SourceHib1
Hib – dose 2	76.Hib2 ☐ Yes:	___/___/___	☐ No	☐ Unknown 77.DateHib2	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 78.SourceHib2
Hib – dose 3	79.Hib3 ☐ Yes:	___/___/___	☐ No	☐ Unknown 80.DateHib3	☐ Card ☐ Vaccination register ☐ Verbal ☐ Unknown 81.SourceHib3

Specimen source: 82.SpecimenSource ☐ CSF ☐ Blood ☐ Urine ☐ Other (*specify*): 83.SpecimenSourceOther

CSF SPECIMEN COLLECTED: ☐ **YES** ☐ **NO** *(Note : IF NO, please STILL complete the form and send to district disease control officer)* 84.SpecimenCollected

IF NO: **Reason:** 85.SpecimenNOTcollected_why ☐ Lack of LP kit ☐ Lack of provider with LP collection skill ☐ LP contraindicated ☐ Other (*specify*): 86.SpecimenNOTcollected_Other

IF YES: **Date of specimen collection:** 87.DateSpecimenCollected ___/___/___ *(dd/mm/yyyy)* **Time of specimen collection:** 88.TimeSpecimenCollected ___/___ ☐ AM ☐ PM

Appearance of CSF: ☐ Clear ☐ Turbid ☐ Bloody ☐ Xanthochromic ☐ Viscous ☐ Purulent 89.ASPECT ☐ Not done

Time of inoculation into transport media: ___/___/___ ☐ AM ☐ PM 90.TransportMedia_InoculationTime

Specimen(s) sent to the laboratory: ☐ Yes ☐ No 91.SpecimenSentToLab If **No**, why?: 92.SpecimenNOTSentToLab_Why

If **Yes, date specimen sent to the:** District laboratory: 93.DateCSFsentDistrict ___/___/___ *(dd/mm/yyyy)*
Regional laboratory: 94.DateCSFsentRegional ___/___/___ *(dd/mm/yyyy)*
National reference laboratory: 95.DateCSFsentNRL ___/___ *(dd/mm/yyyy)* Name of laboratory: 96.LabCSFsent

Specimen container used: ☐ Dry tube ☐ Trans-Isolate (T-I) ☐ Cryotube ☐ Other (*specify*): 100.TransportMedia_Other
97.TransportMedia_Dry Tube 98.TransportMedia_TI 99.TransportMedia_Cryotube

Date of notification to district/region/national surveillance office: 101.DateNotification ___/___ *(dd/mm/yyyy)*

Name of person filling the form: 102.ReporterHF **Telephone:** 103.ReporterPhone

Date form sent to surveillance office: 104.DateFormSent ___/___ **Date form received at surveillance office:** 105.DateFormReceived

DISTRICT LABORATORY NAME: 106.DistrictLab | **Specimen ID District:** 107.SpecimenIDDistrict

Specimen date received: 108.DateReceivedDistrict **Time:** / / 109.TimeSpecimenReceivedDistrict ☐ AM ☐ PM

Specimen container received: ☐ Dry tube 110.DryTubeDistrict ☐ Trans-Isolate 111.TIDistrict ☐ Cryotube 112.CryotubeDistrict ☐ Other (*specify*): 113.OtherMediaDistrict

Specimen condition: ☐ Adequate ☐ Not adequate 114.SpecimenConditionDistrict

CSF appearance: ☐ Clear ☐ Turbid ☐ Bloody ☐ Xanthochromic ☐ Viscous ☐ Purulent ☐ Not done 115.AspectDistrict

Type of tests performed: ☐ Cytology 116.LabTestCYTOLOGIEDistrict ☐ Gram stain 117.LabTestGRAMDistrict ☐ RDT (dipstick/other) 118.LabTestTDRDistrict ☐ Latex 119.LabTestLATEXDistrict ☐ Other (*specify*): 120.LabTestAUTREDistrict

Cytology: Leucocytes: 121.WhiteCellCountDistrict /mm³ PMN: 122.PolyPercentDistrict % LYMPH: 123.MonoPercentDistrict % ☐ Not done 124.CytologyDistrictNotDone

Gram: ☐ GPD 125.GramDistrict ☐ GND ☐ GPB ☐ GNB ☐ Other pathogens (*specify*): 126.GramOtherDistrict ☐ No organism seen ☐ Not done

RDT performed: ☐ Yes ☐ No ☐ Not done 127.TDR_MeningitisDRS
Type RDT: 128.TDR_TypeDRS ☐ Pastorex ☐ CERMES dipstick ☐ Other (*specify*): 129.TestAUTREDistrict **RDT results:** 130.TDR_OtherResultsDRS

Latex: 131.LatexDistrict. ☐ NmA ☐ NmC ☐ NmW/Y ☐ NmB/*E. coli* K1 ☐ *S. pneumoniae* ☐ Hib ☐ StrepB ☐ Negative ☐ Not done

Date results sent to reporting health facility: 132.ResultSentHealthFacility | **Date specimen sent to regional lab/NRL:** 133.SpecimenSentRegionalNRL

REGIONAL LABORATORY NAME: 134.RegionLab | **Specimen ID Region:** 135.SpecimenIDRegion

Specimen date received: 136.DateReceivedRegion **Time:** / / 137.TimeSpecimenReceivedRegion ☐ AM ☐ PM

Specimen container received: ☐ Dry tube 138.DryTubeRegion ☐ Trans-Isolate 139.TIRegion ☐ Cryotube 140.CryotubeRegion ☐ Other (*specify*): 141.OtherMediaRegion

