Case Report Form, Data Dictionary and Key Variables

 **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](http://www.meningvax.org/files/WHO_SOP_EN_2009.pdf)  [Operating Procedures for Enhanced Meningitis](http://www.meningvax.org/files/WHO_SOP_EN_2009.pdf)  [Surveillance in Africa](http://www.meningvax.org/files/WHO_SOP_EN_2009.pdf)

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**

This document is the product of collaborative efforts between several agencies, including the U.S. Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO) Headquarters, WHO–Regional Office for Africa (WHO–AFRO), WHO–AFRO Inter-Country Support Teams (WHO–AFRO/IST), Agènce de Médecine Préventive (AMP), and Ministries of Health (MoH) and National Reference Laboratories from Burkina Faso, Mali, Niger, Chad, and Togo, the Bill & Melinda Gates Foundation, Gavi, the Vaccine Alliance, and the CDC Foundation. The authors thank all MenAfriNet Consortium members and several MenAfriNet Consortium working groups, including Data Management, Surveillance and Outbreak, Research and Evaluation, and Laboratory Working Groups for the creation of the following Case Report Form, Data Dictionary, and key variables.

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as appropriate

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| **1. UNIQUE IDENTIFIER NUMBER (EPID) :**  **/ \_** **\_\_** **\_ / \_** **\_ \_ \_ / \_** **\_ \_ \_ / \_** **\_** **\_ / \_ \_ \_ / \_ \_ \_ \_ \_ \_** **/**(to be assigned at district level) Country Region District Year Disease Case Number |
| **2. REPORTING HEALTH FACILITY NAME:** |
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| **3. REPORTING SUB-DISTRICT:** |  |

 | **4. REPORTING DISTRICT:**  | **5. REPORTING REGION:** |
| **PATIENT IDENTIFICATION**  |
| **6. PATIENT SURNAME:** | **7. PATIENT FIRST NAME:** |
| **8a. DATE OF BIRTH:**  / / *(dd/mm/yyyy)* ***OR*  8b. AGE IN YEARS:** ***OR*** If <12 months: **8c. AGE IN MONTHS:** ***OR* 8d. AGE IN DAYS**:  |
| **9. SEX: □** F-Female **□** M-Male □ 9-Unknown  |
| **10. Patient’s District of Residence** *(Address*): |
| **11. Town/City/Village:**  | **12. □** U-**Urban** □ R-**Rural** □ 9-**Unknown**  |
| **13. Parent’s/caregiver’s name:**  | **14. Telephone number *(WhatsApp,Signal, etc.)*:**  |
| **15. Patient Contact Notes:**  |
| **16. Date seen at health facility:** / / *(dd/mm/yyyy)*  | **17. Date of disease onset:** / / *(dd/mm/yyyy)*  |
| **18. Signs and Symptoms:** |
|  Fever: □ 1-Yes □ 2-No □ 9-Unknown |  Headache: □ 1-Yes □ 2-No □ 9-Unknown |
|  Rash: □ 1-Yes □ 2-No □ 9-Unknown |  Bulging fontanel: □ 1-Yes □ 2-No □ 9-Unknown |
|  Photophobia: □ 1-Yes □ 2-No □ 9-Unknown |  Seizure/convulsion: □ 1-Yes □ 2-No □ 9-Unknown |
|  Neck stiffness: □ 1-Yes □ 2-No □ 9-Unknown |  Altered consciousness: □ 1-Yes □ 2-No □ 9-Unknown |
|  Vomiting: □ 1-Yes □ 2-No □ 9-Unknown |  Diarrhea: □ 1-Yes □ 2-No □ 9-Unknown |
|  Nausea: □ 1-Yes □ 2-No □ 9-Unknown |  Other (*specify*): |
| **19. Hospitalization status:** □ 1-Hospitalized □ 2-Outpatient □ 9-Unknown  |
| **20. Patient outcome:** □ 1-Alive (in treatment/ recovered) □ 2-Dead □ 9-Unknown  |
| **VACCINATION STATUS** **21. Vaccinated:** □ 1-YES □ 2-NO □ 9-UNKNOWN(*If vaccinated, please complete the rest of this section)*  |
| **22. MenA (MenAfriVac; Conj.):**  | □ 1-Yes by card/register | □ 2-Yes by verbal history |  □ 3-No | □ 9-Unknown | **Date of MenA** |  / / *(dd/mm/yyyy)* |
| **23. MenACWYX (Penta;Conj.):**  | □ 1-Yes by card/register | □ 2-Yes by verbal history |  □ 3-No  | □ 9-Unknown | **Date of MenACWYX** |  / / *(dd/mm/yyyy)* |
| **24. PCV:**  | □ 1-Yes by card/register | □ 2-Yes by verbal history |  □ 3-No  | □ 9-Unknown | **Date of last PCV dose** |  / / *(dd/mm/yyyy)* |
| Number of doses | □ 1 □ 2 □ 3 |  |  |  |
| **25. Hib:**  | □ 1-Yes by card/register | □ 2-Yes by verbal history |  □ 3-No  | □ 9-Unknown | **Date of last Hib dose** |  / / *(dd/mm/yyyy)* |
| Number of doses | □ 1 □ 2 □ 3 |  |  |  |
| **26. Other:**  | □ 1-Yes by card/register | □ 2-Yes by verbal history |  □ 3-No  | □ 9-Unknown | **Date of MenA** |  / / *(dd/mm/yyyy)* |
| Vaccine Name: |  |  |  |  |
| **REPORTING HEALTH FACILITY INFORMATION:** |
| **27. Name of reporter:**  | **28. Reporter phone number:**  |
| **29. Date record created:** |  / /  | *(dd/mm/yyyy)*  | **30. Date health facility notified district:**  |  / / *(dd/mm/yyyy)*  |
