

**Table 1. Epidemiological situation, week 14 - 26**

94% of suspect cases reported in the MenAfriNet database had a lumbar puncture, 13% of whom were classified as probable bacterial meningitis. 21% of cases with a specimen collected tested positive for meningococcal meningitis. Vaccination status was complete (yes or no) for 30% of all suspect cases in MenAfriNet countries.

Characteristics	Burkina Faso	Mali	Niger	Chad*	Togo	MenAfriNet
N (%)						
Demographics						
Population**	19,034,397 (100)	3,823,714 (21)	6,854,881 (36)	677,783 (5)	415,487 (6)	30,806,262 (40)
MenAfriNet District†	58 (83)	7 (70)	14 (88)	4 (100)	2 (100)	85 (83)
Weekly suspect cases	688	53	1509	48	16	2,314
MenAfriNet suspected cases	384	20	917	47	19	1,379
Deaths	12 (3)	1 (5)	0 (0)	0 (0)	0 (5)	13 (1)
Age (years)						
<1	84 (22)	10 (50)	77 (9)	10 (28)	1 (5)	182 (14)
1-4	134 (36)	4 (20)	148 (17)	15 (42)	4 (21)	305 (23)
5-9	59 (16)	4 (20)	188 (22)	8 (22)	2 (11)	261 (20)
10-14	43 (11)	1 (5)	207 (24)	0 (0)	7 (37)	258 (19)
15-29	35 (9)	1 (5)	180 (21)	3 (16)	3 (16)	221 (17)
≥30	22 (6)	0 (0)	73 (8)	2 (11)	2 (11)	98 (7)
Sex						
Male	221 (58)	11 (55)	486 (53)	19 (54)	12 (63)	749 (55)
Vaccination status known	345 (90)	19 (95)	0 (0)	38 (100)	9 (47)	411 (30)
MenAfriVac§	28 (8)	1 (5)	0 (0)	1 (3)	1 (11)	31 (8)
Laboratory††						
CSF collected	359 (93)	20 (100)	863 (94)	38 (100)	19 (100)	1,299 (94)
Appearance	265 (74)	19 (95)	51 (6)	34 (89)	19 (100)	388 (30)
Probable bacterial meningitis	117 (33)	10 (50)	23 (3)	15 (39)	8 (42)	173 (13)
Probable meningococcal meningitis	11 (3)	0 (0)	17 (2)	2 (5)	3 (16)	33 (3)
Confirmed bacterial meningitis	80 (26)	1 (20)	240 (28)	38 (58)	10 (27)	331 (27)
Confirmed meningococcal meningitis	29 (9)	0 (0)	219 (25)	3 (8)	0 (0)	251 (21)

**Abbreviation:** CSF, cerebrospinal fluid;

\*Performance indicators will not be presented for Chad as a data management system with complete variables to calculate the performance indicators has not been deployed.

\*\*Population of MenAfriNet supported districts—number of districts: Burkina Faso: 70; Mali: 10; Niger: 16; Tchad: 4; Togo: 2; †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 ou test de diagnostic rapide

Laboratory classification definitions (denominator = CSF collected):

1. Probable bacterial meningitis: cloudy appearance, or white blood cell count > 10 cells/mm<sup>3</sup> 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 14 - 26**