Specimen condition: ☐ Adequate ☐ Not adequate 142.SpecimenConditionRegion

CSF appearances: ☐ Clear ☐ Turbid ☐ Bloody ☐ Xanthochromic ☐ Viscous ☐ Purulent ☐ Not done 143.AspectRegion

Type of tests performed: ☐ Cytology 144.LabTestCYTOLOGIERegion ☐ Gram stain 145.LabTestGRAMRegion ☐ RDT (dipstick/other) 146. LabTestTDRRegion ☐ Latex 147.LabTestLATEXRegion ☐ Culture 148.LabTestCULTURERegion ☐ Other (*specify*): 149.LabTestAUTRERegion

Cytology: Leucocytes: 150.WhiteCellCountRegion /mm³ PMN: 151.PolyPercentRegion % LYMPH: 152.MonoPercentRegion % ☐ Not done 153.CytologyRegionNotDone

Gram: ☐ GPD 154.GramRegion ☐ GND ☐ GPB ☐ GNB ☐ Other pathogens (*specify*): 155.GramOtherRegion ☐ No organism seen ☐ Not done

RDT performed: ☐ Yes ☐ No ☐ Not done 156.TDR_MeningitisRegion
Type RDT: 157. TDR_TypeRegion ☐ Pastorex ☐ CERMES dipstick ☐ Other (*specify*): 158.TestAUTRERegion **RDT results:** 159.TDR_OtherResultsRegion

Latex: 160.LatexRegion ☐ NmA ☐ NmC ☐ NmW/Y ☐ NmB/*E. coli* K1 ☐ *S. pneumoniae* ☐ Hib ☐ StrepB ☐ Negative ☐ Not done

Culture: 161.CultureRegion
☐ NmA ☐ NmC ☐ NmW ☐ NmY ☐ NmB
☐ NmX ☐ Nm indeterminate ☐ StrepB
☐ *S. pneumoniae* ☐ Hib ☐ Hi non-b
☐ Other germ (*specify*): 162.CultureOtherRegion
☐ Contaminated ☐ Negative ☐ Not done ☐ NA

Antibiogram:

Amoxicillin 163.AmoxicillinRegion	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Ceftriaxone 164.CeftriaxoneRegion	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Chloramphenicol 165.ChloramphenicolRegion	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Penicillin G 166.PenicillinRegion	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Oxacillin 167.OxacillineRegion	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Other: 168.OtherAntibioticRegion	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done

169.OtherAntibioticSensitivityRegion

Date results sent to reporting health facility: 170.ResultSentHF_Region | **Date specimen sent to NRL:** 171.SpecimenSentNRL

NATIONAL REFERENCE LABORATORY NAME: 172.NRL | **Specimen ID NRL:** 173.SpecimenIDNRL

Specimen date received: 174.DateReceivedNRL **Time:** / / 175.TimeSpecimenReceivedNRL ☐ AM ☐ PM

Specimen container received: ☐ Dry tube 176.DryTubeNRL ☐ Trans-Isolate 177.TINRL ☐ Cryotube 178.CryotubeNRL ☐ Other (*specify*): 179.OtherMediaNRL

Specimen condition: ☐ Adequate ☐ Not adequate 180.SpecimenConditionNRL

CSF appearances: ☐ Clear ☐ Turbid ☐ Bloody ☐ Xanthochromic ☐ Viscous ☐ Purulent ☐ Not done 181.AspectNRL

Type of tests performed: ☐ Cytology 182.LabTestCYTOLOGIENRL ☐ Gram stain 183.LabTestGRAMNRL ☐ RDT (dipstick/other) 184.LabTestTDRNRL ☐ Latex 185.LabTestLATEXNRL ☐ Culture 186.LabTestCULTURENRL ☐ Other (*specify*): 187.LabtestAUTRENRL

Cytology: Leucocytes: 188.WhiteCellCountNRL /mm³ PMN: 189. PolyPercentNRL % LYMPH: 190. MonoPercentNRL % ☐ Not done 191.CytologyNRLNotDone

Gram: ☐ GPD 192.GramNRL ☐ GND ☐ GPB ☐ GNB ☐ Other pathogens (*specify*): 193.GramOtherNRL ☐ No organism seen ☐ Not done

RDT performed: ☐ Yes ☐ No ☐ Not done 194.TDR_MeningitisNRL
Type RDT: 195.TDR_TypeNRL ☐ Pastorex ☐ CERMES dipstick ☐ Other (*specify*): 196.TestAUTRENRL **RDT results:** 197.TDR_OtherResultsNRL

Latex: 198.LatexNRL ☐ NmA ☐ NmC ☐ NmW/Y ☐ NmB/*E. coli* K1 ☐ *S. pneumoniae* ☐ Hib ☐ StrepB ☐ Negative ☐ Not done

Culture: 199.CultureNRL
☐ NmA ☐ NmC ☐ NmW ☐ NmY ☐ NmB
☐ NmX ☐ Nm indeterminate ☐ StrepB
☐ *S. pneumoniae* ☐ Hib ☐ Hi non-b
☐ Other germ (*specify*): 200.CultureOtherNRL
☐ Contaminated ☐ Negative ☐ Not done ☐ NA

Antibiogram:

Amoxicillin 201.Amoxicillin	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Ceftriaxone 202.Ceftriaxone	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Chloramphenicol 203.Chloramphenicol	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Penicillin G 204.Penicillin	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Oxacillin 205.Oxacilline	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done
Other: 206.OtherAntibiotic	☐ Sensitive	☐ Resistant	☐ Intermediate	☐ Not done