| **31. Date health facility sent form to district:** / / *(dd/mm/yyyy)*  |
| **SPECIMEN COLLECTION:** |
| **32. Specimen Collected:** □ 1-Yes □ 2-No □ 9-Unknown *(Note : IF NO, please STILL complete the form and send to district disease control office)* |
| IF YES: Date of specimen collection: |  / /  | *(dd/mm/yyyy)*  |
| **Specimen Type:**   | □ 1-CSF  | □ 2-Blood  | □ 3-Other (*specify*):  |  |
| **Appearance of CSF:**  | □ 1-Clear |  □ 2-Turbid | □ 3-Bloody | □ 4-Xanthochromic | □ 5-Citrin | □ 6-Cloudy | □ 7-Purulent | □ 9-Not done |

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| **33. DISTRICT LABORATORY NAME:**  |  | **53. NATIONAL REFERENCE LABORATORY NAME:** |  |
| 34. Date specimen received at district: / / *(dd/mm/yyyy)*   | **54. Specimen ID NRL:** Specimen labeled with EPID Number: □ 1-Yes □ 2-No Date specimen received at NRL: / / *(dd/mm/yyyy)*  |
| 35. Date form received at district: / / *(dd/mm/yyyy)* |
| **36. REGIONAL LABORATORY NAME:**  |  | **55. Type of specimen container received at NRL** (*Check all that apply*)**:** □ 1-Trans-isolate □ 2-Cryotube □ 3-Dry tube □ 4-Other |
| 37. Date specimen received at region: |  / / *(dd/mm/yyyy)*  |
| **SPECIMEN TESTING AT PERIPHERAL LABORATORY:** | **56 Specimen condition at NRL:**Drytube specimen condition: □ 1-Adequate □ 2-Not Adequate Trans-isolate specimen condition: □ 1-Adequate □ 2-Not Adequate Cryotube specimen condition: □ 1-Adequate □ 2-Not Adequate  |
| **CULTURE** |  |
| **38. Name of district or regional lab conducting test:** |  |
| **39. Culture Result:** □ 1-NmA □ 2-NmC □ 3-NmW □4-NmY □ 5-NmB □ 6-NmX□ 7-Nm Indeterminate □ 8-S. pneumo □ 9-Hib □ 10-*Hi* non-b□ 11-Streptococcus B □ 12-Other organism (*specify*): □ 13-Contaminated □ 14-Negative □ 15-Not done |
| **57. Culture Results (NRL):** □ 1-NmA □ 2-NmC □ 3-NmW □ 4-NmY □ 5-NmB □ 6-NmX□ 7-Nm Indeterminate □ 8-S. pneumo □ 9-Hib □ 10-Hi non-b □ 11-Strep B □ 12-Other organism (*specify*): □ 13-Contaminated □ 14-Negative □ 15-Not done |
| **GRAM** |
| **40. Name of district or regional lab conducting test:** |  |
| **41. Gram Result:** □ 1-GPD □ 2-GND □ 3-GPB □ 4-GNB □ 5-Other pathogens (specify): □ 6-No organism seen □ 9-Not done |
| **58. PCR Results (NRL):** □ 1-NmA □ 2-NmC □ 3-NmW □ 4-NmY □ 5-NmB □ 6-NmX□ 7-Nm Indeterminate □ 8-S. pneumo □ 9-Hib □ 10-*Hi* non-b□ 11-Streptococcus B □12-Other organism (*specify*): □ 13-Contaminated □ 14-Negative □ 15-Not done**59. Date PCR performed:** / / *(dd/mm/yyyy)*  |
| **RDT**  |  |  |
| **42. Name of district or regional lab conducting test:** |  |
| **43. RDT Type:**  |  |
| **44. RDT Result:**□ 1-NmA □ 2-NmC □ 3-NmW □ 4-NmY □ 5-NmB □ 6-NmX□ 7-Nm Indeterminate □ 8-S. pneumo □ 9-Hib □ 10-Hi non-b□ 11-Streptococcus B □ 12-Other organism (*specify*): □ 13-Contaminated □ 14-Negative □ 15-Not done |
| **60. Antibiogram:**Ceftriaxone: □ S-Sensitive □ R-Resistant □ I-Intermediate □ 9-Not done Ciprofloxacin: □ S-Sensitive □ R-Resistant □ I-Intermediate □ 9-Not done Penicillin: □ S-Sensitive □ R-Resistant □ I-Intermediate □ 9-Not done Oxacillin: □ S-Sensitive □ R-Resistant □ I-Intermediate □ 9-Not done Other (*specify)*:  □ S-Sensitive □ R-Resistant □ I-Intermediate □ 9-Not done  |
| **LATEX****45. Name of district or regional lab conducting test:** **46. Latex Result:** □ 1-NmA □ 2-NmC □ 3-NmW/Y□ 4-NmB/E. coli K1 □ 5-NmX □ 6-S. pneumo□ 7-Hib □ 8-StrepB □ 9-Negative □ 10-Not done |
| **61. Final laboratory result:** □ 1-NmA □ 2-NmC □ 3-NmW □ 4-NmY □ 5-NmB □ 6-NmX□ 7-Nm indeterminate □ 8-S. pneumo *(specify serotype)* □ 9-Hib □ 10-*Hi* non-b □ 11-Streptococcus B □12-Other organism (*specify*): □ 13-Contaminated □ 14-Negative □ 15-Not done |
| **CYTOLOGY****47. Name of district or regional lab conducting test:**  **48. White Cell Count:**  /mm3 |
| **OTHER TESTS PERFORMED** |  |
| **49. Other test performed:**  | □ 1-Yes □ 2-No □ 9-Unknown  |
| **50. Name of district or regional lab conducting test:** **51. Name of other test(s):** **52. Result(s):**  | **62. Final Classification:**  □ 1-Confirmed □ 2-Probable □ 3- Suspect |
| **63. Observations (all labs):**  |  |  |
| FINAL LABORATORY RESULT TRANSMISSION: |  |  |
| **64. Date final results sent to MOH:** / / *(dd/mm/yyyy***65. Date final results sent to district:** / / *(dd/mm/yyyy)*  | **66. Date final results sent to health facility:** / / *(dd/mm/yyyy)* **67. Date final results received at district:** / / *(dd/mm/yyyy)*  |

