

Table 1. Epidemiological situation, week 27 - 39

99% of suspect cases reported in the MenAfriNet database had a lumbar puncture, 11% of whom were classified as probable bacterial meningitis. 7% of cases with a specimen collected tested positive for meningitis. Vaccination status was complete (yes or no) for 21% of all suspect cases in MenAfriNet countries.

Characteristics	Burkina Faso [£]	Mali	Niger	Tchad*	Togo	MenAfriNet
N (%)						
Demographics						
Population**	20,244,079 (100)	12,805,246 (66)	13,986,624 (65)	847,057 (5)	1,413,472 (19)	49,296,478 (58)
MenAfriNet District†	48/70 (69)	12/33 (36)	12/43 (28)	3/4 (75)	7/7 (100)	82/157 (52)
Weekly suspected cases	456	137	51	40	17	701
MenAfriNet suspected cases	548	110	26	39	51	774
Death	2 (0)	3 (3)	0 (0)	0 (0)	0 (0)	5 (1)
Age (year)						
<1	31 (12)	26 (24)	7 (27)	17 (47)	5 (10)	86 (18)
1-4	155 (61)	36 (33)	8 (31)	5 (14)	19 (38)	223 (47)
5-9	39 (15)	19 (17)	5 (19)	2 (6)	9 (18)	74 (16)
10-14	11 (4)	6 (5)	2 (8)	5 (13)	2 (4)	26 (5)
15-29	6 (2)	4 (4)	4 (15)	3 (8)	3 (6)	20 (4)
≥30	11 (4)	19 (17)	0 (0)	4 (11)	12 (24)	46 (10)
Sex						
Male	155 (60)	63 (57)	19 (73)	17 (50)	31 (61)	285 (59)
Vaccination status known	82 (15)	42 (38)	7 (27)	15 (39)	15 (29)	161 (21)
MenAfriVac§	4 (5)	7 (17)	0 (0)	3 (8)	0 (0)	15 (10)
Laboratory ††						
CSF collected	547 (100)	110 (100)	25 (96)	39 (100)	47 (92)	753 (99)
Probable bacterial meningitis	47 (9)	11 (10)	7 (28)	10 (26)	6 (13)	81 (11)
Probable meningococcal meningitis	4 (1)	0 (0)	0 (0)	1 (3)	2 (4)	7 (1)
Confirmed bacterial meningitis	15 (3)	8 (7)	4 (16)	8 (21)	0 (0)	35 (5)
Confirmed meningoccal meningitis	0 (0)	0 (0)	2 (8)	0 (0)	0 (0)	2 (0)

Abbreviation: CSF, cerebrospinal fluid;

*Chad data will be presented in Table 1 and 2. Performance indicators will not be presented as the country has not started implementing activities.

**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 in Burkina Faso: Age: n = 253 (46%); Sex: n = 260 (47%)

Laboratory classification definitions (denominator = CSF collected):

1. Probable bacterial meningitis: cloudy appearance, or white blood cell count > 10 cells/mm³ or any positive Gram stain test result
2. Probable meningococcal meningitis: gram negative diplococci only
3. Confirmed bacterial meningitis]: cases confirmed, regardless of the germ
4. Confirmed meningococcal meningitis: laboratory confirmation of N. meningitidis serogroup A, C, W, Y or X

Table 2. Laboratory results, week 27 - 39

63% of specimens collected in MenAfriNet countries were tested by culture, PCR, Latex or a rapid diagnostic test. Among these samples, 7% were positive. *S. Pneumoniae* was the predominant pathogen (5%), followed by *Neisseria meningitidis* (1%) and *Haemophilus influenzae* (1%).