207.OtherAntibioticSensitivity

PCR: ☐ NmA ☐ NmC ☐ NmW ☐ NmY ☐ NmB ☐ NmX ☐ Nm indeterminate ☐ *S. pneumoniae* (specify *genotype*): 209.Genotype_Sp
208.PCR ☐ Hib ☐ Hi non-b ☐ Contaminated (*specify*): 210.FinalResultOtherNRL ☐ Negative ☐ Not done ☐ NA

Type of PCR: 211.PCRType **Conventional** ☐ **Real time** | **Date PCR performed:** / / 212.DatePCR

Observations: 213.ObservationsNRL

Final laboratory result: 214.FinalResultNRL

Date results sent to: Health facility: 215.DateResultsSentHF / /
Disease Surveillance Department/MoH: / / 216.DateFinalResultsSentMOH

Final classification (national level): 217.FinalClassification ☐ Confirmed ☐ Probable ☐ Suspect

Data Dictionary

Variable Number	Variable Name	Electronic Reporting Prompt	Variable Coding	Definition	Format	Required/ Optional
1	EpidNumber	EPID		Unique case identification number comprised of country-region-district-year-illness-case notification number	Text (read only)	Required
2	Year	Epi year		Year that case was reported	Number ####	Required
3	Disease	Disease		Disease of notification	Comment legal	Required
4	CaseNumber	Case number		Unique case identification number attributed by the district	Number ####	Required
5	HealthFacility	Reporting health facility		Name of the health facility reporting the case	Text	Required
6	SubDistrict	Reporting sub-district		Name of the sub-district of the health facility reporting the case	Legal value	Optional
7	District	Reporting district		Name of the district of the health facility reporting the case	Legal value	Required
8	Region	Reporting region		Name of the region reporting the case	Legal value	Required
9	FamilyName	Patient surname		Patient surname	Text (UPPERCASE)	Required
10	FirstName	Patient first name		Patient first name	Text (UPPERCASE)	Required
11	DateOfBirth	Date of birth		Patient date of birth	Date	Required
12	AgeYears	Age (years)		Age in years, if patient aged ≥12 months	Number ##	Required
13	AgeMonths	Age (months)		Age in months, if patient aged <12 months	Number ##	Required
14	AgeDays	Age (days)		Age in days, if patient aged <1 month otherwise indicate in months	Number ##	Required
15	Sex	Sex	1-Male 2-Female 9-Unknown	Patient sex	Comment legal	Required
16	Profession	Profession		Patient's occupation	Text	Optional
17	DistrictOfResidence	District of residence		Patient district of residence	Legal value	Required
18	SubDistrictofResidence	Subdistrict of residence		Patient sub-district of residence	Legal value	Optional
19	Village	Town/City/Village		Patient village, town or city of residence	Text (UPPERCASE)	Required
20	Neighborhood	Neighborhood/Locality		Patient neighborhood of residence	Text (UPPERCASE)	Optional
21	Address	Address		Patient street address of residence	Text (UPPERCASE)	Optional
22	UrbanRural	Urban/Rural	1-Urban 2-Rural 9-unknown	Indicate whether case's residence is in a urban or rural area	Comment legal	Optional
23	ParentName	Name of parent or guardian		Name of patient's parent or guardian	Text (UPPERCASE)	Optional
24	PhoneNum	Phone number		Patient phone number or their guardian	Text	Optional
25	DateConsultation	Date seen at health facility		Date patient was seen at the health facility	Date	Required
26	DateOnset	Date of onset of symptoms		Date of the patient's initial onset of symptoms	Date	Required
27	Fever	Fever		Patient has fever	Checkbox	Optional
28	NeckStiff	Stiff neck		Patient has stiff neck	Checkbox	Optional
29	Headache	Headache		Patient has headache	Checkbox	Optional
30	BulgFontanel	Bulging fontanel		Patient has bulging fontanel	Checkbox	Optional