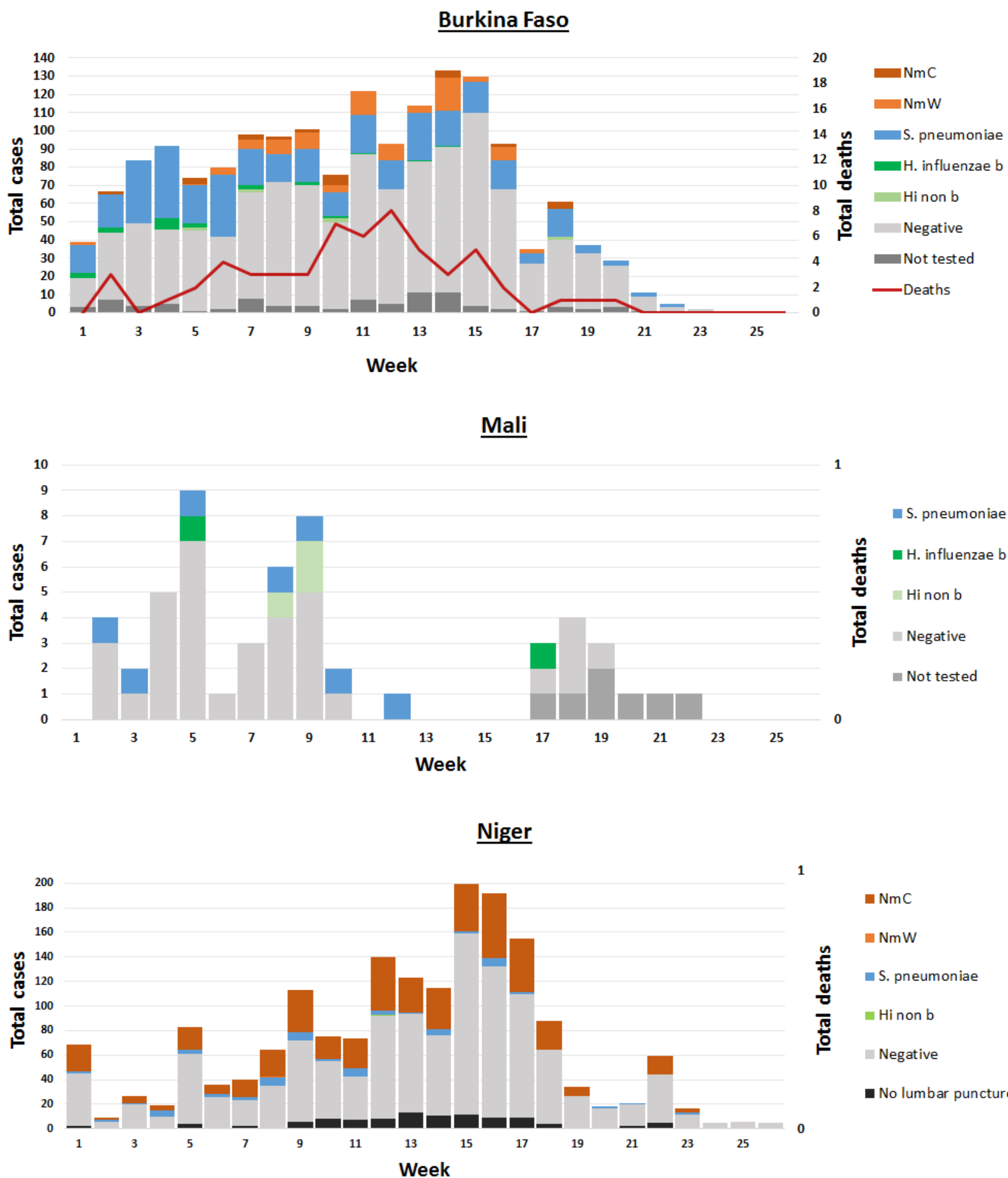
97% of specimens collected in MenAfriNet countries were tested by culture, PCR, Latex or a rapid diagnostic test. *N. meningitidis* serogroup C was the predominant pathogen (18%) followed by *S. pneumoniae* (6%).