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| **1. UNIQUE IDENTIFIER NUMBER (EPID) :** 1a.EpidNumber **/ \_**1b.Country **\_ / \_** **\_ \_ \_ / \_** **\_ \_ \_ / \_**1c.Year **\_ / \_ \_ \_ / \_ \_ \_ \_ \_ \_** **/**(to be assigned at district level) Country Region District Year Disease Case Number |
| **2. REPORTING HEALTH FACILITY NAME:** 2.HealthFacility |
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| **3. REPORTING SUB-DISTRICT:** | 3.Subdistrict |

 | **4. REPORTING DISTRICT:** 4.District | **5. REPORTING REGION:** 5.Region |
| **PATIENT IDENTIFICATION**  |
| **6. PATIENT SURNAME:**  6.FamilyName | **7. PATIENT FIRST NAME:** 7.FirstName |
| **8a. DATE OF BIRTH:** 8a.DateOfBirth / / *(dd/mm/yyyy)* ***OR*  8b. AGE IN YEARS:** 8b.AgeYears ***OR*** If <12 months: **8c. AGE IN MONTHS:** 8c.AgeMonths ***OR* 8d. AGE IN DAYS**: 8d.AgeDays |
| **9. SEX: □** F-Female **□** M-Male □ 9-Unknown 9.Sex  |
| **10. Patient’s District of Residence** *(Address*):10.DistrictResidence |
| **11. Town/City/Village:** 11.Village | **12. □** U-**Urban** □ R-**Rural** □ 9-**Unknown** 12.UrbanRural |
| **13. Parent’s/caregiver’s name:** 13.ParentName | **14. Telephone number *(WhatsApp,Signal, etc.)*:** 14.PhoneNum |
| **15. Patient Contact Notes:** 15.ContactNotes |
| **16. Date seen at health facility:** / / *(dd/mm/yyyy)* 16.DateConsultation | **17. Date of disease onset:** / / *(dd/mm/yyyy)* 17.DateOnset |
| **18. Signs and Symptoms:** |
|  18a Fever Fever: □ 1-Yes □ 2-No □ 9-Unknown |  18g Headache Headache: □ 1-Yes □ 2-No □ 9-Unknown |
|  18b Rash Rash: □ 1-Yes □ 2-No □ 9-Unknown |  18h BulgeFontanel Bulging fontanel: □ 1-Yes □ 2-No □ 9-Unknown |
| 18c Photophobia Photophobia: □ 1-Yes □ 2-No □ 9-Unknown |  18i Seizure Seizure/convulsion: □ 1-Yes □ 2-No □ 9-Unknown |
|  18d StiffNeck Neck stiffness: □ 1-Yes □ 2-No □ 9-Unknown | 18j AlteredConscious Altered consciousness: □ 1-Yes □ 2-No □ 9-Unknown |
|  18e Vomiting Vomiting: □ 1-Yes □ 2-No □ 9-Unknown |  18k Diarrhea Diarrhea: □ 1-Yes □ 2-No □ 9-Unknown |
|  18f Nausea Nausea: □ 1-Yes □ 2-No □ 9-Unknown |  Other (*specify*): 18L OtherSymptom |
| **19. Hospitalization status:** □ 1-Hospitalized □ 2-Outpatient □ 9-Unknown 19.InOutPatient |
| **20. Patient outcome:** □ 1-Alive (in treatment/ recovered) □ 2-Dead □ 9-Unknown 20.Outcome |
| **VACCINATION STATUS** **21. Vaccinated:** □ 1-YES □ 2-NO □ 9-UNKNOWN(*If vaccinated, please complete the rest of this section)* 21.VaccinationStatus |
| **22. MenA (MenAfriVac; Conj.):** 22a.MenA | □ 1-Yes by card/register | □ 2-Yes by verbal history |  □ 3-No | □ 9-Unknown | **Date of MenA** | 22b.DateMenA / / *(dd/mm/yyyy)* |
| **23. MenACWYX (Penta;Conj.):** 23a.Penta | □ 1-Yes by card/register | □ 2-Yes by verbal history |  □ 3-No  | □ 9-Unknown | **Date of MenACWYX** | 23b.DatePenta / / *(dd/mm/yyyy)* |
| **24. PCV:** 24a.PCV | □ 1-Yes by card/register | □ 2-Yes by verbal history |  □ 3-No  | □ 9-Unknown | **Date of last PCV dose** | 24b.DatePCV\_LASTDOSE / / *(dd/mm/yyyy)* |
| 24c.DosePCV Number of doses | □ 1 □ 2 □ 3 |  |  |  |
| **25. Hib:** 25a.Hib | □ 1-Yes by card/register | □ 2-Yes by verbal history |  □ 3-No  | □ 9-Unknown | **Date of last Hib dose** | 25b.DateHib\_LASTDOSE / / *(dd/mm/yyyy)* |
| 25c.DoseHib Number of doses | □ 1 □ 2 □ 3 |  |  |  |
| **26. Other:** 26a.OtherVaccine | □ 1-Yes by card/register | □ 2-Yes by verbal history |  □ 3-No  | □ 9-Unknown | **Date of MenA** | 26b.DateOtherVaccine / / *(dd/mm/yyyy)* |
| Vaccine Name: | 26c.OtherVaccineName |  |  |  |
| **REPORTING HEALTH FACILITY INFORMATION:** |
| **27. Name of reporter:** 27.ReporterHF | **28. Reporter phone number:** 28.ReporterPhone |
| **29. Date record created:** |  / /  | *(dd/mm/yyyy)* 29.DateCreated | **30. Date health facility notified district:** 30.DateHFNotifiedDistrict |  / / *(dd/mm/yyyy)*  |
| **31. Date health facility sent form to district:** / / *(dd/mm/yyyy)* 31.DateFormSentDistrict |
| **SPECIMEN COLLECTION:** |
| **32. Specimen Collected:** 32a.SpecimenCollected □ 1-Yes □ 2-No □ 9-Unknown *(Note : IF NO, please STILL complete the form and send to district disease control office)* |
| IF YES: Date of specimen collection: |  / /  | *(dd/mm/yyyy)* 32b.DateSpecimenCollected |
| **Specimen Type:** 32c.SpecimenType | □ 1-CSF  | □ 2-Blood  | □ 3-Other (*specify*): 32d.SpecimenTypeOther |  |