Variable Number	Variable Name	Electronic Reporting Prompt	Variable Coding	Definition	Format	Required/ Optional
31	Convulsion	Convulsions or seizures		Patient has convulsions or seizures	Checkbox	Optional
32	AltConsciousness	Altered consciousness		Patient has altered consciousness	Checkbox	Optional
33	Rash	Rash		Patient has a rash	Checkbox	Optional
34	Photophobia	Photophobia		Patient has photophobia	Checkbox	Optional
35	Nausea	Nausea		Patient has nausea	Checkbox	Optional
36	Vomiting	Vomiting		Patient has vomiting	Checkbox	Optional
37	Diarrhea	Diarrhea		Patient has diarrhea	Checkbox	Optional
38	OtherSx	Other symptoms		Specify any other symptom observed	Text	Optional
39	SxUnknown	Unknown		Patient symptoms are unknown	Checkbox	Optional
40	AntibioticTx	Antibiotic treatment	1-Amoxicillin 2-Ceftriaxone 3-Chloramphenicol 4-Penicillin G 5-Oxacillin 6-Other 7-Unknown	Specify the antibiotic treatment given to patient	Comment legal	Optional
41	OtherAbx	Other antibiotic		If Other selected, please specify the name of other antibiotic treatment given to patient	Text	Optional
42	DateAbx	Date of first dose of antibiotic treatment		Date of the first dose of the antibiotic treatment given to patient	Date	Optional
43	InOutPatient	Hospitalization status	1-Patient hospitalized 2-Outpatient 9-Unknown	Whether the patient was treated as inpatient or outpatient	Comment legal	Optional
44	Outcome	Patient outcome	1-Recovered 2-Dead 3-On treatment 4-Referred 9-Unknown	Patient outcome	Comment legal	Required
45	VaccinationStatus	Vaccination status	1-Yes 2-No 9-Unknown	Whether the patient had received any vaccines	Comment legal	Required
46	MenAC	MenAC (PS)	1-Yes 2-No 9-Unknown	Whether the patient received MenAC (polysaccharide) vaccination	Comment legal	Required
47	DateMenAC	Date of vaccination: MenAC (PS)		Date of last vaccination with MenAC (polysaccharide) vaccine	Date	Required
48	SourceMenAC	Source of information: MenAC (PS)	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of information for MenAC (polysaccharide) vaccination status	Comment legal	Required
49	MenACW	MenACW (PS)	1-Yes 2-No 9-Unknown	Whether the patient received MenACW (polysaccharide) vaccination	Comment legal	Required
50	DateMenACW	Date of vaccination: MenACW (PS)		Date of last vaccination with MenACW (polysaccharide) vaccines	Date	Required
51	SourceMenACW	Source of information: MenACW (PS)	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of information for MenACW (polysaccharide) vaccination status	Comment legal	Required
52	MenACWY	MenACWY (PS)	1-Yes 2-No 9-Unknown	Whether the patient received MenACWY (polysaccharide) vaccination	Comment legal	Required
53	DateMenACWY	Date of vaccination: MenACWY (PS)		Date of last vaccination with MenACWY (polysaccharide) vaccine	Date	Required
54	SourceMenACWY	Source of information: MenACWY (PS)	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of information for MenACWY (polysaccharide) vaccination status	Comment legal	Required

Variable Number	Variable Name	Electronic Reporting Prompt	Variable Coding	Definition	Format	Required/ Optional
55	MenA	MenA conjugate (MenAfriVac)	1-Yes 2-No 9-Unknown	Whether the patient received MenA conjugate (MenAfriVac) vaccination	Comment legal	Required
56	DateMenA	Date of vaccination: MenA conjugate		Date of the last vaccination with MenA conjugate vaccine	Date	Required
57	SourceMenA	Source of information: MenA conjugate	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of information for MenA conjugate vaccine	Comment legal	Required
58	MenC	MenC conjugate	1-Yes 2-No 9-Unknown	Whether the patient received MenC conjugate vaccination	Comment legal	Required
59	DateMenC	Date of vaccination: MenC conjugate		Date of the last vaccination with MenC conjugate vaccine	Date	Required
60	SourceMenC	Source of information: MenC conjugate	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of information for MenC conjugate vaccination	Comment legal	Required
61	Menactra	Menactra	1-Yes 2-No 9-Unknown	Whether the patient received Menactra vaccination	Comment legal	Required
62	DateMenactra	Date of vaccination: Menactra		Date of the last vaccination with Menactra vaccine	Date	Required
63	SourceMenactra	Source of information: Menactra	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of information for the Menactra vaccination	Comment legal	Required
64	PCV1	PCV13-1	1-Yes 2-No 9-Unknown	Whether the patient received the first dose of PCV13	Comment legal	Required
65	DatePCV1	Date of vaccination: PCV1		Date the first dose of PCV13 vaccine	Date	Required
66	SourcePCV1	Source of information: PCV1	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of the information for first dose of PCV13 vaccine	Comment legal	Required
67	PCV2	PCV13-2	1-Yes 2-No 9-Unknown	Whether the patient received the second dose of PCV13 vaccine	Comment legal	Required
68	DatePCV2	Date of vaccination: PCV2		Date of the second dose of PCV13 vaccine	Date	Required
69	SourcePCV2	Source of information: PCV2	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of information on second dose of PCV13 vaccine	Comment legal	Required
70	PCV3	PCV13-3	1-Yes 2-No 9-Unknown	Whether the patient received the third dose of PCV13 vaccine	Comment legal	Required
71	DatePCV3	Date of vaccination: PCV3		Date of the third dose of PCV13 vaccine	Date	Required
72	SourcePCV3	Source of information: PCV3	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of information for the third dose of PCV13 vaccine	Comment legal	Required
73	Hib1	Hib 1	1-Yes 2-No 9-Unknown	Whether the patient received the first dose of Hib vaccine	Comment legal	Required
74	DateHib1	Date of vaccination: Hib1		Date of the first dose of Hib vaccine	Date	Required
75	SourceHib1	Source of information: Hib1	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of the information for the first dose of Hib vaccine	Comment legal	Required
76	Hib2	Hib 2	1-Yes 2-No 9-Unknown	Whether the patient received the second dose of Hib vaccine	Comment legal	Required
77	DateHib2	Date of vaccination: Hib2		Date of the second dose of Hib vaccine	Date	Required