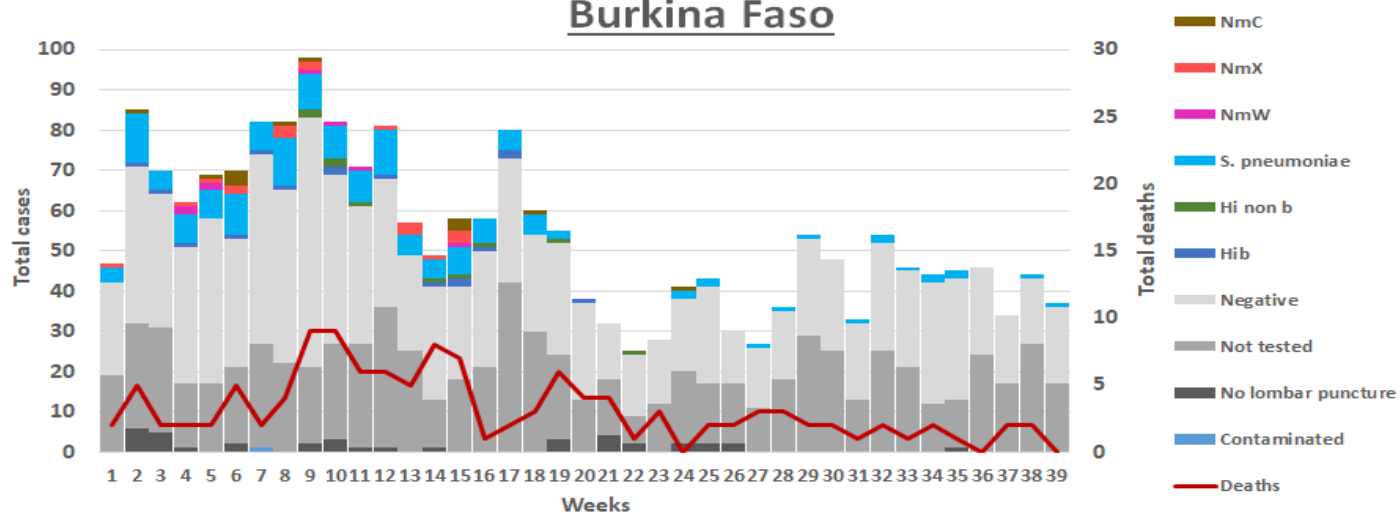
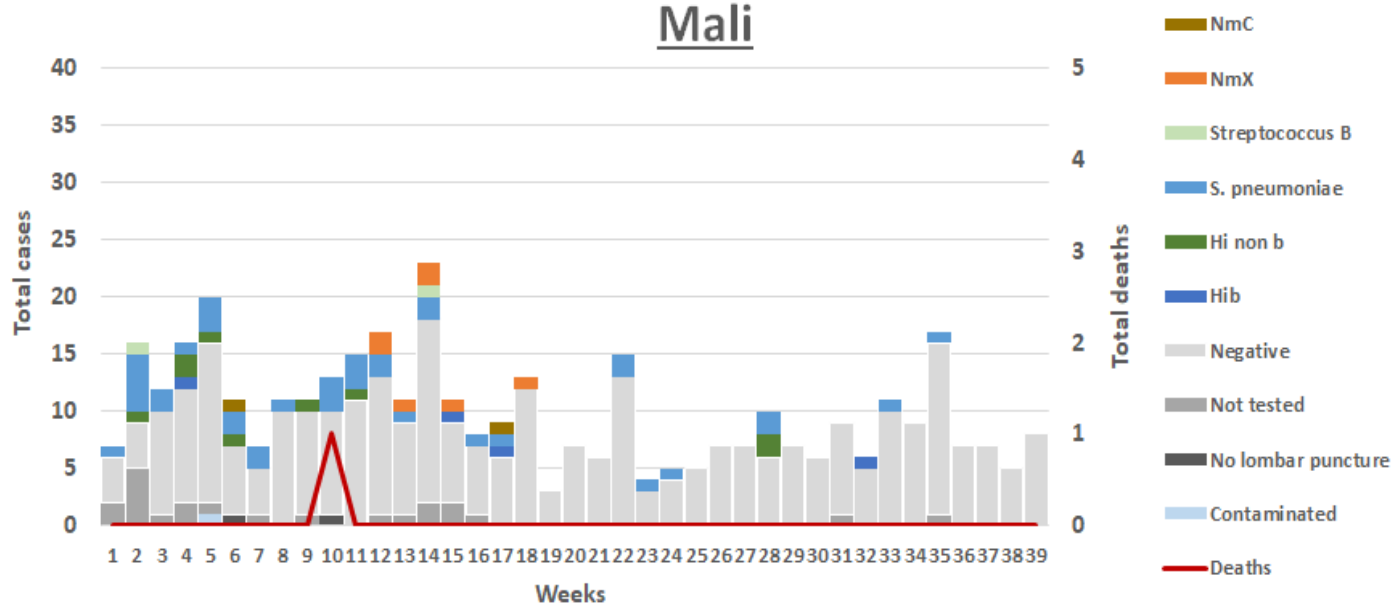
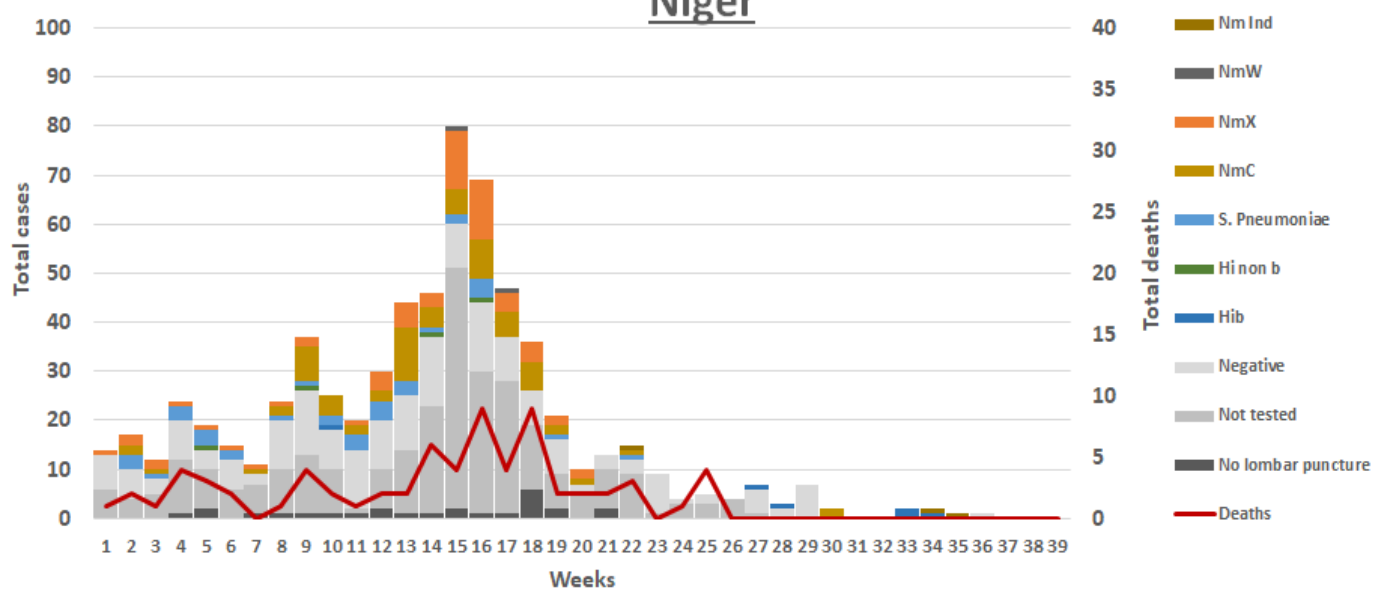
Results	Burkina Faso	Mali	Niger	Tchad	Togo	MenAfriNet
	N (%)					
CSF Collected	547 (100)	110 (100)	25 (96)	39 (100)	47 (92)	753 (99)
Aspect	161 (29)	106 (96)	24 (96)	34 (87)	43 (91)	357 (47)
Gram stain	157 (29)	6 (5)	2 (8)	34 (87)	26 (55)	225 (29)
CSF received at the LNR	442 (81)	108 (98)	14 (56)	39 (100)	30 (64)	633 (82)
CSF analysed by confirmatory test*	299 (55)	108 (98)	12 (48)	36 (92)	30 (64)	485 (63)
Culture	97 (32)	108 (100)	0 (0)	36 (100)	30 (100)	271 (56)
PCR	300 (68)	108 (100)	12 (86)	36 (92)	30 (100)	485 (77)
Real Time-PCR	300 (100)	108 (100)	12 (100)	36 (100)	30 (100)	485 (100)
Conventional-PCR	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Latex	22 (4)	108 (98)	0 (0)	1 (3)	8 (17)	139 (18)
RDT	2 (0)	0 (0)	13 (52)	0 (0)	0 (0)	15 (2)
Final Result						
N. meningitis	0 (0)	0 (0)	2 (17)	0 (0)	0 (0)	3 (1)
NmA	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
NmC	0 (0)	0 (0)	2 (17)	0 (0)	0 (0)	2 (0)
NmW	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	1 (0)
NmX	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nm ind	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
S. pneumoniae	14 (5)	4 (4)	2 (17)	5 (13)	1 (3)	26 (5)
H. influenzae	0 (0)	3 (3)	0 (0)	2 (5)	0 (0)	5 (1)
b	0 (0)	1 (1)	0 (0)	2 (5)	0 (0)	3 (1)
Non-b	0 (0)	2 (2)	0 (0)	0 (0)	0 (0)	2 (0)
Other germs	0 (0)	1 (1)	0 (0)	0 (0)	0 (0)	1 (0)
Negative**	285 (95)	100 (93)	8 (67)	28 (78)	29 (97)	450 (93)