| **Appearance of CSF:** 32e.Aspect | □ 1-Clear |  □ 2-Turbid | □ 3-Bloody | □ 4-Xanthochromic | □ 5-Citrin | □ 6-Cloudy | □ 7-Purulent | □ 9-Not done |



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| --- | --- | --- | --- |
| **33. DISTRICT LABORATORY NAME:**  | 33.DistrictLab | **53. NATIONAL REFERENCE LABORATORY NAME:** | 53.LabNameNRL |
| 34. Date specimen received at district: / / *(dd/mm/yyyy)* 34.DateSpecimenReceivedDistrict  | **54. Specimen ID NRL:** 54a.SpecimenIDNRLSpecimen labeled with EPID Number: □ 1-Yes □ 2-No 54b.SpecimenLabelIDDate specimen received at NRL: / / *(dd/mm/yyyy)* 54c.DateSpecimenReceivedNRL |
| 35. Date form received at district: / / *(dd/mm/yyyy)* 35.DateFormReceivedDistrict |
| **36. REGIONAL LABORATORY NAME:**  | 36.RegionLab | **55. Type of specimen container received at NRL** (*Check all that apply*)**:** 55.ContainerType□ 1-Trans-isolate □ 2-Cryotube □ 3-Dry tube □ 4-Other |
| 37. Date specimen received at region: |  / /  *(dd/mm/yyyy)* 37.DateSpecimenReceivedRegion |
| **SPECIMEN TESTING AT PERIPHERAL LABORATORY:** | **56 Specimen condition at NRL:**Drytube specimen condition: □ 1-Adequate □ 2-Not Adequate 56a.ConditionDrytubeNRLTrans-isolate specimen condition: □ 1-Adequate □ 2-Not Adequate 56b.ConditionTINRLCryotube specimen condition: □ 1-Adequate □ 2-Not Adequate 56c.ConditionCryotubeNRL |
| **CULTURE** |  |
| **38. Name of district or regional lab conducting test:** | 38.LabNameCulture |
| **39. Culture Result:** 39a.CulturePeripheral□ 1-NmA □ 2-NmC □ 3-NmW □4-NmY □ 5-NmB □ 6-NmX□ 7-Nm Indeterminate □ 8-S. pneumo □ 9-Hib □ 10-*Hi* non-b□ 11-Streptococcus B □ 12-Other organism (*specify*): 39b.CultureOtherPeripheral□ 13-Contaminated □ 14-Negative □ 15-Not done |
| **57. Culture Results (NRL):** 57a.CultureNRL□ 1-NmA □ 2-NmC □ 3-NmW □ 4-NmY □ 5-NmB □ 6-NmX□ 7-Nm Indeterminate □ 8-S. pneumo □ 9-Hib □ 10-Hi non-b □ 11-Strep B □ 12-Other organism (*specify*): 57b.CultureOtherNRL □ 13-Contaminated □ 14-Negative □ 15-Not done |
| **GRAM** |
| **40. Name of district or regional lab conducting test:** | 40.LabNameGram |
| **41. Gram Result:** 41a.GramResult□ 1-GPD □ 2-GND □ 3-GPB □ 4-GNB □ 5-Other pathogens (specify): 41b.GramResultOther □ 6-No organism seen □ 9-Not done |
| **58. PCR Results (NRL):** 58.PCR□ 1-NmA □ 2-NmC □ 3-NmW □ 4-NmY □ 5-NmB □ 6-NmX□ 7-Nm Indeterminate □ 8-S. pneumo □ 9-Hib □ 10-*Hi* non-b□ 11-Streptococcus B □12-Other organism (*specify*): 58b.PCROther□ 13-Contaminated □ 14-Negative □ 15-Not done**59. Date PCR performed:** / / *(dd/mm/yyyy)* 59.DatePCR |
| **RDT**  |  |  |
| **42. Name of district or regional lab conducting test:** | 42.LabNameRDT |
| **43. RDT Type:** 43.RDTType |  |
| **44. RDT Result:** 44a.RDTResult□ 1-NmA □ 2-NmC □ 3-NmW □ 4-NmY □ 5-NmB □ 6-NmX□ 7-Nm Indeterminate □ 8-S. pneumo □ 9-Hib □ 10-Hi non-b□ 11-Streptococcus B □ 12-Other organism (*specify*): 44b.RDTResultOther□ 13-Contaminated □ 14-Negative □ 15-Not done |
| **60. Antibiogram:**Ceftriaxone: □ S-Sensitive □ R-Resistant □ I-Intermediate □ 9-Not done 60a.CeftriaxoneCiprofloxacin: □ S-Sensitive □ R-Resistant □ I-Intermediate □ 9-Not done 60b.CiprofloxacinPenicillin: □ S-Sensitive □ R-Resistant □ I-Intermediate □ 9-Not done 60c.PenicillinOxacillin: □ S-Sensitive □ R-Resistant □ I-Intermediate □ 9-Not done 60d.OxacillinOther (*specify)*: 60e.OtherAntibiotic □ S-Sensitive □ R-Resistant □ I-Intermediate □ 9-Not done  60.fOtherAntibioticResult |
| **LATEX****45. Name of district or regional lab conducting test:** 45.LabNameLatex**46. Latex Result:** 46.LatexResult□ 1-NmA □ 2-NmC □ 3-NmW/Y□ 4-NmB/E. coli K1 □ 5-NmX □ 6-S. pneumo□ 7-Hib □ 8-StrepB □ 9-Negative □ 10-Not done |
| **61. Final laboratory result:** 61a.FinalResultNRL□ 1-NmA □ 2-NmC □ 3-NmW □ 4-NmY □ 5-NmB □ 6-NmX□ 7-Nm indeterminate □ 8-S. pneumo *(specify serotype)* 61b.SPNSerotype□ 9-Hib □ 10-*Hi* non-b □ 11-Streptococcus B □12-Other organism (*specify*): 61c.FinalResultOtherNRL□ 13-Contaminated □ 14-Negative □ 15-Not done |
| **CYTOLOGY****47. Name of district or regional lab conducting test:** 47.LabNameCytology**48. White Cell Count:**  48.WhiteCellCount /mm3 |
| **OTHER TESTS PERFORMED** |  |
| **49. Other test performed:** 49.OtherTest | □ 1-Yes □ 2-No □ 9-Unknown  |