Variable Number	Variable Name	Electronic Reporting Prompt	Variable Coding	Definition	Format	Required/ Optional
78	SourceHib2	Source of information: Hib2	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of the information for the second dose of Hib vaccine	Comment legal	Required
79	Hib3	Hib 3	1-Yes 2-No 9-Unknown	Whether the patient received the third dose of Hib vaccine	Comment legal	Required
80	DateHib3	Date of vaccination: Hib3		Date of the third dose of Hib vaccine	Date	Required
81	SourceHib3	Source of information: Hib3	1-Vaccination card 2-Vaccine register 3-Verbal recall 9-Unknown	Source of the information for the third dose of Hib vaccine	Comment legal	Required
82	SpecimenSource	Specimen source	1-CSF 2-Blood 3-Urine 9-Unknown	Source of the specimen	Comment legal	Required
83	SpecimenSourceOther	Specimen source other (specify)		Specify the other source of specimen	Text	
84	SpecimenCollected	Specimen collected	1-Yes 2-No 9-Unknown	Was a CSF specimen collected?	Comment legal	Required
85	SpecimenNOTcollected_why	Reason specimen not collected	1-Lack of LP kit 2-Lack of provider with LP collection skill 3-LP contraindication 4-Other	Reason why specimen not collected	Comment legal	Optional
86	SpecimenNOTcollected_Other	Other reason why specimen not collected		Specify other reason why specimen not collected	Text	Optional
87	DateSpecimenCollected	Date specimen collected		Date specimen collected	Date	Required
88	TimeSpecimenCollected	Time specimen collected		Time specimen collected	Time	Optional
89	ASPECT	Macroscopic analysis	1-Clear 2-Turbid/ Cloudy 3-Bloody 4-Xanthochromic/ Yellow 5-Viscous 6-Purulent 9-Not done	Clarity of specimen (Note: Variable coding list includes term/alternate term. Please select term that best fits what is used in-country)	Comment legal	Required
90	TransportMedia_InoculationTime	Time of inoculation into transport media		Time of transport media inoculation	Time	Optional
91	SpecimenSentToLab	Was the sample sent to the laboratory	1-Yes 2-No	Whether the sample was sent to the laboratory	Comment legal	Required
92	SpecimenNOTSentToLab_Why	If NOT sent to laboratory, WHY		Reason why specimen was not sent to the laboratory	Text	Optional
93	DateCSFSentDistrict	Date CSF sent to district laboratory		Date that the specimen was sent to the district laboratory.	Date	Required
94	DateCSFSentRegional	Date CSF sent to regional laboratory		Date that the specimen was sent to the regional laboratory.	Date	Required
95	DateCSFSentNRL	Date CSF sent to NRL		Date that the specimen was sent to the NRL.	Date	Required
96	LabCSFSent	Name of the analysis laboratory		Name of the laboratory that receives the CSF sample	Text	Required
97	TransportMedia_Dry Tube	Transportation media		Whether specimen sent in dry tube	Checkbox	Required
98	TransportMedia_TI	Transportation media		Whether specimen sent in Trans-Isolate	Checkbox	Required
99	TransportMedia_Cryotube	Transportation media		Whether specimen sent in cryotube	Checkbox	Required
100	TransportMedia_Other	Transportation media		Whether specimen sent in Other transport media (please specify)	Text	Required
101	DateNotification	Date health facility notified district/region/ national surveillance office		Date the health facility notifies the district/regional/national surveillance office	Date	Optional

Variable Number	Variable Name	Electronic Reporting Prompt	Variable Coding	Definition	Format	Required/ Optional
102	ReporterHF	Name of reporter		Name of the reporter of the case notified at the health facility level	Text (UPPERCASE)	Optional
103	ReporterPhone	Reporter phone		Reporter phone of the case notified	Text	Optional
104	DateFormSent	Date form sent to surveillance office		Date form sent to district/ regional/national surveillance office	Date	Optional
105	DateFormReceived	Date form received at surveillance office		Date form received by district/ region/national surveillance office	Date	Optional
106	DistrictLab	Name of district laboratory		Name of the district laboratory performing testing	Text	Required
107	SpecimenIDDistrict	Specimen ID		Number listed in the laboratory registry at the district laboratory	Text	Optional
108	DateReceivedDistrict	Date district laboratory received		Date that the district laboratory received the specimen	Date	Required
109	TimeSpecimenReceivedDistrict	Time		Time specimen was received by district laboratory	Time	Optional
110	DryTubeDistrict	Dry tube received (district)		Whether specimen was received in a dry tube by district laboratory	Checkbox	Required
111	TIDistrict	TI received (district)		Whether specimen was received in a Trans-Isolate by district laboratory	Checkbox	Required
112	CryotubeDistrict	Cryotube received (district)		Whether specimen was received in cryotubes by district laboratory	Checkbox	Required
113	OtherMediaDistrict	Other media received (district)		Specify the Other media received by district laboratory	Text	Optional
114	SpecimenConditionDistrict	Specimen condition (district)	1-Adequate 2-Not adequate	Condition of specimen received at the district laboratory: 1-Adequate (indicating both volume and temperature of specimen) or 2-Not adequate (indicating if cracked, empty, transported at incorrect temperature, insufficient volume or illegible labeling)	Comment legal	Required
115	AspectDistrict	Macroscopic analysis (district)	1-Clear 2-Turbid/ Cloudy 3-Bloody 4-Xanthochromic/ Yellow 5-Viscous 6-Purulent 9-Not done	Clarity of specimen received at the district laboratory (Note: Variable coding list includes term/alternate term. Please select term that best fits what is used in-country)	Comment legal	Required
116	LabTestCYTOLOGIEDistrict	Type of tests performed		Whether cytology was performed	Checkbox	Required
117	LabTestGRAMDistrict	Type of tests performed		Whether gram stain test was performed	Checkbox	Required
118	LabTestTDRDistrict	Type of tests performed		Whether RDT lab test was performed	Checkbox	Required
119	LabTestLATEXDistrict	Type of tests performed		Whether latex test was performed	Checkbox	Required
120	LabTestAUTREDistrict	Type of tests performed		Specify Other type of lab tests completed	Text	Required
121	WhiteCellCountDistrict	White cell count (district)		White blood count recorded at district laboratory	Number	Required
122	PolyPercentDistrict	Polymorphonucleocytes % (district)		Polymorphonucleocytes recorded at district laboratory	Number	Optional
123	MonoPercentDistrict	Lymphocytes % (district)		Mono Lymphocytes level recorded at district laboratory: elevated lymphocytes can show inflammation of the meninges	Number	Optional