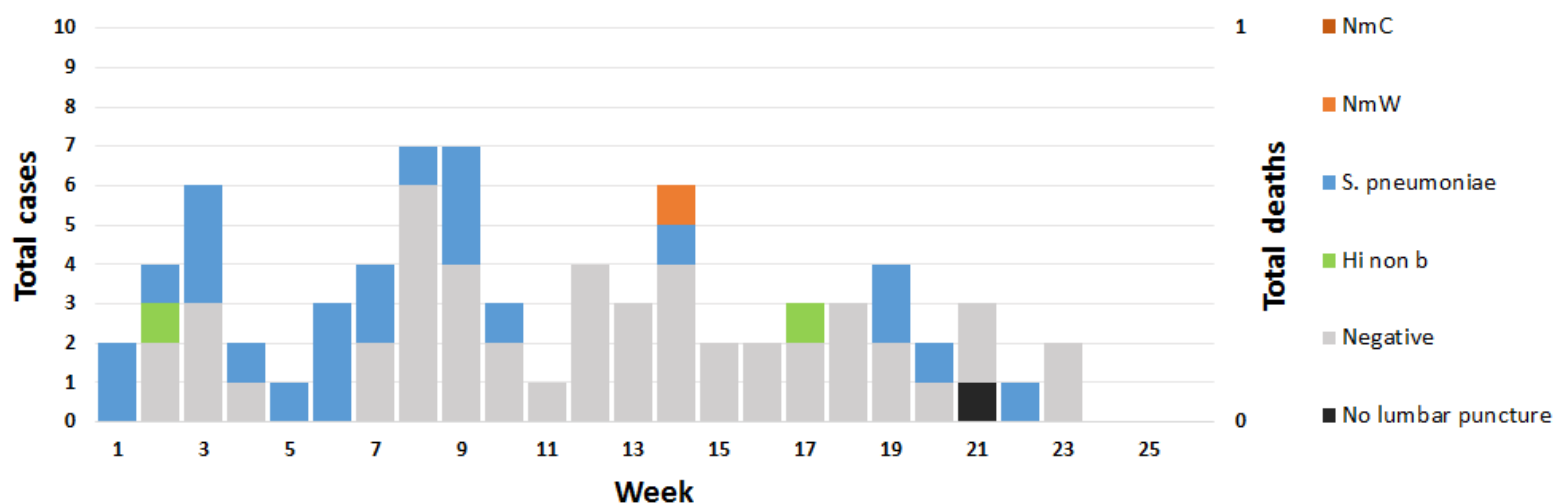
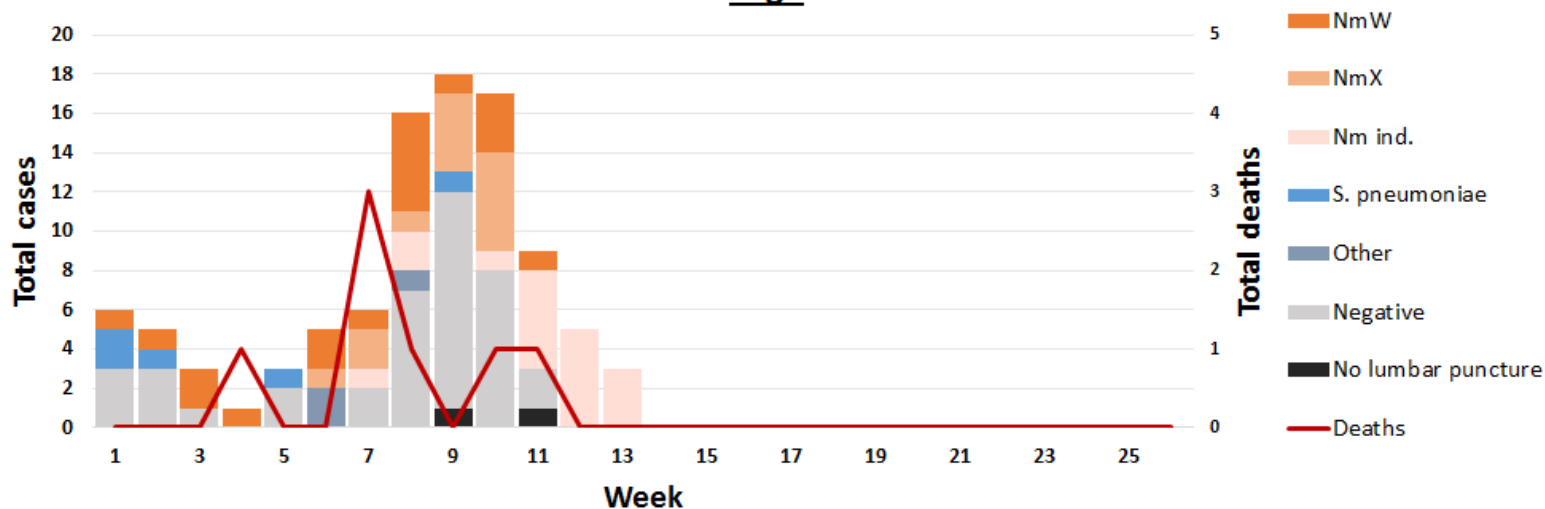
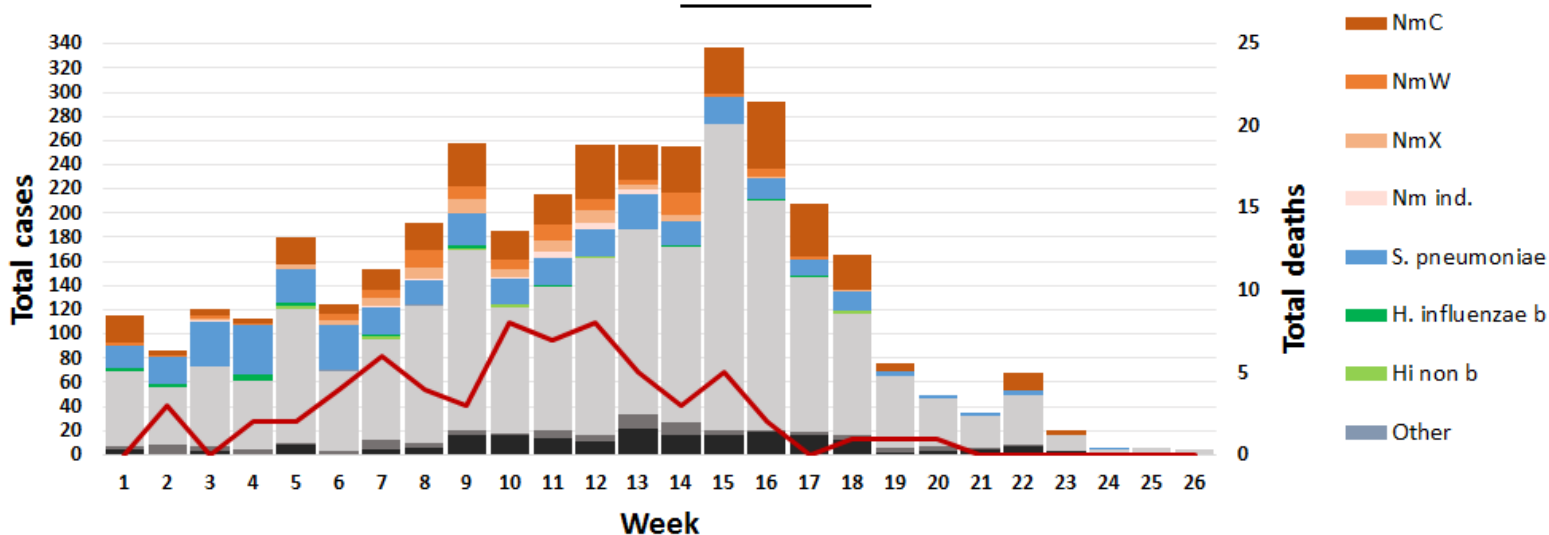
Results	Burkina Faso	Mali	Niger	Chad	Togo	MenAfriNet
	N (%)					
CSF collected	359 (93)	20 (100)	863 (94)	38 (100)	19 (100)	1,299 (94)
Gram Stain	137 (38)	14 (70)	39 (5)	38 (100)	16 (84)	244 (19)
CSF received at the NRL	328 (91)	5 (25)	863 (100)	38 (100)	16 (84)	1,250 (96)
CSF analyzed by a confirmatory test	333 (93)	13 (65)	863 (100)	37 (97)	16 (84)	1,262 (97)
Culture	110 (33)	5 (38)	0 (0)	36 (97)	16 (100)	167 (13)
PCR	306 (94)	5 (100)	860 (100)	31 (84)	0 (0)	1,202 (96)
Real-time PCR	306 (100)	5 (100)	860 (100)	31 (100)	0 (0)	1,202 (100)
Conventional	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	77 (4)
Latex	19 (6)	10 (77)	0 (0)	0 (0)	15 (94)	44 (3)
RDT	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<b>Final Result</b>						
<i>N. meningitidis</i>						
NmA	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
NmC	5 (2)	0 (0)	219 (25)	0 (0)	0 (0)	224 (18)
NmW	17 (6)	0 (0)	0 (0)	1 (3)	0 (0)	18 (1)
NmX	7 (2)	0 (0)	0 (0)	2 (5)	0 (0)	9 (1)
Nm ind	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<i>S. pneumoniae</i>	49 (16)	0 (0)	19 (2)	5 (14)	0 (0)	73 (6)
<i>H. influenzae</i>						
b	1 (0)	1 (20)	2 (0)	1 (3)	0 (0)	5 (0)
Non-b	1 (0)	0 (0)	0 (0)	1 (3)	0 (0)	2 (0)
<b>Other germs</b>	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<b>Negative§</b>	227 (74)	4 (80)	623 (72)	20 (54)	0 (0)	874 (72)