| **50. Name of district or regional lab conducting test:** 50.LabNameOther**51. Name of other test(s):** 51.OtherTestName **52. Result(s):** 52.OtherTestResult | **62. Final Classification:**  62. FinalClassification□ 1-Confirmed □ 2-Probable □ 3- Suspect |
| **63. Observations (all labs):** 63. Observations |  |  |
| FINAL LABORATORY RESULT TRANSMISSION: |  |  |
| **64. Date final results sent to MOH:** / / *(dd/mm/yyyy)* 64.DateResultsSentMOH**65. Date final results sent to district:** / / *(dd/mm/yyyy)* 65.DateResultsSentDistrict | **66. Date final results sent to health facility:** / / *(dd/mm/yyyy)* 66.DateResultsSentHF**67. Date final results received at district:** / / *(dd/mm/yyyy)* 67.DateResultsReceivedDistrict |

**Data Dictionary**

| Variable Number | Variable Name | Electronic Reporting Prompt | Variable Coding | Definition | Format | Required/Optional |
| --- | --- | --- | --- | --- | --- | --- |
| V001a | EpidNumber | EPID number |  | Unique case identification number comprised of country-region-district-year-illness-case notification number | Text (Each segment is 3 letters long, except for year and notification number. I.e., BFA-SAH-NOS-22-MEN-0001) | Required |
| V001b | Country | Country |  | Country of case reporting | Text - This is usually notated with 3 capital letters (i.e., Burkina Faso = 'BFA') | Required |
| V001c | Year | Epi Year |  | Year that case was reported | Number | Required |
| V002 | HealthFacility | Reporting Health Facility |  | Name of the health facility reporting the case | Text | Required |
| V003 | Subdistrict | Reporting Subdistrict |  | Name of the sub-district of the health facility reporting the case | Text | Required |
| V004 | District | Reporting District |  | Name of the district of the health facility reporting the case | Text | Required |
| V005 | Region | Reporting Region |  | Name of the region reporting the case | Text | Required |
| V006 | FamilyName | Patient Surname |  | Patient surname | Text (CAPITALIZED) | Required |
| V007 | FirstName | Patient First Name |  | Patient first name | Text (CAPITALIZED) | Required |
| V008a | DateOfBirth | Date of Birth |  | Patient's date of birth | Date (dd/mm/yyyy) | Required |
| V008b | AgeYears | Age (years) |  | Age in years, if patient aged ≥ 12 months | Number | Required |
| V008c | AgeMonths | Age (months) |  | Age in months, if patient aged <12 months | Number | Required |
| V008d | AgeDays | Age in days |  | Age in days, if patient aged <1 month otherwise indicate in months | Number | Required |
| V009 | Sex | Sex | F-FemaleM-Male9-Unknown | Patient's sex | Comment legal | Required |
| V010 | DistrictResidence | District of Residence |  | Patient's district of residence | Text | Required |
| V011 | Village | Town/City/Village |  | Patient village, town or city of residence | Text (CAPITALIZED) | Required |
| V012 | UrbanRural | Urban/Rural | U-UrbanR-Rural9-Unknown | Urban or rural setting of patient's residence | Comment legal | Required |
| V013 | ParentName | Name of Parent or Guardian |  | Name of patient’s parent or guardian | Text (CAPITALIZED) | Required |
| V014 | PhoneNum | Phone Number |  | Patient phone number or their guardian | Text | Required |
| V015 | ContactNotes | Additional notes clarifying provided number or instructions on how to contact patient |  | Indication of whether provided number is a phone number or number on a specific social media platform such as Whatsapp, etc. Any notes a patient would like to give regarding contact information. | Text | Optional |
| V016 | DateConsultation | Date Seen at Health Facility |  | Date patient was seen at the health facility | Date (dd/mm/yyyy) | Required |
| V017 | DateOnset | Date of onset of symptoms |  | Date of the patient’s initial onset of symptoms | Date (dd/mm/yyyy) | Optional |
| V018a | Fever | Fever | 1-Yes2-No9-Unknown | Patient has fever | Comment legal | Optional |
| V018b | Rash | Rash | 1-Yes2-No9-Unknown | Patient has a rash | Comment legal | Optional |
| V018c | Photophobia | Photophobia | 1-Yes2-No9-Unknown | Patient has photophobia | Comment legal | Optional |
| V018d | StiffNeck | Neck stiffness | 1-Yes2-No9-Unknown | Patient has stiff neck | Comment legal | Optional |
| V018e | Vomiting | Vomiting | 1-Yes2-No9-Unknown | Patient has vomiting | Comment legal | Optional |
| V018f | Nausea | Nausea | 1-Yes2-No9-Unknown | Patient has nausea | Comment legal | Optional |