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;

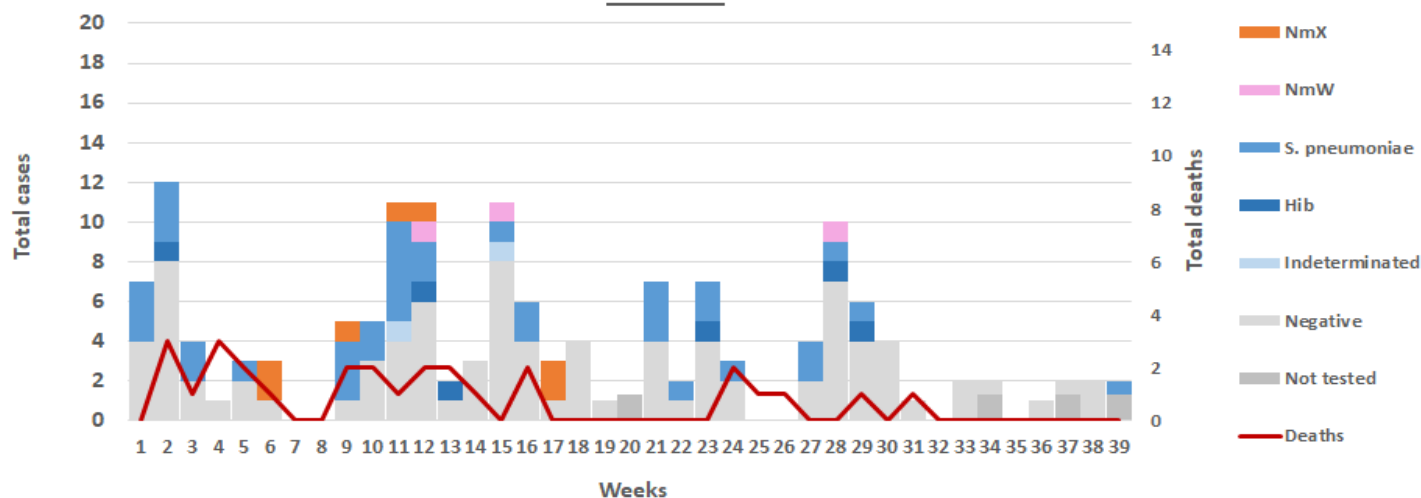
*Identification by : Culture, PCR, latex or RDT