**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;

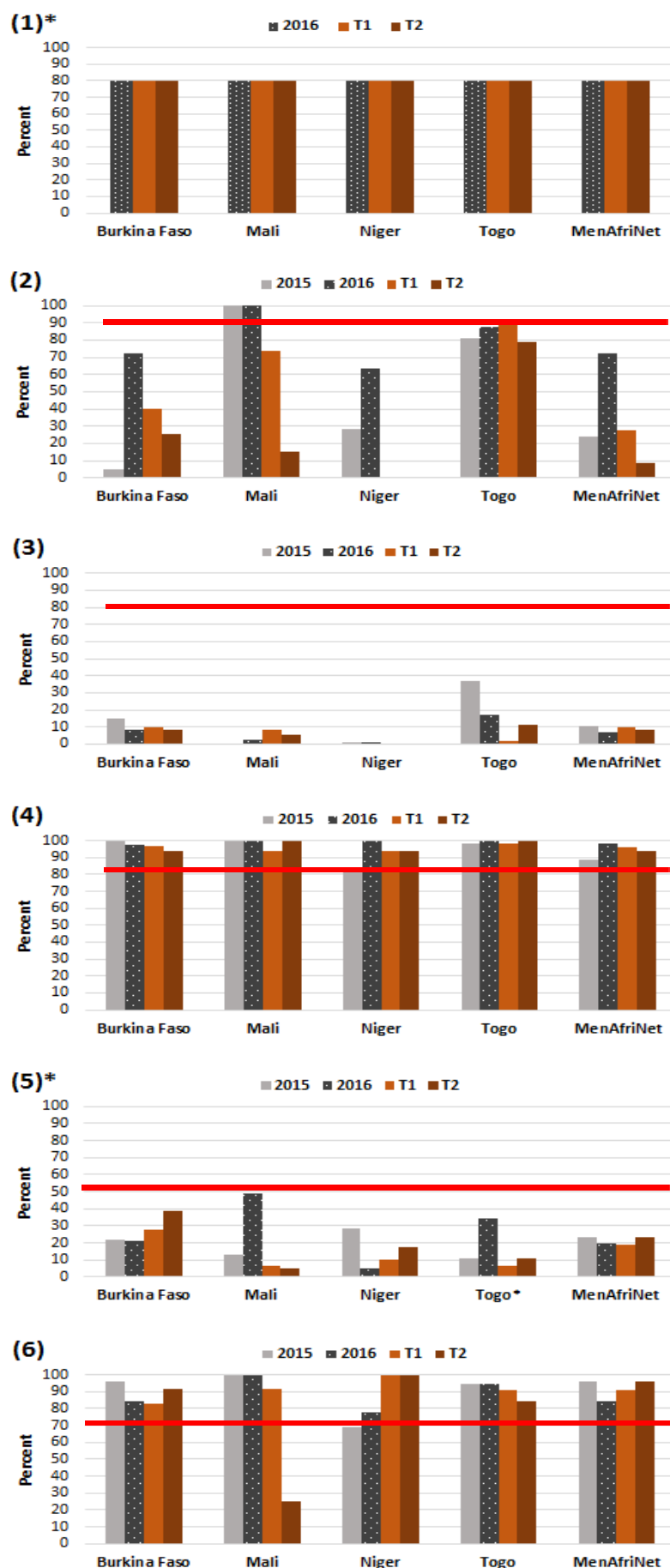
§ Tested negative for all pathogens and serogroups

Figure 1. Epedemic Curve, Week 1 - 26



ChadTogoMenAfriNet

**Figure 2. Annual and Quarterly Trends of Surveillance and Laboratory Performance Indicators, 2015, 2016 and Quarter 1 and 2 of 2017**



**(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 outcome known

Threshold: > 90%

**(3)** — Percentage of cases vaccinated with MenAfriVac among those with known (yes or no) vaccine status

Threshold: > 80%

**(4)** — Percentage of cases with CSF collected

Threshold: > 80%

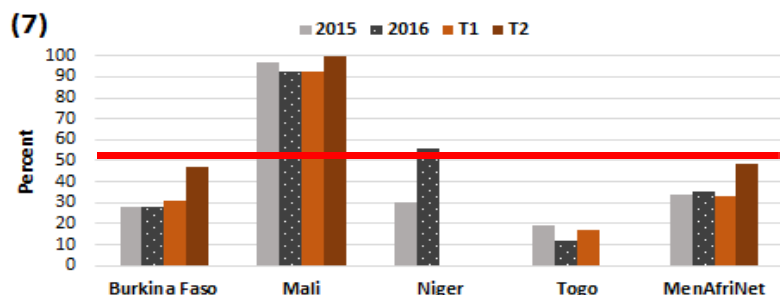
**(5)\*** — Percentage of CSF specimen received at any lab in trans-isolate (T-I)