| V018g | Headache | Headache | 1-Yes2-No9-Unknown | Patient has headache | Comment legal | Optional |
| V018h | BulgeFontanel | Bulging fontanel | 1-Yes2-No9-Unknown | Patient has bulging fontanel | Comment legal | Optional |
| V018i | Seizure | Seizure/convulsion | 1-Yes2-No9-Unknown | Patient has convulsions or seizure | Comment legal | Optional |
| V018j | AlteredConscious | Altered consciousness | 1-Yes2-No9-Unknown | Patient has altered consciousness | Comment legal | Optional |
| V018k | Diarrhea | Diarrhea | 1-Yes2-No9-Unknown | Patient has diarrhea | Comment legal | Optional |
| V018L | OtherSymptom | Other (specify) |  | Specify any other symptom observed | Text | Optional |
| V019 | InOutPatient | In-patient/out-patient | 1-Inpatient2-Outpatient9-Unknown | Whether the patient was treated as inpatient or outpatient | Comment legal | Required |
| V020 | Outcome | Patient Outcome | 1-Alive (in treatment /recovered)2-Died9-Unknown | Patient outcome | Comment legal | Required |
| V021 | VaccinationStatus | Vaccination status | 1-Yes2-No9-Unknown | Whether the patient has received any vaccines | Comment legal | Required |
| V022a | MenA | Vaccine received: MenAfriVac conjugate A vaccine | 1-Yes by card or register2-Yes by verbal history3-No9-Unknown | Whether the patient received MenA conjugate (MenAfriVac) vaccination | Comment legal | Required |
| V022b | DateMenA | Date of vaccination: MenAfriVac monovalent conjugate vaccine |  | Date of the last vaccination with MenA conjugate vaccine | Date (dd/mm/yyyy) | Required |
| V023a | Penta | Vaccine received: Pentavalent ACWYX meningococcal conjugate vaccine | 1-Yes by card or register2-Yes by verbal history3-No9-Unknown | Whether the patient received Pentavalent ACWYX meningococcal conjugate vaccine (**Note**: As of January 2023, this vaccine is not yet available, but this prompt is added in anticipation of potential availability in late 2022 or later.) | Comment legal | Required |
| V023b | DatePenta | Date of vaccination: Pentavalent ACWYX meningococcal conjugate vaccine |  | Date of the last vaccination with Pentavalent ACWYX meningococcal conjugate vaccine | Date (dd/mm/yyyy) | Required |
| V024a | PCV | Vaccine received: PCV (Pneumococcal Conjugate Vaccine) | 1-Yes by card or register2-Yes by verbal history3-No9-Unknown | Whether patient has received any dose of PCV vaccination | Comment Legal | Required |
| V024b | DatePCV\_LASTDOSE | Date of vaccination: PCV |  | Date of most recent PCV vaccination | Date (dd/mm/yyyy) | Required |
| V024c | DosePCV | N doses received: PCV |  | Number of PCV vaccination doses received | Checkbox | Required |
| V025a | Hib | Vaccine received: Hib (*Haemophilus influenzae* type B conjugate vaccine) | 1-Yes by card or register2-Yes by verbal history3-No9-Unknown | Whether the patient received any of the Hib vaccinations | Comment legal | Required |
| V025b | DateHib\_LASTDOSE | Date of vaccination: Hib |  | Date of last dose of Hib vaccination | Date (dd/mm/yyyy) | Required |
| V025c | DoseHib | N doses received: Hib |  | Number of Hib doses received | Checkbox | Required |
| V026a | OtherVaccine |  | 1-Yes by card or register2-Yes by verbal history3-No9-Unknown | Whether the patient received any other relevant vaccines | Comment legal | Optional |
| V026b | DateOtherVaccine | Date of other vaccine |  | Date of last dose of other vaccine | Date (dd/mm/yyyy) | Optional |
| V026c | OtherVaccineName | Name of the other vaccine |  | Name of other vaccine | Text | Optional |
| V027 | ReporterHF | Name of Reporter |  | Name of the reporter at health facility | Text | Required |
| V028 | ReporterPhone | Reporter Phone |  | Reporter's phone number | Text | Required |
| V029 | DateCreated | Date record created |  | Date patient record is created | Date (dd/mm/yyyy) | Required |
| V030 | DateHFNotifiedDistrict | Date health facility notified district |  | Date health facility notified district | Date (dd/mm/yyyy) | Required |
| V031 | DateFormSentDistrict | Date form sent to district |  | Date form sent to district surveillance office | Date (dd/mm/yyyy) | Required |
| V032a | SpecimenCollected | Specimen collected (Y/N) | 1-Yes2-No9-Unknown | Was a CSF specimen collected? | Comment legal | Required |
| V032b | DateSpecimenCollected | Date specimen collected |  | Date of specimen collection | Date (dd/mm/yyyy) | Required |