Variable Number	Variable Name	Electronic Reporting Prompt	Variable Coding	Definition	Format	Required/ Optional
124	CytologyDistrictNotDone	Cytology (district)		Specify whether cytology not completed at district laboratory	Checkbox	Optional
125	GramDistrict	Gram (district)	1-GDP 2-GND 3-GPB 4-GNB 5-Other pathogens 6-No organism seen 7-Not done	Organism identified by gram stain test at the district laboratory	Comment legal	Required
126	GramOtherDistrict	Gram – other (district)		If other germ identified, please specify the other pathogen identified at the district laboratory	Text	Optional
127	TDR_MeningitisDRS	Rapid Diagnostic Test Meningitis (district)	1-Yes 2-No 3-Not done	Whether RDT was performed at the district laboratory	Comment legal	Optional
128	TDR_TypeDRS	Type of Rapid Diagnostic Test Meningitis (district)	1-Pastorex 2-CERMES Dipstick 3-Other (specify)	Type of RDT Meningitis at district laboratory	Comment legal	Optional
129	TestAUTREDistrict	Other type of TDR (specify name)		Specify the type and results if other Lab test utilized at district laboratory	Text	Optional
130	TDR_OtherResultsDRS	Rapid Diagnostic Test Meningitis (district)	1-NmA 2-NmC 3-NmW 4-NmY 5-Negative 6-Not done	RDT Results performed at district laboratory	Comment legal	Optional
131	LatexDistrict	Latex (district)	1-NmA 2-NmC 3-NmW/Y 4-NmB/*E. coli* K1 5-*S. pneumoniae* 6-Hib 7-StrepB 8-Negative 9-Not done	Results of the latex test at the district laboratory	Comment legal	Optional
132	ResultSentHealthFacility	Date result sent to reporting health facility		Date that the result is sent to the reporting health facility	Date	Optional
133	SpecimenSentRegionalNRL	Date specimen is sent to the regional laboratory or NRL		Date the specimen is sent to regional laboratory or NRL	Date	Optional
134	RegionLab	Name of regional laboratory	Country specific list	Name of regional laboratory receiving the specimen	Text	Required
135	SpecimenIDRegion	Specimen ID		Specimen ID at regional laboratory	Text	Optional
136	DateReceivedRegion	Date regional laboratory received		Date the regional laboratory received the specimen	Date	Required
137	TimeSpecimenReceivedRegion	Time		Time the specimen was received at regional laboratory	Time	Optional
138	DryTubeRegion	Dry tube (region)		Whether the specimen received in dry tube by regional laboratory	Checkbox	Required
139	TIRegion	TI (region)		Whether the specimen was received in Trans-Isolate by regional laboratory	Checkbox	Required
140	CryotubeRegion	Cryotube (region)		Whether the specimen was received in cryotube by regional laboratory	Checkbox	Required
141	OtherMediaRegion	Sample received in OTHER media		Specify the OTHER media received by regional laboratory	Text	Optional
142	SpecimenConditionRegion	Specimen condition (region)	1-Adequate 2-Not adequate	Whether a specimen was: 1-Adequate (indicating both volume and temperature of specimen) or 2-Not adequate (indicating if cracked, empty, transported at incorrect temperature, insufficient volume or illegible labeling)	Comment legal	Required

Variable Number	Variable Name	Electronic Reporting Prompt	Variable Coding	Definition	Format	Required/ Optional
143	AspectRegion	Macroscopic analysis (region)	1-Clear 2-Turbid/ Cloudy 3-Bloody 4-Xanthochromic/ Yellow 5-Viscous 6-Purulent 9-Not done	Clarity of specimen (Note: Variable coding list includes term/alternate term. Please select term that best fits what is used in-country)	Comment legal	Required
144	LabTestCYTOLOGIERegion	Type of tests performed		Whether cytology performed on case reported	Checkbox	Required
145	LabTestGRAMRegion	Type of tests performed		Whether gram stain tests were performed on case reported	Checkbox	Required
146	LabTestTDRRegion	Type of tests performed		Whether RDT lab tests completed on case reported	Checkbox	Required
147	LabTestLATEXRegion	Type of tests performed		Whether latex test was performed on case reported	Checkbox	Required
148	labTestCULTURERegion	Type of tests performed		Whether culture was performed on case reported	Checkbox	Required
149	LabTestAUTRERegion	Type of tests performed		Specify OTHER type of lab tests completed on case reported	Text	Optional
150	WhiteCellCountRegion	White cell count (region)		White blood count recorded at regional laboratory	Number	Required
151	PolyPercentRegion	Polymorphonucleocytes % (region)		Polymorphonucleocytes recorded at the regional laboratory	Number	Optional
152	MonoPercentRegion	Lymphocytes % (region)		Mono Lymphocytes level recorded at regional laboratory (Elevated lymphocytes can show inflammation of the meninges)	Number	Optional
153	CytologyRegionNotDone	Cytology (region)		Specify whether cytology not completed at regional laboratory	Checkbox	Optional
154	GramRegion	Gram (region)	1-GDP 2-GND 3-GPB 4-GNB 5-Other pathogens 6-No organism seen 7-Not done	Pathogen identified by gram stain test at regional laboratory	Comment legal	Required
155	GramOtherRegion	Gram – other (region)		If other germ identified, please specify the other pathogen identified at the regional laboratory	Text	Required
156	TDR_MeningitisRegion	Rapid Diagnostic Test Meningitis (region)	1-Yes 2-No 3-Not done	Whether RDT was performed at the regional laboratory	Comment legal	Required
157	TDR_TypeRegion	Type of Rapid Diagnostic Test Meningitis (region)	1-Pastorex 2-CERMES Dipstick 3-Other	Type of RDT Meningitis at regional laboratory	Comment legal	Required
158	TestAUTRERegion	Other type of testing (specify name)		Specify the type of Other Lab test utilized	Text	Optional
159	TDR_OtherResultsRegional	Rapid Diagnostic Test Meningitis (region)	1-NmA 2-NmC 3-NmW 4-NmY 5-Negative 6-Not done	RDT Results performed at regional laboratory	Comment legal	Required
160	LatexRegion	Latex (region)	1-NmA 2-NmC 3-NmW/Y 4-NmB/*E. coli* K1 5-*S. pneumoniae* 6-Hib 7-StrepB 8-Negative 9-Not done	Results of the latex test at the regional laboratory	Comment legal	Required

