

**Table 1. Epidemiological situation, weeks 01 - 26**

99% of suspect cases reported in the MenAfriNet database had a lumbar puncture, 20% of whom were classified as probable bacterial meningitis. Vaccination status was complete (yes or no) for 38% of all suspect cases in MenAfriNet countries.

Characteristics	Burkina Faso	Mali	Niger	Chad*	Togo	MenAfriNet
	N (%)					
Demographics						
Population**	20,870,060 (100)	12,642,145 (63)	14,537,248 (65)	847,057 (5)	1,445,327 (18)	50,341,837
MenAfriNet District†	67/70 (96)	19/33 (58)	27/43 (63)	3/4 (75)	7/7 (100)	123/157 (78)
Weekly suspected cases	1691	284	929	485	342	3 731
MenAfriNet suspected cases	1875	235	289	353	331	3 083
Death	67 (4)	3 (1)	27 (9)	7 (2)	16 (5)	120 (4)
Age (ans)						
<1	201 (18)	87 (38)	27 (10)	61 (18)	17 (5)	393 (17)
1-4	353 (32)	70 (30)	55 (20)	48 (14)	38 (12)	566 (25)
5-9	194 (17)	26 (11)	63 (22)	42 (12)	54 (16)	379 (17)
10-14	135 (12)	10 (4)	71 (25)	50 (15)	86 (26)	352 (15)
15-29	127 (11)	14 (6)	50 (18)	71 (21)	94 (28)	356 (16)
≥30	98 (9)	23 (10)	16 (6)	67 (20)	41 (12)	245 (11)
Sex						
Male	670 (53)	135 (58)	155 (54)	184 (53)	194 (59)	1,338 (54)
Vaccination status known	646 (35)	135 (57)	169 (59)	97 (27)	139 (42)	1,186 (38)
MenAfriVac§	66 (10)	23 (17)	55 (33)	6 (6)	5 (4)	155 (13)
Laboratory ††						
CSF collected	1,875 (100)	235 (100)	267 (92)	345 (98)	331 (100)	3,053 (99)
Probable bacterial meningitis	168 (9)	38 (16)	150 (52)	114 (32)	155 (47)	625 (20)
Probable meningococcal meningitis	67 (4)	3 (1)	2 (1)	23 (7)	2 (1)	97 (3)
Confirmed bacterial meningitis	195 (10)	31 (13)	90 (31)	106 (30)	123 (37)	545 (18)
Confirmed meningoccal meningitis	94 (5)	2 (1)	66 (23)	64 (18)	110 (33)	336 (11)

**Abbreviation:** CSF, cerebrospinal fluid;

\*Following WHO and Davycas International support mission in December 2018 in Chad, 2018 database was established. However, case base data entry for 2019 did not continue. At the last meeting of the Data Managers Working Group, in Ouagadougou, from 23 to 26 July 2019, the participants of this country decided and reconstructed 2019 database through the entry of historical data from the central level.

\*\*Population of MenAfriNet supported districts—number of districts: Burkina Faso: 70; Mali: 33; Niger: 43; Tchad: 4; Togo: 7

†Supported MenAfriNet districts submitting case-based data (denominator = Total number of supported MenAfriNet districts)

§Denominator = number of cases with known (yes or no) vaccination status

††Identification by culture, PCR, latex or rapid diagnostic tests

Missing values for age and sex variables: Burkina Faso: Age: n = 1110 (59%); Sex: n = 1274 (68%); Mali: Age: n = 230 (98%); Sex: n = 233 (99%); Niger: Age: n = 282 (98%); Sex: n = 288 (99%); Chad: Age: n = 339 (96%); Sex: n = 347 (98%); Togo: Age: n = 330 (99%); Sex: n = 331 (100%).

Case base surveillance data in Burkina Faso are providing by a Cloud-Based Meningitis Surveillance and Specimen Tracking System (STELab).

Laboratory classification definitions : visit MenAfriNet web site <http://www.menafrinet.org/en-us/Resources> for more details

**Table 2. Laboratory results, weeks 01 - 26**

54% of specimens collected in MenAfriNet countries were tested by culture, PCR, Latex or a rapid diagnostic test. Among these samples, 33% were positive. *Neisseria meningitidis* (20%), particularly NmC (14%) and *S. Pneumoniae* (10%) were the predominant pathogens.