| V032c | SpecimenType | Specimen type | 1-CSF2-blood3-other | Type of specimen collected | Comment legal | Required |
| V032d | SpecimenTypeOther | Specimen type - other (specify) |  | Type of specimen if collected specimen is not CSF or blood | Text | Required |
| V032e | Aspect | Specimen aspect / macroscopic exam (CSF) | 1-Clear2-Turbid3-Bloody4-Xanthochromic5-Citrin6-Cloudy7-Purulent9-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 |
| V033 | DistrictLab | Name of District Lab |  | Name of the district lab performing testing | Text | Required |
| V034 | DateSpecimenReceivedDistrict | Date specimen received at district lab |  | Date that the district lab received the specimen | Date (dd/mm/yyyy) | Required |
| V035 | DateFormReceivedDistrict | Date form received at District |  | Date form received at district surveillance office | Date (dd/mm/yyyy) | Required |
| V036 | RegionLab | Name of Regional Lab |  | Name of regional lab | Text | Required |
| V037 | DateSpecimenReceivedRegion | Date specimen received at regional lab |  | Date PCR specimen received at regional lab | Date (dd/mm/yyyy) | Required |
| V038 | LabNameCulture | Name of lab performing culture test |  | Name of the lab that performed and is reporting on culture test | Text | Optional |
| V039a | CulturePeripheral | Culture result (peripheral laboratory) | 1-NmA2-NmC3-NmW4-NmY5-NmB6-NmX7-Nm Indeterminate8-S. pneumoniae9-Hib10-H. influenzae (non-b)11-Streptococcus B12-Other organism13-Contaminated14-Negative15-Not done | Culture result performed at peripheral laboratory | Comment legal | Required |
| V039b | CultureOtherPeripheral | Culture - other (specify) (peripheral laboratory) |  | Specify other organism identified by culture at peripheral laboratory | Text | Required |
| V040 | LabNameGram | Lab conducting Gram stain |  | Name of lab performing Gram stain | Text | Required |
| V041a | GramResult | Gram stain result | 1-GPD (Gram Positive cocci/diplococci)2-GND (Gram Negative cocci/diplococci)3-GPB (Gram Positive Bacilli)4-GNB (Gram Negative Bacilli)5-Other germs6-No organism seen9-Not done | Gram stain result | Comment legal | Required |
| V041b | GramResultOther | Gram stain result - other (specify) |  | Other results from gram stain | Text | Required |
| V042 | LabNameRDT | Name of lab performing RDT |  | Name of lab performing and reporting RDT | Text | Optional |
| V043 | RDTType | Type of RDT used |  | Specify the type of RDT used | Text | Required |
| V044a | RDTResult | RDT result | 1-NmA2-NmC3-NmW4-NmY5-NmB6-NmX7-Nm Indeterminate8-S. pneumoniae9-Hib10-H. influenzae (non-b)11-Streptococcus B12-Other organism13-Contaminated14-Negative15-Not done | RDT result | Comment legal | Required |
| V044b | RDTResultOther | RDT result - other |  | Other results of RDT test | Text | Required |
| V045 | LabNameLatex | Name of lab performing and reporting latex test |  | Name of lab performing and reporting latex test | Text | Optional |
| V046 | LatexResult | Latex agglutination result (any laboratory) | 1-NmA2-NmC3-NmW/Y4-NmB/E. coliK15-NmX6-S.pneumoniae7-Hib8-Streptococcus B9-Negative10-Not done | Latex agglutination result | Comment legal | Required |
| V047 | LabNameCytology | Name of lab performing and reporting cytology |  | Name of lab performing and reporting cytology | Text | Optional |
| V048 | WhiteCellCount | White cell count |  | White blood count recorded at any lab | Number | Required |
| V049 | OtherTest | Other test performed (any laboratory) | 1-Yes2-No9-Unknown | Any other test performed at any laboratory | Text | Required |
| V050 | LabNameOther | Name of lab that performed any other relevant lab tests |  | Name of lab that performed any other lab tests | Text | Optional |
| V051 | OtherTestName | Other test name (any laboratory) |  | Name of any other test performed at any laboratory | Text | Required |
| V052 | OtherTestResult | Other test results (any laboratory) |  | Results of other tests performed at any laboratory | Text | Required |
| V053 | LabNameNRL | Name of National Reference Lab |  | Name of National Reference Lab used to perform testing | Text | Required |
| V054a | SpecimenIDNRL | Specimen ID (NRL) |  | Specimen id at NRL | Text | Required |
| V054b | SpecimenLabelID | Specimen labeled with EPID Number | 1-Yes2-No | Whether specimen was labeled with EPID Number | Comment legal | Required |