Variable Number	Variable Name	Electronic Reporting Prompt	Variable Coding	Definition	Format	Required/ Optional
161	CultureRegion	Culture (region)	1-NmA 2-NmC 3-NmW 4-NmY 5-NmB 6-NmX 7-Nm Indeterminate 8-StrepB 9-*S. pneumoniae* 10-Hib 11-Hi non-b 12-Other germ (specify) 13-Contaminated 14-Negative 15-Not done 16-Not Available (NA)	Results of culture test at regional laboratory for the case notified	Comment legal	Required
162	CultureOtherRegion	Culture – other (region)		Specify other organism identified by culture at regional laboratory	Text	Optional
163	AmoxicillinRegion	Amoxicillin	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for amoxicillin at regional laboratory	Comment legal	Optional
164	CeftriaxoneRegion	Ceftriaxone	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for ceftriaxone at regional laboratory	Comment legal	Optional
165	ChloramphenicolRegion	Chloramphenicol	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for Chloramphenicol at regional laboratory	Comment legal	Optional
166	PenicillinRegion	Penicillin	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for penicillin at regional laboratory	Comment legal	Optional
167	OxacillineRegion	Oxacillin	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for oxacilline at regional laboratory	Comment legal	Optional
168	OtherAntibioticRegion	Other antibiotic		Name of the other Antibiotic tested by antibiogram at regional laboratory	Text	Optional
169	OtherAntibioticSensitivityRegion	Other antibiotic sensitivity	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for the other antibiotic at regional laboratory	Comment legal	Optional
170	ResultSentHF_Region	Date Results sent to reporting health facility		Date results sent to reporting health facility	Date	Optional
171	SpecimenSentNRL	Date specimen sent to the NRL		Date specimen sent to the NRL	Date	Optional
172	NRL	Name of National Reference Laboratory		Name of NRL	Text	Required
173	SpecimenIDNRL	Specimen ID		Specimen ID at NRL	Text	Optional
174	DateReceivedNRL	Date NRL received		Date that the NRL received the specimen	Date	Required
175	TimeSpecimenReceivedNRL	Time		Time the specimen was received by NRL	Time	Optional
176	DryTubeNRL	Dry Tube (NRL)		Whether the specimen received in dry tube by NRL	Checkbox	Required
177	TINRL	T-I Media (NRL)		Whether the specimen was received in a Trans-Isolate by NRL	Checkbox	Required
178	CryotubeNRL	Cryotube (NRL)		Whether specimen was received in cryotube by NRL	Checkbox	Required
179	OtherMediaNRL	Sample received in OTHER media (NRL)		Specify Other media received by NRL	Checkbox	Optional