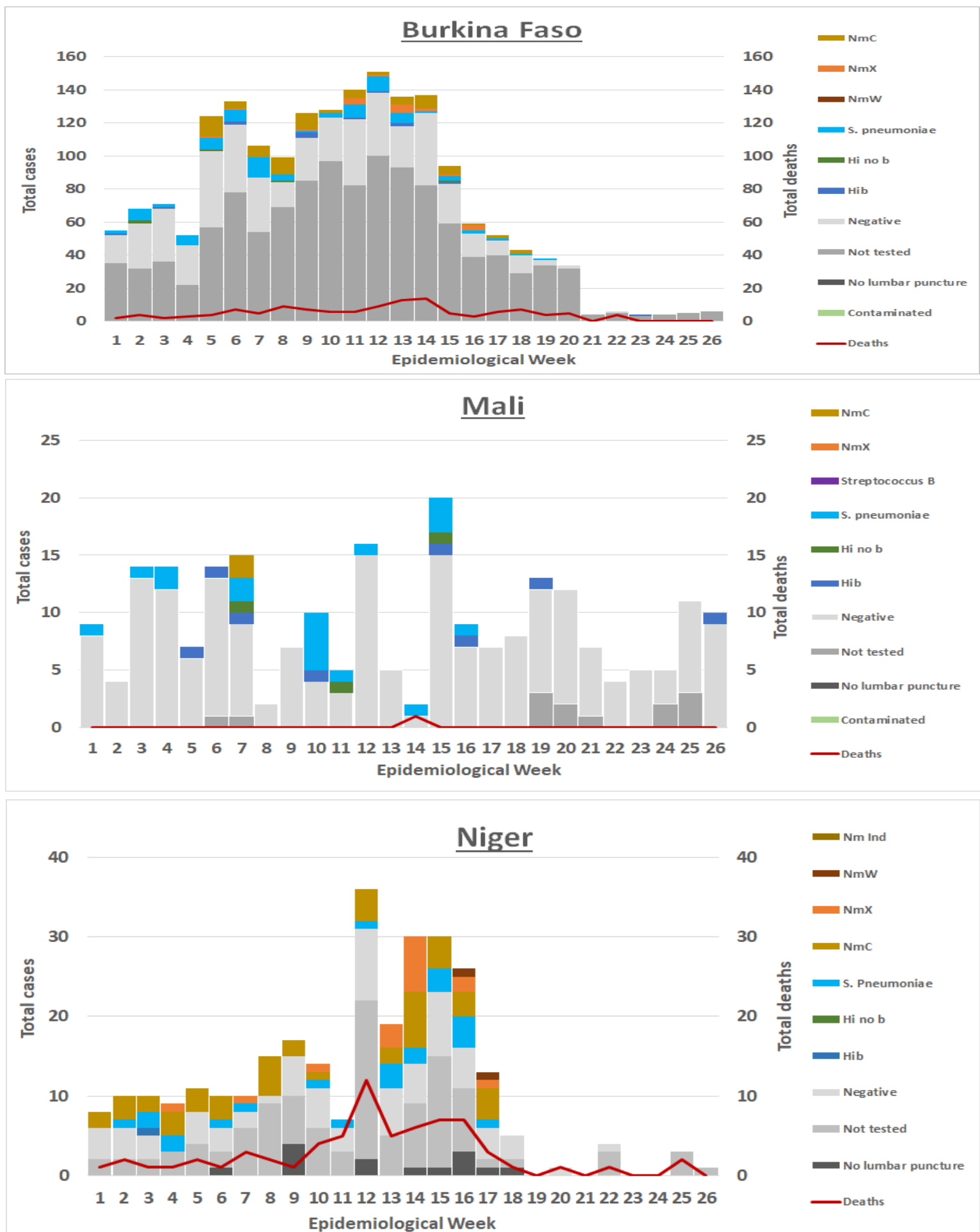
Results	Burkina Faso	Mali	Niger	Chad	Togo	MenAfriNet
	N (%)					
<b>CSF Collected</b>	1,875 (100)	235 (100)	267 (92)	345 (98)	331 (100)	3,053 (99)
<b>Appearance</b>	1,642 (88)	235 (100)	262 (98)	345 (100)	306 (92)	2,790 (91)
<b>Gram stain</b>	899 (48)	55 (23)	14 (5)	102 (30)	31 (9)	1,101 (36)
<b>CSF received at the LNR</b>	1,013 (54)	222 (94)	166 (62)	342 (99)	244 (74)	1,987 (65)
<b>CSF analysed by confirmatory test*</b>	693 (37)	222 (94)	166 (62)	342 (99)	228 (69)	1,651 (54)
<b>Culture</b>	282 (41)	220 (99)	0 (0)	45 (13)	11 (5)	558 (34)
<b>PCR</b>	693 (68)	222 (100)	166 (100)	342 (100)	228 (93)	1,651 (83)
<b>Real Time-PCR</b>	693(100)	222 (100)	166 (100)	342 (100)	228(100)	1,651(100)
<b>Conventional-PCR</b>	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<b>Latex</b>	151 (8)	0 (0)	10 (4)	20 (6)	1 (0)	182 (6)
<b>RDT</b>	74 (1)	2 (1)	42 (16)	0 (0)	2 (1)	120 (4)
<b>Final Result</b>						
<b>N. meningitis</b>	<b>94 (14)</b>	<b>2 (1)</b>	<b>66 (40)</b>	<b>64 (19)</b>	<b>110 (48)</b>	<b>336 (20)</b>
NmA	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
NmC	75 (11)	2 (1)	48 (29)	0 (0)	104 (46)	229 (14)
NmW	0 (0)	0 (0)	2 (1)	52 (15)	0 (0)	54 (3)
NmX	19 (3)	0 (1)	16 (10)	11 (3)	6 (3)	52 (3)
Nm ind	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	1 (0)
<b>S. pneumoniae</b>	<b>83 (12)</b>	<b>18 (8)</b>	<b>24 (14)</b>	<b>35 (10)</b>	<b>11 (5)</b>	<b>170 (10)</b>
<b>H. influenzae</b>	<b>18 (3)</b>	<b>11 (5)</b>	<b>1 (1)</b>	<b>7 (2)</b>	<b>2 (1)</b>	<b>39 (2)</b>
b	13 (2)	8 (4)	1 (1)	7 (2)	2 (1)	31 (2)
Non-b	5 (1)	3 (1)	0 (0)	0 (0)	0 (0)	8 (0)
<b>Other germs</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>	<b>0 (0)</b>
<b>Negative**</b>	<b>498 (72)</b>	<b>191 (86)</b>	<b>76 (46)</b>	<b>220 (64)</b>	<b>105 (46)</b>	<b>1090 (66)</b>