**Tested negative for all pathogens and serogroups

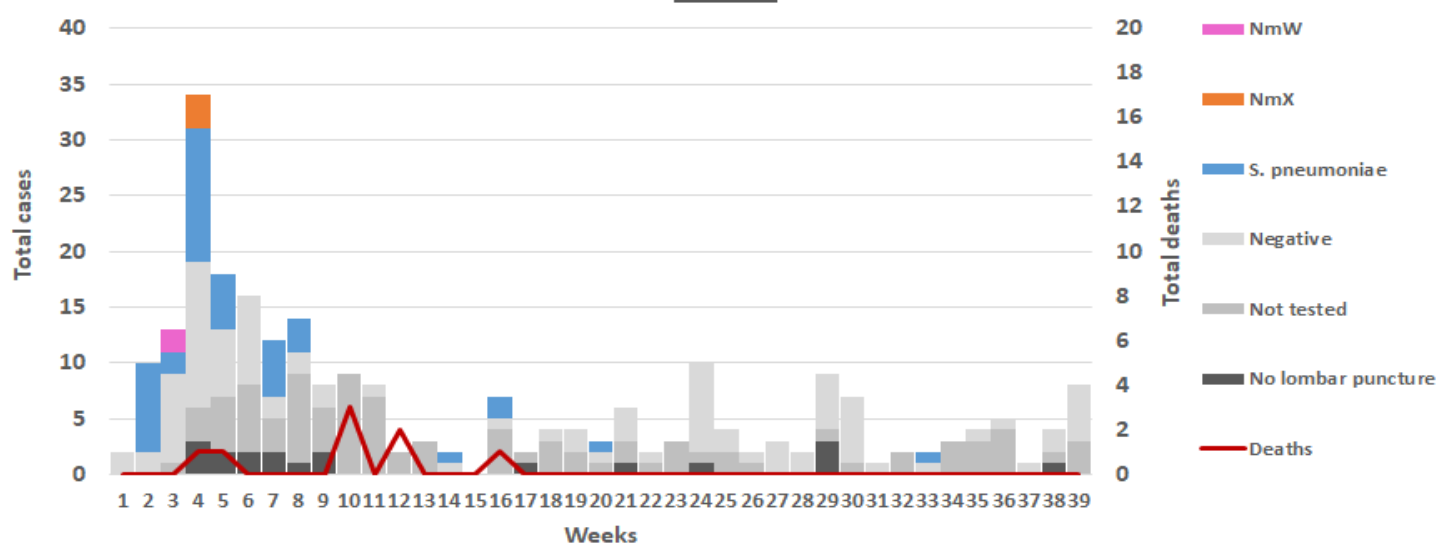
Figure 1. Epidemic Curve, Week 01 - 39

Burkina FasoMaliNiger

Tchad



Togo



MenAfriNet

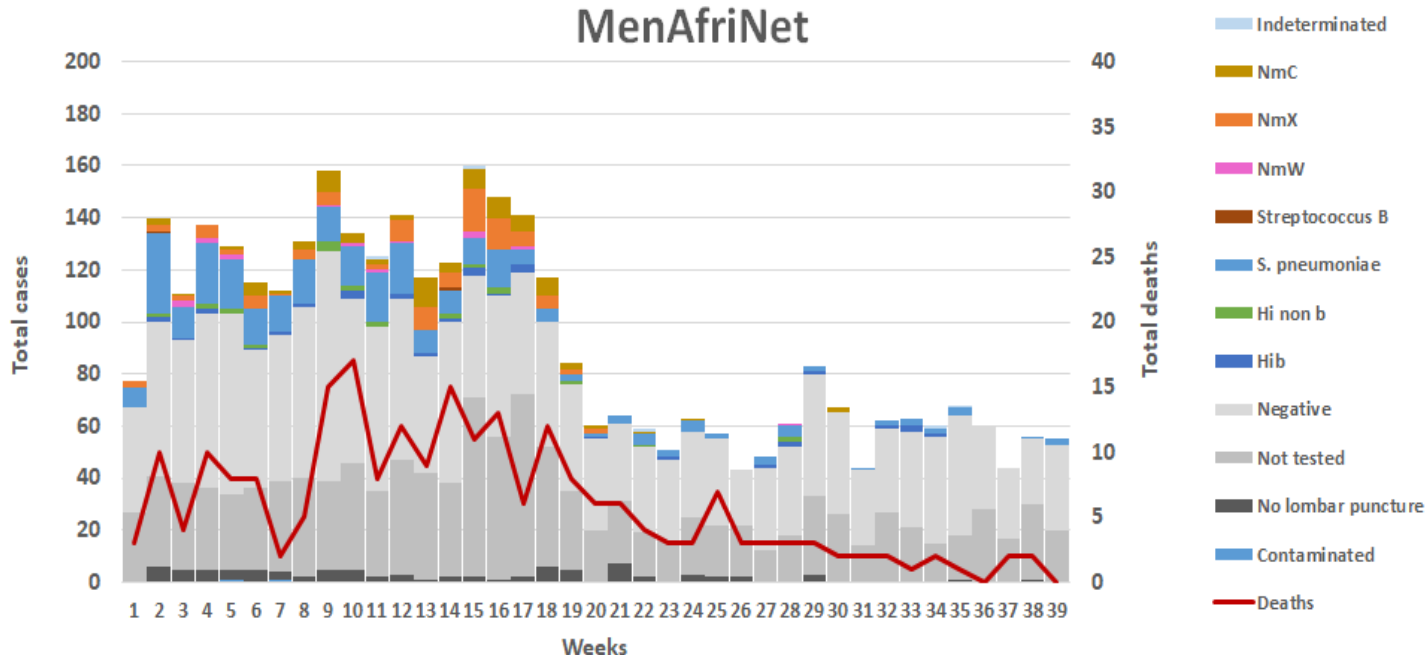
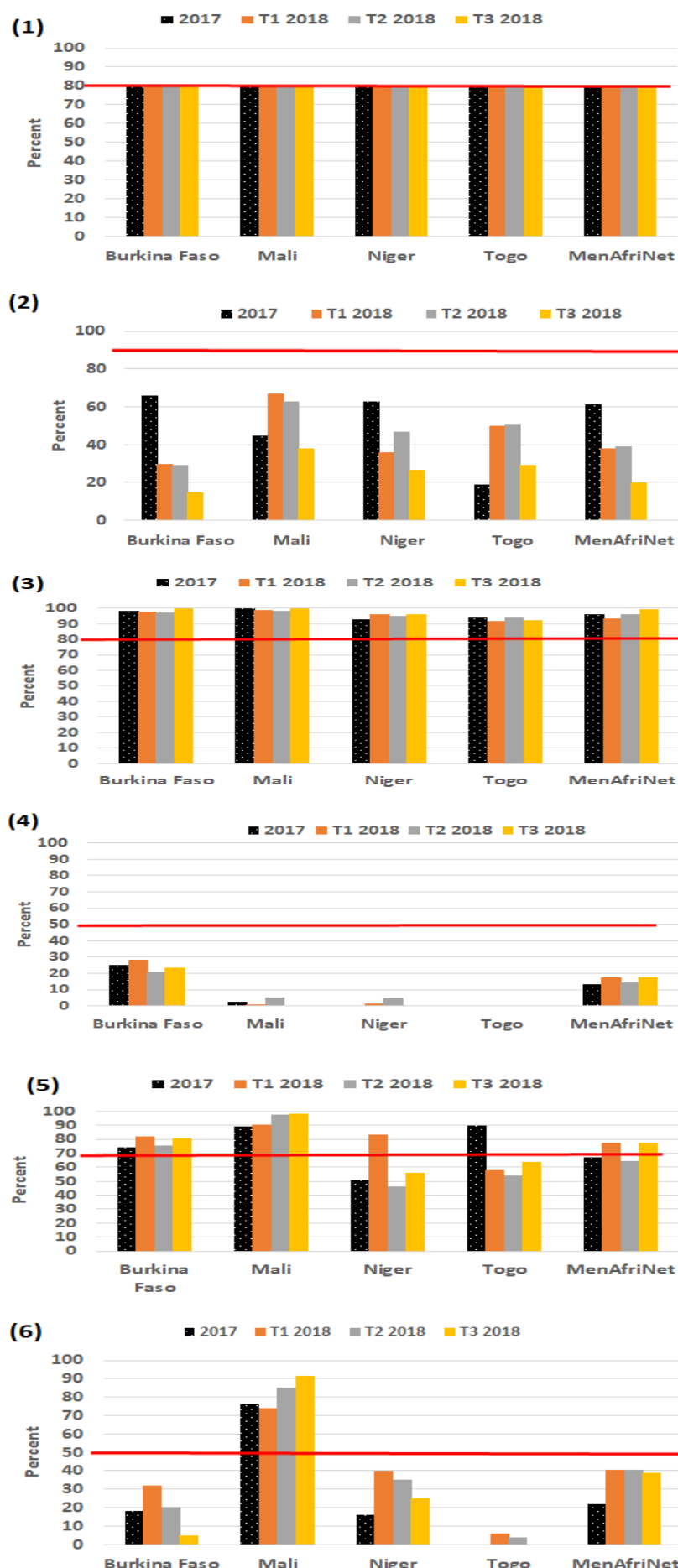


Figure 2. Annual and Quarterly Trends of Surveillance and Laboratory Performance Indicators, 2017 and Quarter 1, 2 & 3 of 2018