Variable Number	Variable Name	Electronic Reporting Prompt	Variable Coding	Definition	Format	Required/ Optional
180	SpecimenConditionNRL	Specimen condition (NRL)	1-Adequate 2-Not adequate	Whether a specimen was: 1-Adequate (indicating both volume and temperature of specimen) or 2-Not adequate (indicating if cracked, empty, transported at incorrect temperature, insufficient volume or illegible labeling)	Comment legal	Required
181	AspectNRL	Macroscopic analysis (NRL)	1-Clear 2-Turbid/ Cloudy 3-Bloody 4-Xanthochromic/ Yellow 5-Viscous 6-Purulent 9-Not done	Clarity of specimen (Note: Variable coding list includes term/alternate term. Please select term that best fits what is used in-country)	Comment legal	Required
182	LabTestCYTOLOGIENRL	Type of tests performed		Whether cytology performed on case reported	Checkbox	Required
183	LabTestGRAMNRL	Type of tests performed		Whether gram stain tests were performed on case reported	Checkbox	Required
184	LabTestTDRNRL	Type of tests performed		Whether RDT lab tests completed on case reported	Checkbox	Required
185	LabTestLATEXNRL	Type of tests performed		Whether latex test was performed on case reported	Checkbox	Required
186	labTestCULTURENRL	Type of tests performed		Whether culture was performed on case reported	Checkbox	Required
187	LabTestAUTRENRL	Type of tests performed		Specify other type of lab tests completed on case reported	Text	Optional
188	WhiteCellCountNRL	White cell count (NRL)		White count cell number recorded at NRL	Number	Required
189	PolyPercentNRL	Polymorphonucleocytes % (NRL)		Polymorphonucleaocytes recorded at the NRL	Number	Required
190	MonoPercentNRL	Lymphocytes % (NRL)		Mono Lymphocytes level recorded at NRL	Number	Required
191	CytologyNRLNotDone	Cytology (NRL)		Specify whether cytology not completed at NRL	Checkbox	Optional
192	GramNRL	Gram (NRL)	1-GDP 2-GND 3-GPB 4-GNB 5-Other pathogens 6-No organism seen 7-Not done	Organism identified by gram stain test at the NRL	Comment legal	Required
193	GramOtherNRL	Gram – other (NRL)		Specify Other organism identified by gram stain test at NRL	Text	Required
194	TDR_MeningitisNRL	Rapid Diagnostic Test Meningitis (NRL)	1-Yes 2-No 3-Not done	Whether RDT was performed at the NRL	Comment legal	Required
195	TDR_TypeNRL	Type of Rapid Diagnostic Test Meningitis	1-Pastorex 2-CERMES Dipstick 3-Other	Type of RDT Meningitis at NRL	Comment legal	Required
196	TestAUTRENRL	Other type of testing (name and results)		Specify the type of test and results of other lab test utilized at NRL	Text	Optional
197	TDR_OtherResultsNRL	Rapid Diagnostic Test Meningitis Results (NRL)	1-NmA 2-NmC 3-NmW 4-NmY 5-Negative 6-Not done	RDT results performed at NRL	Comment legal	Required
198	LatexNRL	Latex (NRL)	1-NmA 2-NmC 3-NmW/Y 4-NmB/*E. coli* K1 5-*S. pneumoniae* 6-Hib 7-StrepB 8-Negative 9-Not done	Results of the Latex test at the NRL	Comment legal	Required

Variable Number	Variable Name	Electronic Reporting Prompt	Variable Coding	Definition	Format	Required/ Optional
199	CultureNRL	Culture (NRL)	1-NmA 2-NmC 3-NmW 4-NmY 5-NmB 6-NmX 7-Nm Indeterminate 8-StrepB 9-*S. pneumoniae* 10-Hib 11-Hi non-b 12-Other germ (specify) 13-Contaminated 14-Negative 15-Not done 16-Not Available (NA)	Results of culture test at NRL for the case notified	Comment legal	Required
200	CultureOtherNRL	Culture – other (NRL)		Specify other organism identified by culture at NRL	Text	Required
201	Amoxicillin	Amoxicillin	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for amoxicillin at NRL	Comment legal	Optional
202	Ceftriaxone	Ceftriaxone	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for ceftriaxone at NRL	Comment legal	Optional
203	Chloramphenicol	Chloramphenicol	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for Chloramphenicol at NRL	Comment legal	Optional
204	Penicillin	Penicillin	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for penicillin at NRL	Comment legal	Optional
205	Oxacilline	Oxacillin	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for Oxacilline at NRL	Comment legal	Optional
206	OtherAntibiotic	Other antibiotic		Name of other antibiotic tested by antibiogram at NRL	Text	Optional
207	OtherAntibioticSensitivity	Other antibiotic sensitivity	1-Sensitive 2-Resistant 3-Intermediate 9-Not done	Results of antibiogram for the other antibiotic at NRL	Comment legal	Optional
208	PCR	PCR	1-NmA 2-NmC 3-NmW 4-NmY 5-NmB 6-NmX 7-Nm Indeterminate 8-*S. pneumoniae* (specify genotype next) 9-Hib 10-Hi non-b 11-Contaminated (specify) 12-Negative 13-Not done 14- Not Available	Serotype identified by PCR according to the PCR testing algorithm	Comment legal	Required
209	Genotype_Sp	Genotype of *S. pneumoniae*		Specify results of genotype for *S. pneumoniae*	Text	Optional
210	FinalResultOtherNRL	Final lab result – other		Specify other organism identified by PCR	Text	Required
211	PCRType	PCR type	1-Conventional 2-Real Time	Whether conventional or real-time PCR was used at NRL	Comment legal	Required
212	DatePCR	Date PCR Performed (NRL)		Date that the PCR test was performed	Date	Required
213	ObservationsNRL	Observations (NRL)		Observations of the National Reference Laboratory	Text	Optional

Variable Number	Variable Name	Electronic Reporting Prompt	Variable Coding	Definition	Format	Required/ Optional
214	FinalResultNRL	Final lab result	1-NmA 2-NmC 3-NmW 4-NmY 5-NmB 6-NmX 7-Nm Indeterminate 8-NmW/Y 9-NmB/*E. coli* K1 10. *S. pneumoniae* 11-Hib 12-Hi non-b 13-StrepB 14- Other organism 15-Contaminated 16-Negative 17-Not done	Serotype identified in the final lab results from the national reference laboratory	Comment legal	Required
215	DateResultsSentHF	Date laboratory sent final lab results to health facility/clinician		Date results sent to reporting health facility	Date	Optional
216	DateFinalResultsSentMOH	Date laboratory sent final lab results to Disease Surveillance Department/MoH		Date results sent to the MoH Disease Surveillance Department	Date	Optional
217	FinalClassification	Final case classification (national level)	1-Confirmed 2-Probable 3-Suspect	Final classification according to the clinical symptoms (case definition), epidemiology and laboratory result: confirmed, probable, and suspect	Comment legal	Required