**Abbreviation:** b, *H. influenzae* serotype b; CSF, cerebrospinal fluid; Hi, *H. influenzae*, NmA, *N. meningitidis* serogroup A; NmC, *N. meningitidis* serogroup C; NmW, *N. meningitidis* serogroup W; NmX, *N. meningitidis* serogroup X; non-b, *H. influenzae* serotype non-b; NRL, national reference laboratory; Nm Ind, *N. meningitidis* indeterminate; Sp, *S. pneumoniae*; RDT, rapid diagnostic test;

\*Identification by : Culture, PCR, latex or RDT

\*\*Tested negative for all pathogens and serogroups

Figure 1. Epidemic Curve, weeks 01 - 26



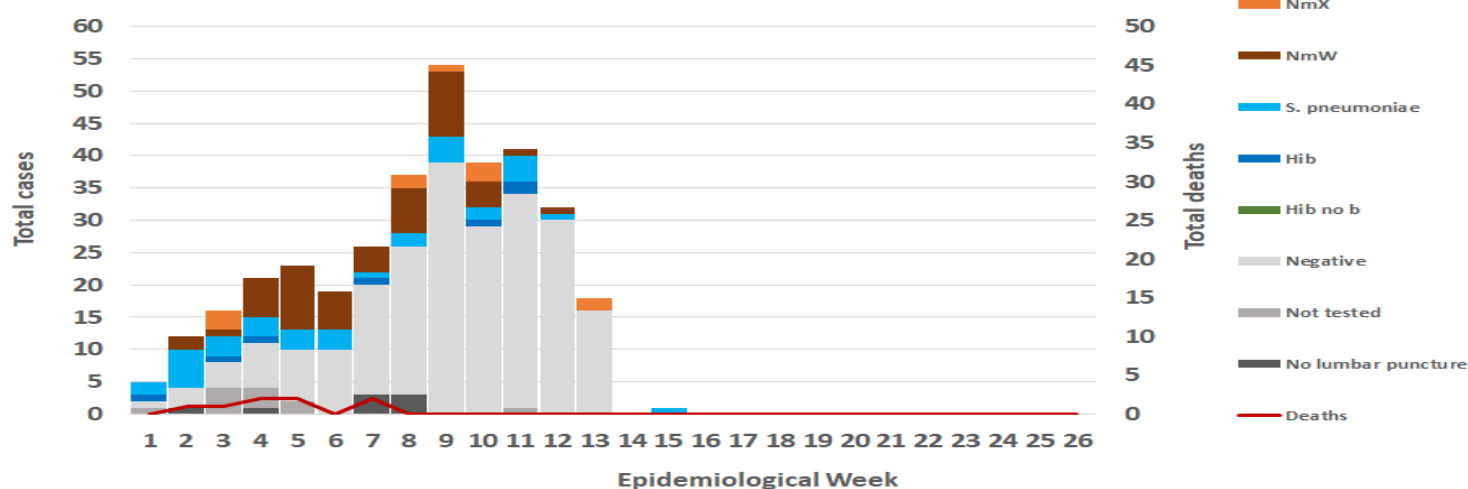
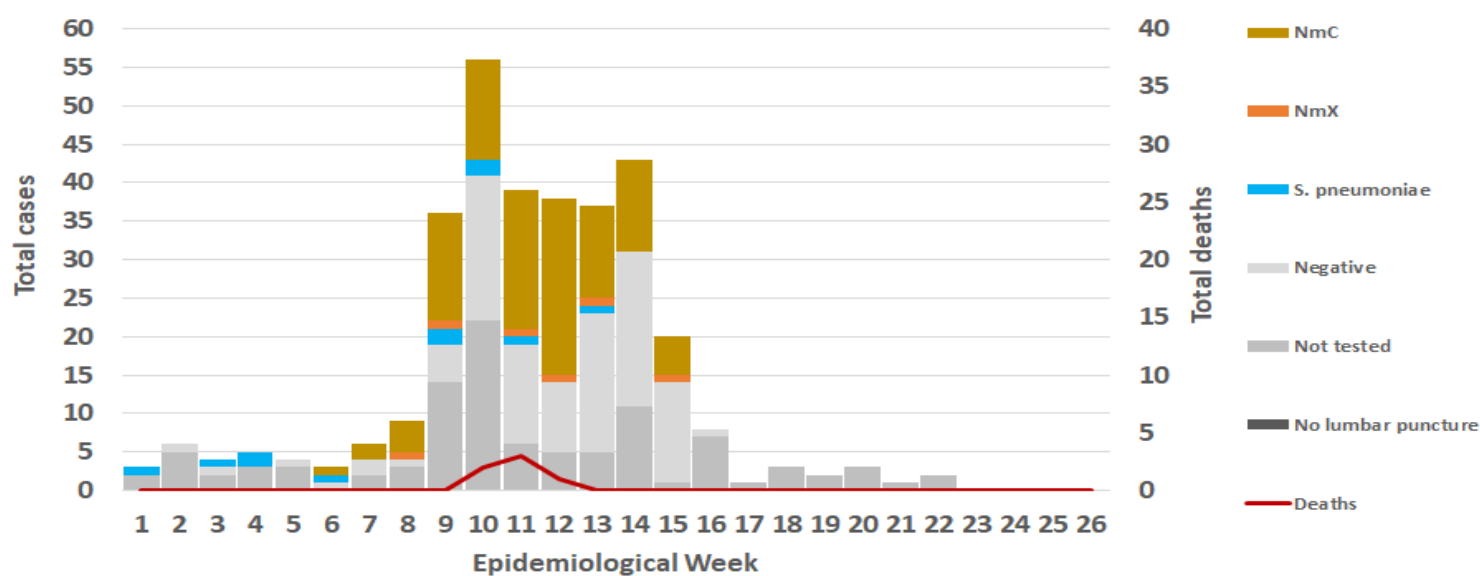
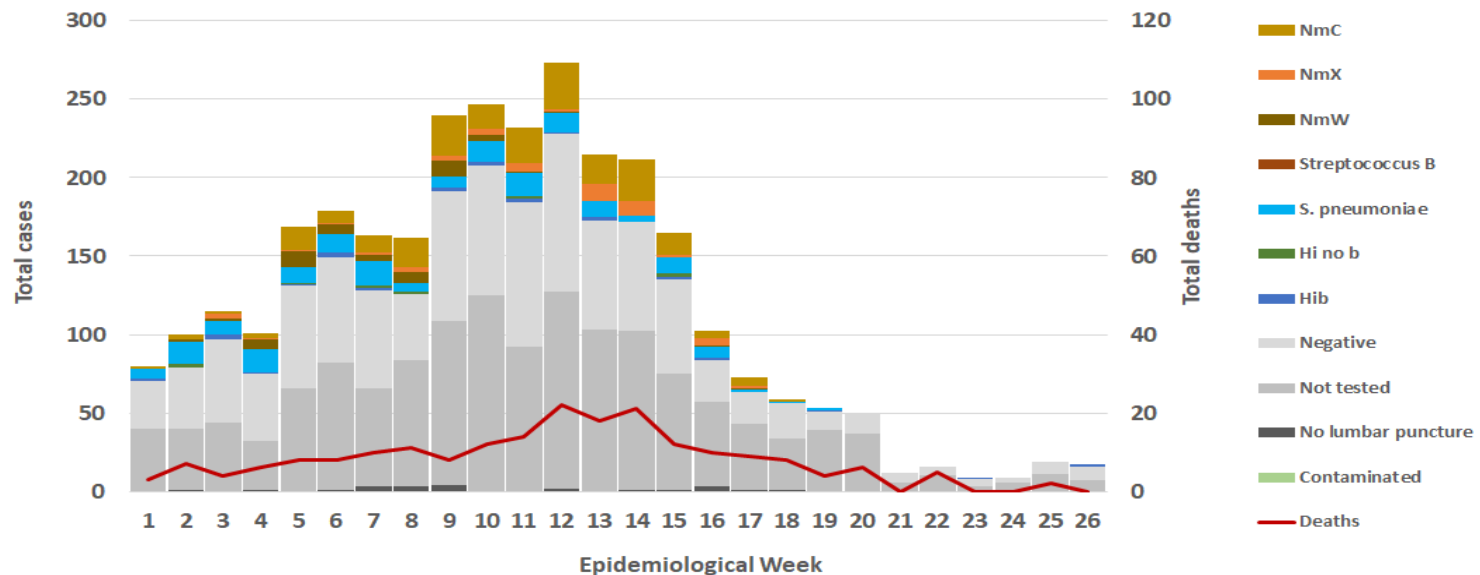
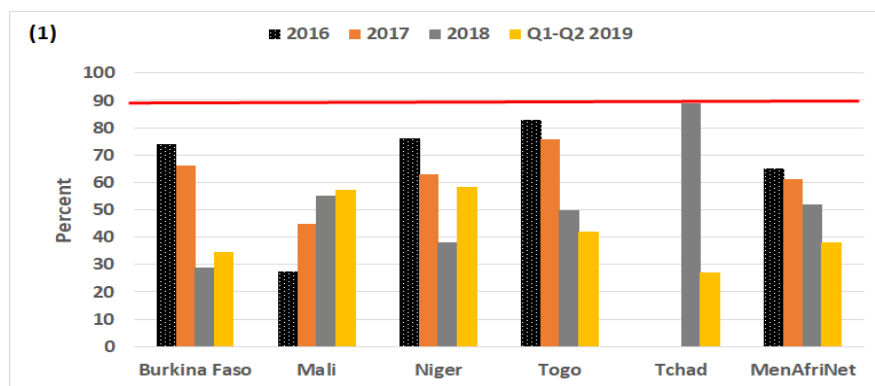
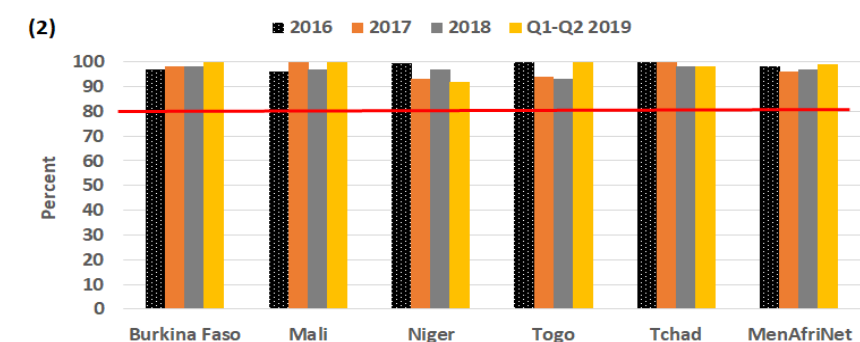
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Figure 2. Quarterly Trends of Surveillance and Laboratory Performance Indicators