(1)* — Percentage of months that data were submitted on time to WHO-IST/WA by the 7th day of each month

Threshold: > 80%

*Indicator was modified in 2016 to allow the project to evaluate the timely submission of data at the regional level

(2) — Percentage of cases with vaccination status known

Threshold: > 90%

(3) — Percentage of cases with CSF collected

Threshold: > 80%

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

Threshold: > 50%

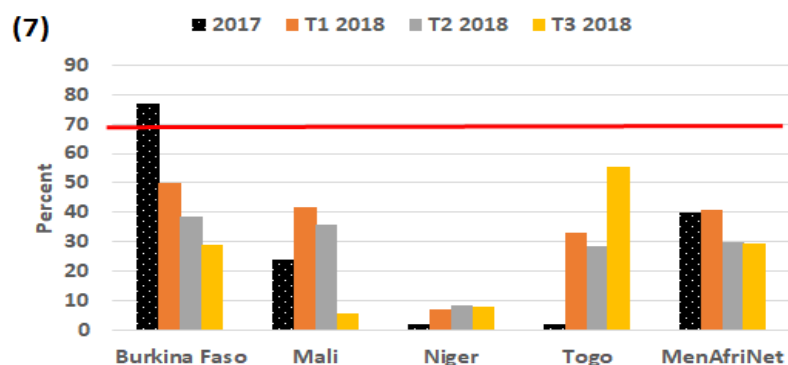
*Togo: the protocol does not require the use of TI for 3 of the 4 hospitals because of their proximity to the lab.

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

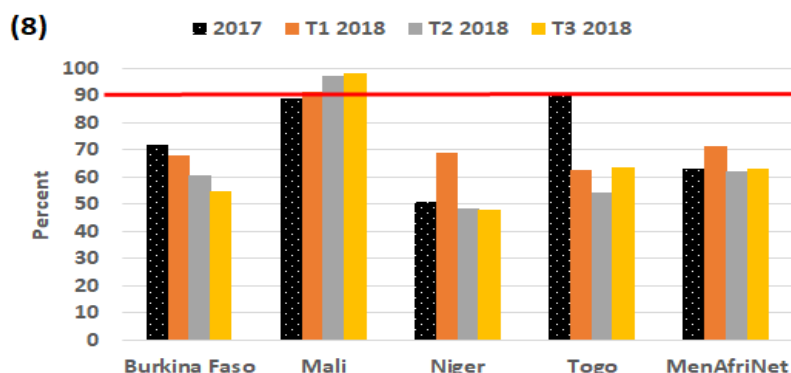
Threshold: > 70%

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

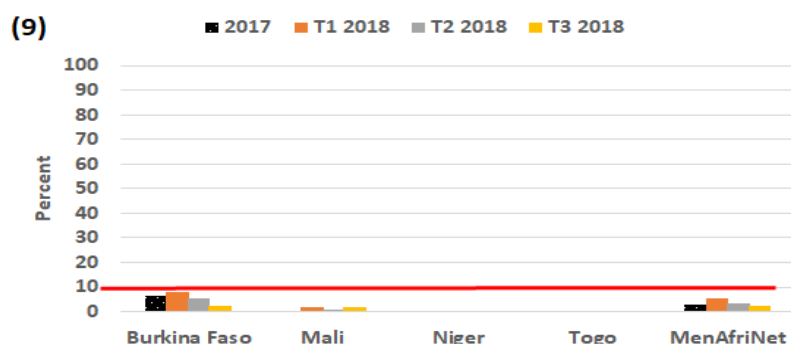
Threshold: > 50%



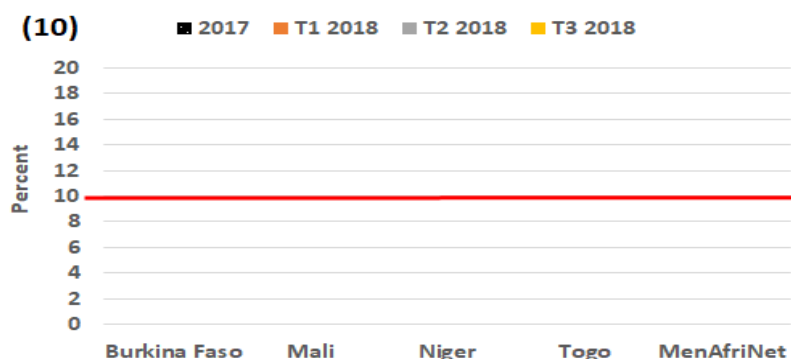
(7) —Percentage of CSF specimen tested at labs other than the NRL by a Gram stain test
Threshold: > 70%