| V054c | DateSpecimenReceivedNRL | Date specimen received at NRL |  | Date that the NRL received the specimen | Date (dd/mm/yyyy) | Required |
| V055 | ContainerType | Type of specimen received (NRL) | 1-TI2-Cryotube3-Dry tube4-Other | Transportation media in which specimen is sent to the National Reference Lab | Comment legal | Required |
| V056a | ConditionDrytubeNRL | Specimen condition dry tube (NRL) | 1-Adequate2-Not adequate | Condition of specimen received in dry tube at the NRL | Comment legal | Required |
| V056b | ConditionTINRL | Specimen condition (TI at NRL) | 1-Adequate2-Not adequate | Condition of specimen received in trans isolate at the NRL | Comment legal | Required |
| V056c | ConditionCryotubeNRL | Specimen condition cryotube at NRL | 1-Adequate2-Not adequate | Condition of specimen received in cryotube at the NRL | Comment legal | Required |
| V057a | CultureNRL | Culture result (NRL) | 1-NmA2-NmC3-NmW4-NmY5-NmB6-NmX7-Nm Indeterminate8-S. pneumoniae9-Hib10-H. influenzae (non-b)11-Streptococcus B12-Other organism13-Contaminated14-Negative15-Not done | Result of culture test performed at NRL | Comment legal | Required |
| V057b | CultureOtherNRL | Culture result - other (specify) (NRL) |  | Specify other organism identified by culture at NRL | Text | Required |
| V058a | PCR | PCR result | 1-NmA2-NmC3-NmW4-NmY5-NmB6-NmX7-Nm Indeterminate8-S. pneumoniae9-Hib10-H. influenzae (non-b)11-Streptococcus B12-Other organism13-Contaminated14-Negative15-Not done | Results of PCR test performed at NRL | Comment legal | Required |
| V058b | PCROther | PCR result - other (specify) (NRL) |  | Specify other organism identified by PCR test | Text | Required |
| V059 | DatePCR | PCR Date |  | Date in which PCR was performed | Date (dd/mm/yyyy) | Required |
| V060a | Ceftriaxone | Ceftriaxone susceptibility | S-SensitiveR-ResistantI-Intermediate9-Not done | Results of antibiogram for ceftriaxone at NRL | Comment legal | Required |
| V060b | Ciprofloxacin | Ciprofloxacin susceptibility | S-SensitiveR-ResistantI-Intermediate9-Not done | Results of antibiogram for ciprofloxacin at NRL | Comment legal | Required |
| V060c | Penicillin | Penicillin susceptibility | S-SensitiveR-ResistantI-Intermediate9-Not done | Results of antibiogram for penicillin at NRL | Comment legal | Required |
| V060d | Oxacilline | Oxacillin susceptibility | S-SensitiveR-ResistantI-Intermediate9-Not done | Results of antibiogram for oxacilline at NRL | Comment legal | Required |
| V060e | OtherAntibiotic | other antibiotic tested |  | Name of other antibiotic tested by antibiogram at NRL | Text | Required |
| V060f | OtherAntibioticResult | other antibiotic tested result | S-SensitiveR-ResistantI-Intermediate9-Not done | Results of antibiogram for the other antibiotic at NRL | Comment legal | Required |
| V061a | FinalResultNRL | Final lab result | 1-NmA2-NmC3-NmW4-NmY5-NmB6-NmX7-Nm Indeterminate8-S. pneumoniae9-Hib10-H. influenzae (non-b)11-Streptococcus B12-Other organism13-Contaminated14-Negative15-Not done | Serotype identified in the final lab results from the national reference laboratory | Comment legal | Required |
| V061b | SPNSerotype | *S. pneumoniae* serotype |  | Specify results of genotype for S. pneumoniae | Text | Required |
| V061c | FinalResultOtherNRL | Other organisms identified in final lab result |  | Other organisms identified in final NRL lab result | Text | Required |
| V062 | FinalClassification | Final case classification | 1-Confirmed2-Probable3-Suspect | Final classification of suspect case at the national level | Comment legal | Required |
| V063 | Observations | Any observation from labs |  | Any observation from labs | Text | Optional |
| V064 | DateResultSentMOH | Date final lab results sent to MoH |  | Date results sent to the MoH Disease Surveillance Department | Date | Optional |
| V065 | DateResultSentDistrict | Date final lab results sent to district |  | Date results sent to the District Disease Surveillance Department | Date (dd/mm/yyyy) | Optional |
| V066 | DateResultSentHF | Date final lab results sent to clinician |  | Date results sent to the District Disease Surveillance Department | Date (dd/mm/yyyy) | Required |
| V067 | DateResultReceivedDistrict | Date final lab results received at district |  | Date results sent to the District Disease Surveillance Department | Date (dd/mm/yyyy) | Optional |