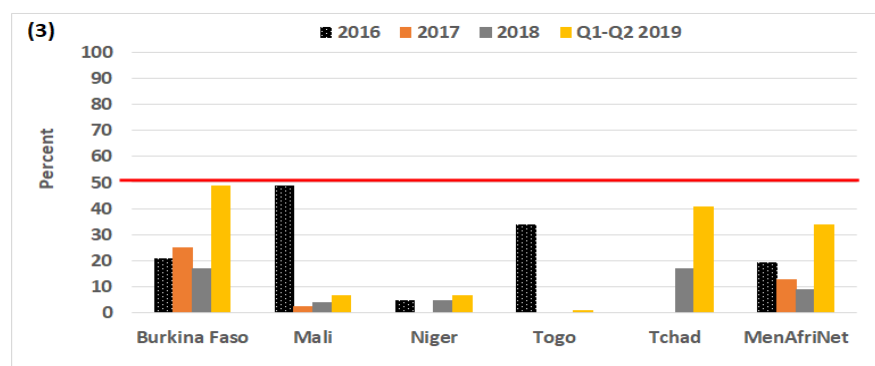
(1) — Percentage of cases with vaccination status known

Threshold: > 90%



(2) — Percentage of cases with CSF collected

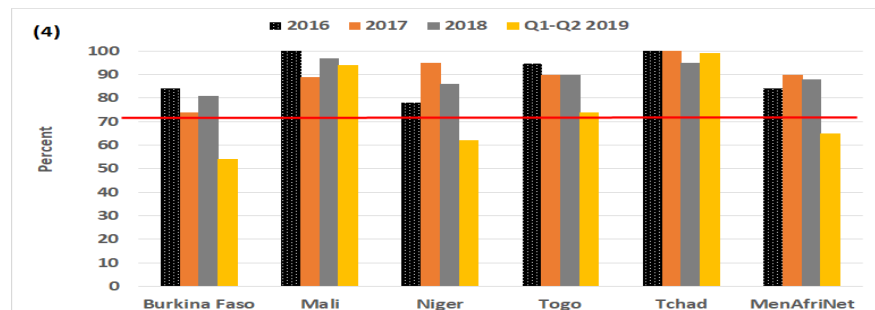
Threshold: > 80%



(3)\* — Percentage of CSF specimen received at any lab in trans-isolate (T-I)

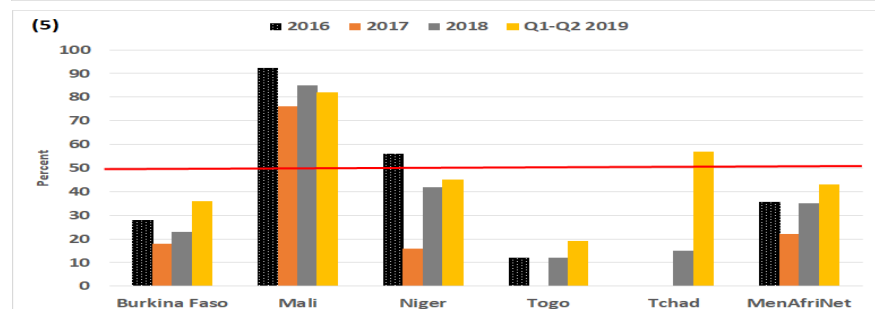
Threshold: > 50%

\*Togo: the protocol does not require the use of TI for 3 of the 4 hospitals because of their proximity to the lab.