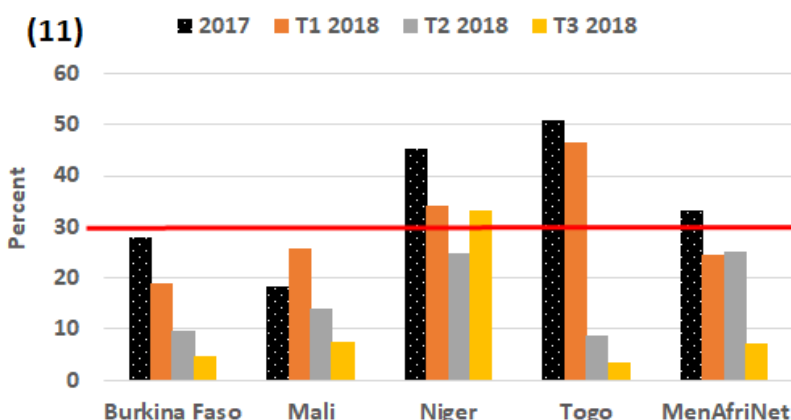
(8) — Percentage of CSF specimen received at the NRL and analyzed by a confirmatory test (culture, PCR, latex or rapid diagnostic test)
Threshold: > 90%



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

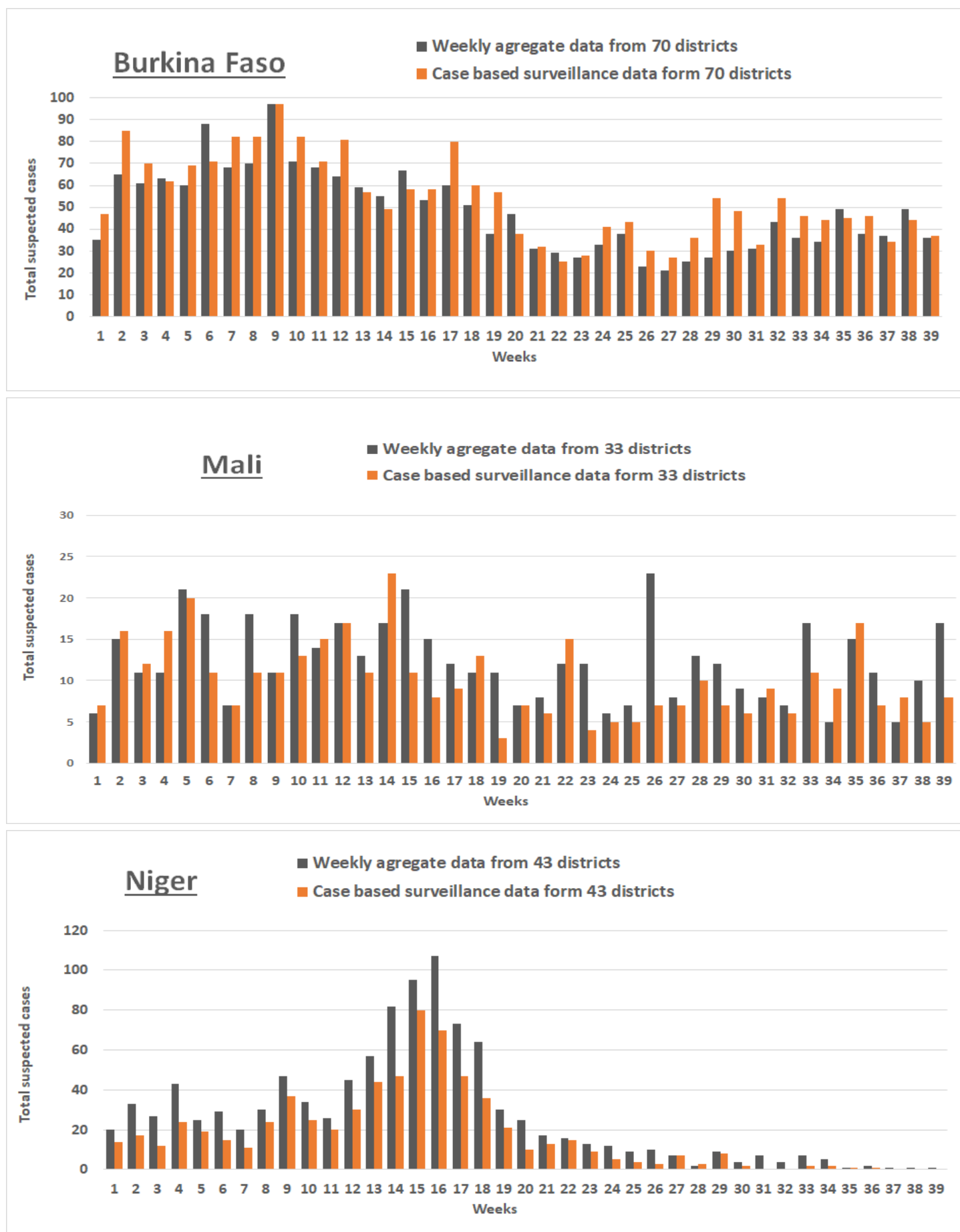


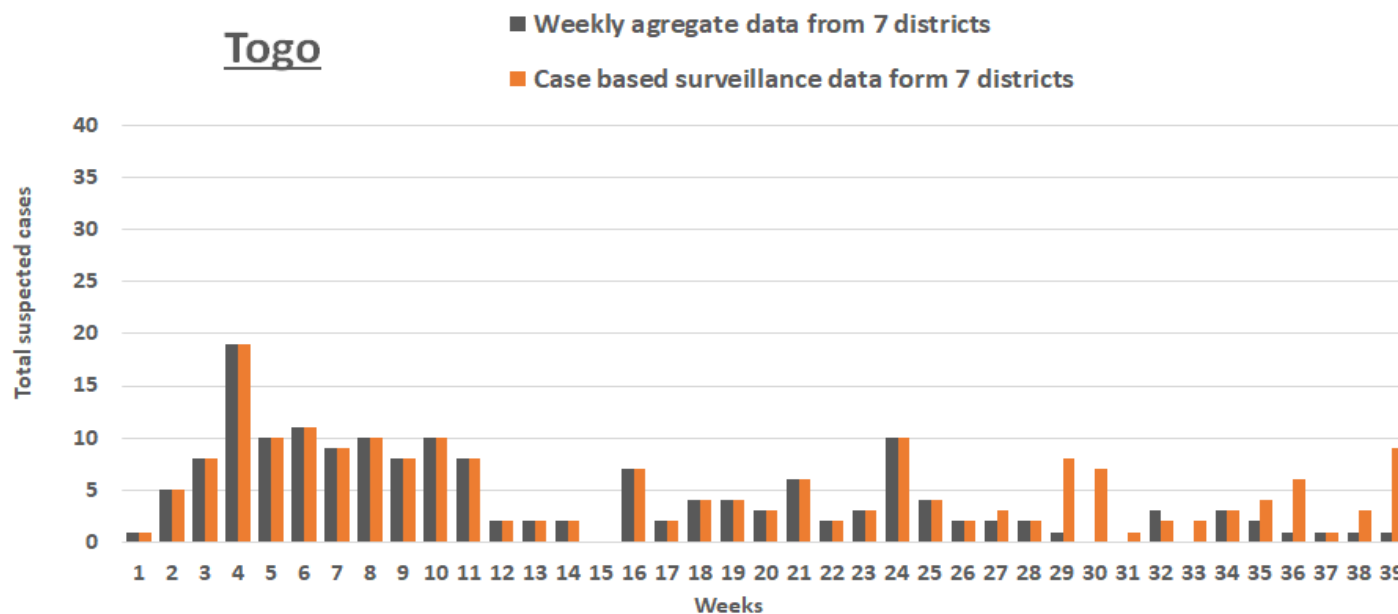
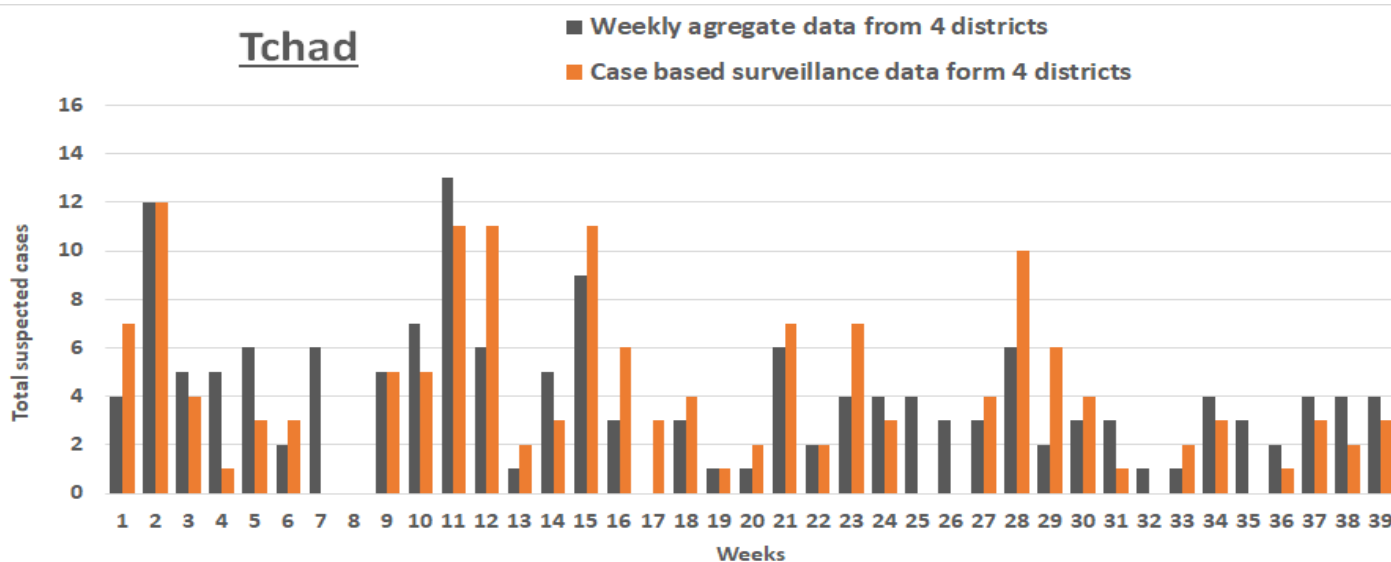
(10) — Percentage of CSF specimen contaminated for PCR procedure at the NRL
Threshold: < 10%



(11) — 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



TogoTchadMenAfriNet