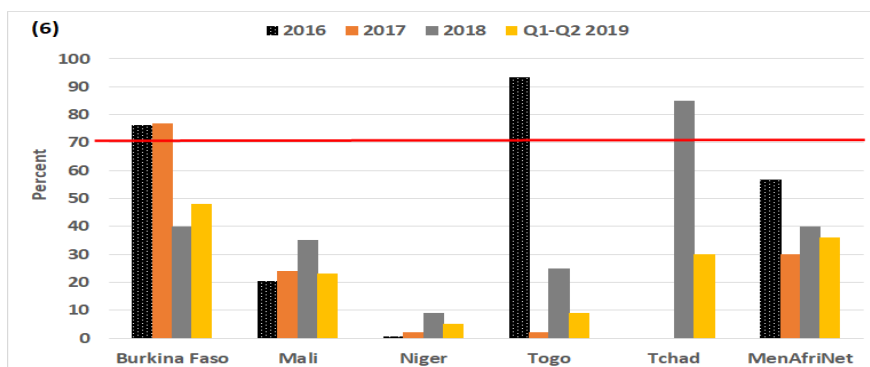
(4) — Percentage of CSF specimens received at the NRL

Threshold: > 70%

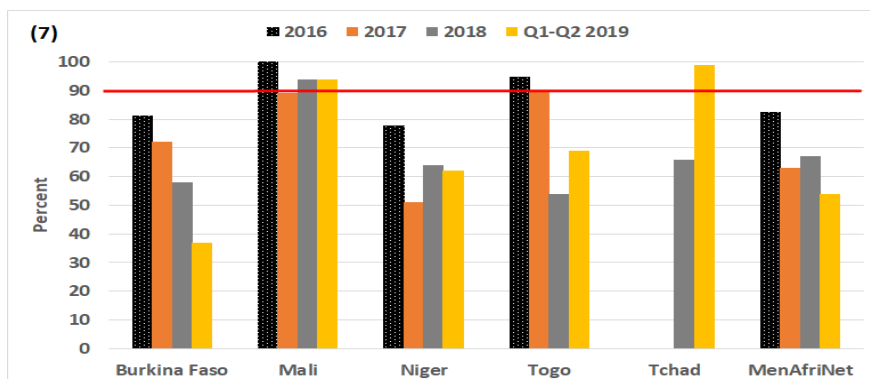


(5) — Percentage of cases with a delay of <7 days between CSF collection date and date CSF received at NRL

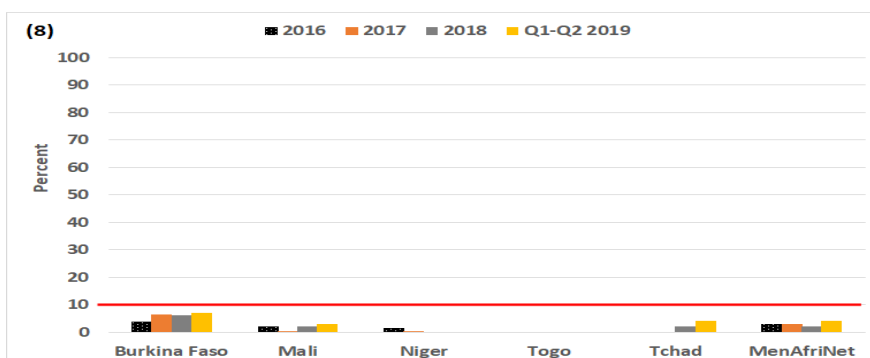
Threshold: > 50%



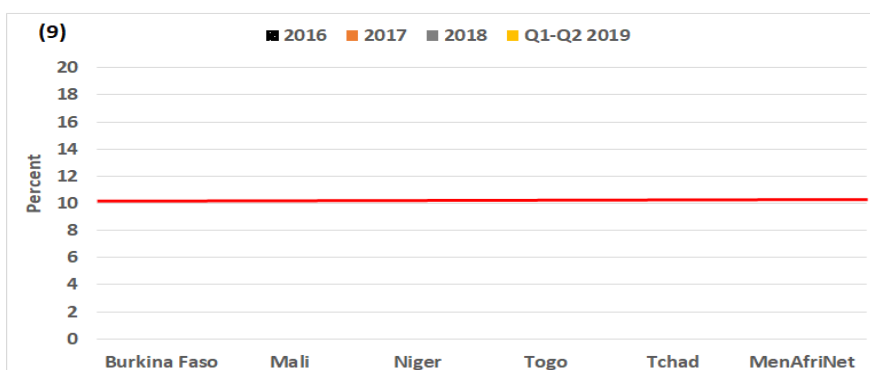
(6) —Percentage of CSF specimen tested at labs other than the NRL by a Gram stain test  
Threshold: > 70%



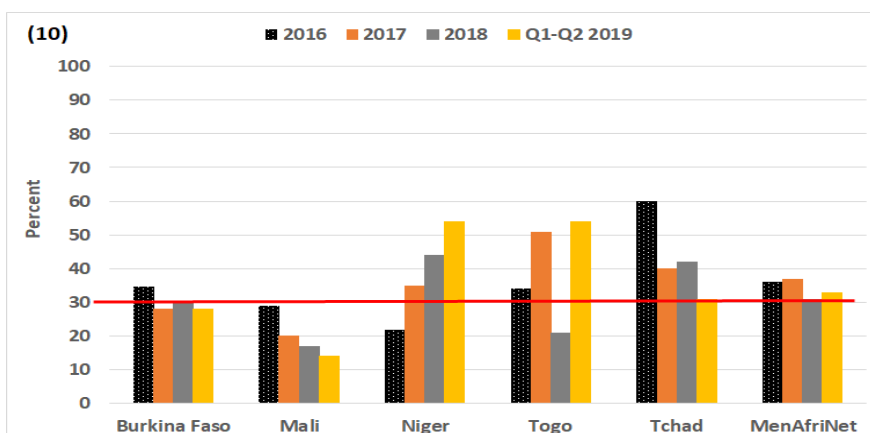
(7) — Percentage of CSF specimen received at the NRL and analyzed by a confirmatory test (culture, PCR, latex or rapid diagnostic test)  
Threshold: > 90%



(8) — Percentage of CSF specimen contaminated for culture procedure at the NRL  
Threshold: < 10%

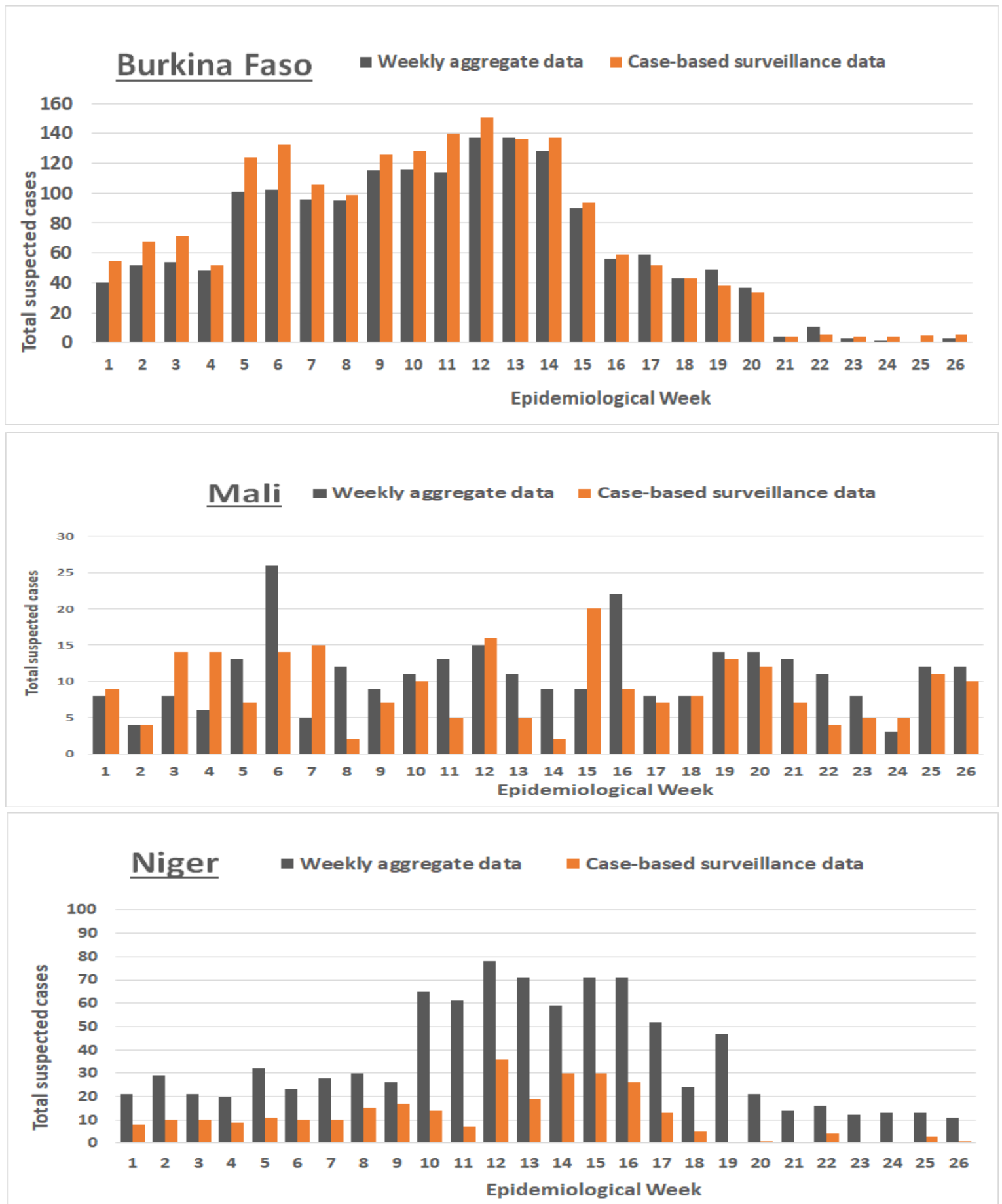


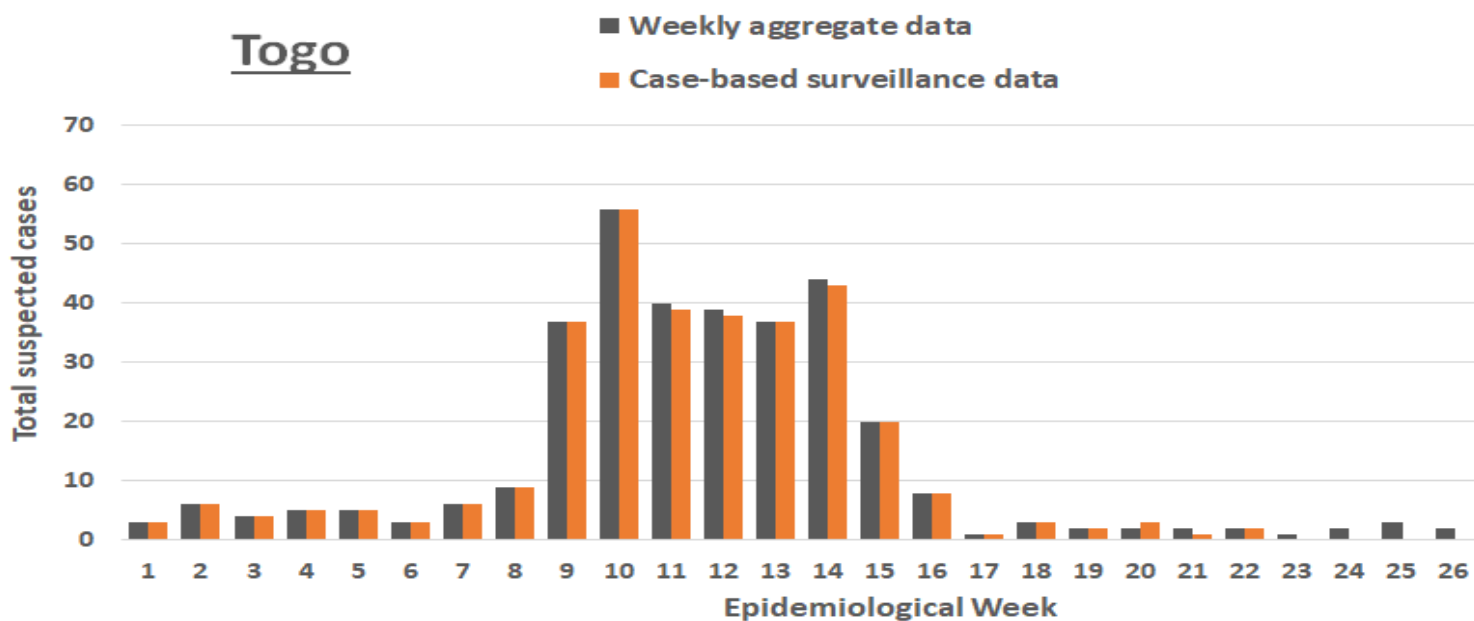
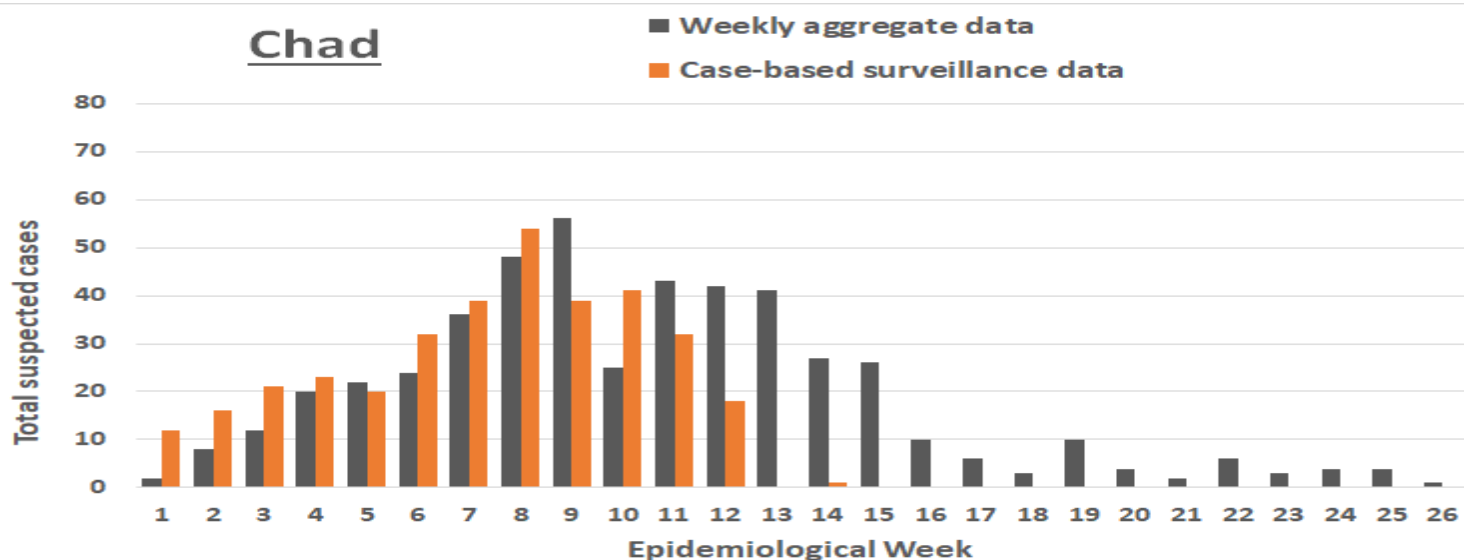
(9) — Percentage of CSF specimen contaminated for PCR procedure at the NRL  
Threshold: < 10%



(10) — Percentage of CSF confirmed at the NRL for Hi, Sp and Nm and other pathogens  
Threshold: > 30%

**Figure 3. Comparison between aggregate reporting and case-based surveillance data from MenAfriNet supported districts, weeks 01 - 26**



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