Threshold: > 50%

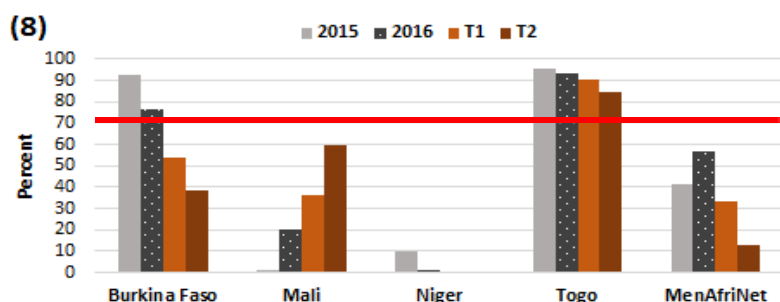
\*Togo: the protocol does not require the use of TI for 3 of the 4 hospitals because of their proximity to the lab.

**(6)** — Percentage of CSF specimens received at the NRL

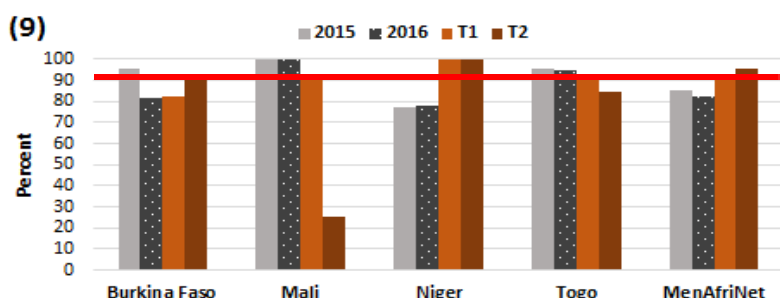
Threshold: > 70%



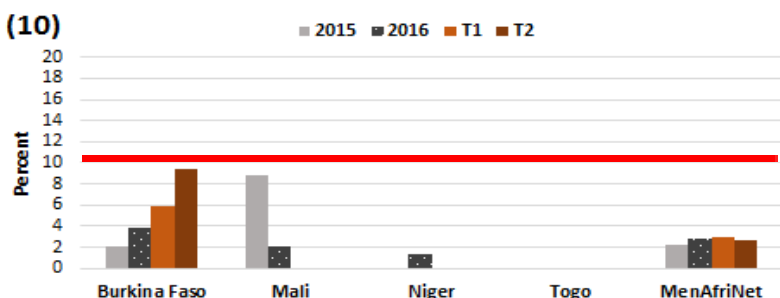
**(7)** — Percentage of cases with a delay of <7 days between CSF collection date and date CSF received at NRL  
Threshold: > 50%



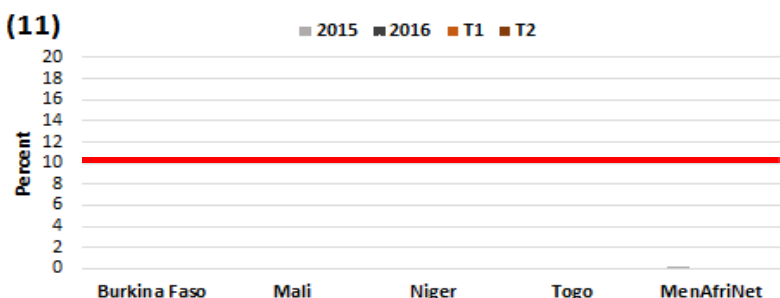
**(8)** — Percentage of CSF specimen tested at labs other than the NRL by a Gram stain test  
Threshold: > 70%



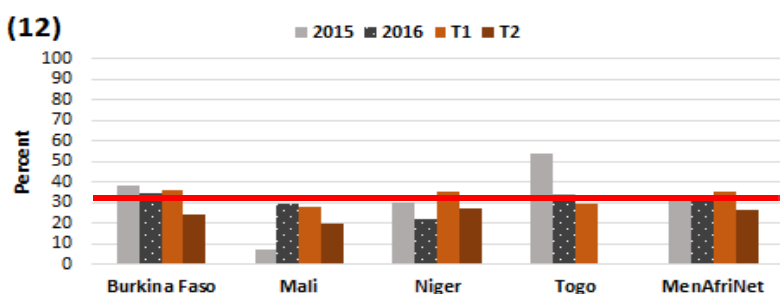
**(9)** — Percentage of CSF specimen received at the NRL and analyzed by a confirmatory test (culture, PCR, latex or rapid diagnostic test)  
Threshold: > 90%



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

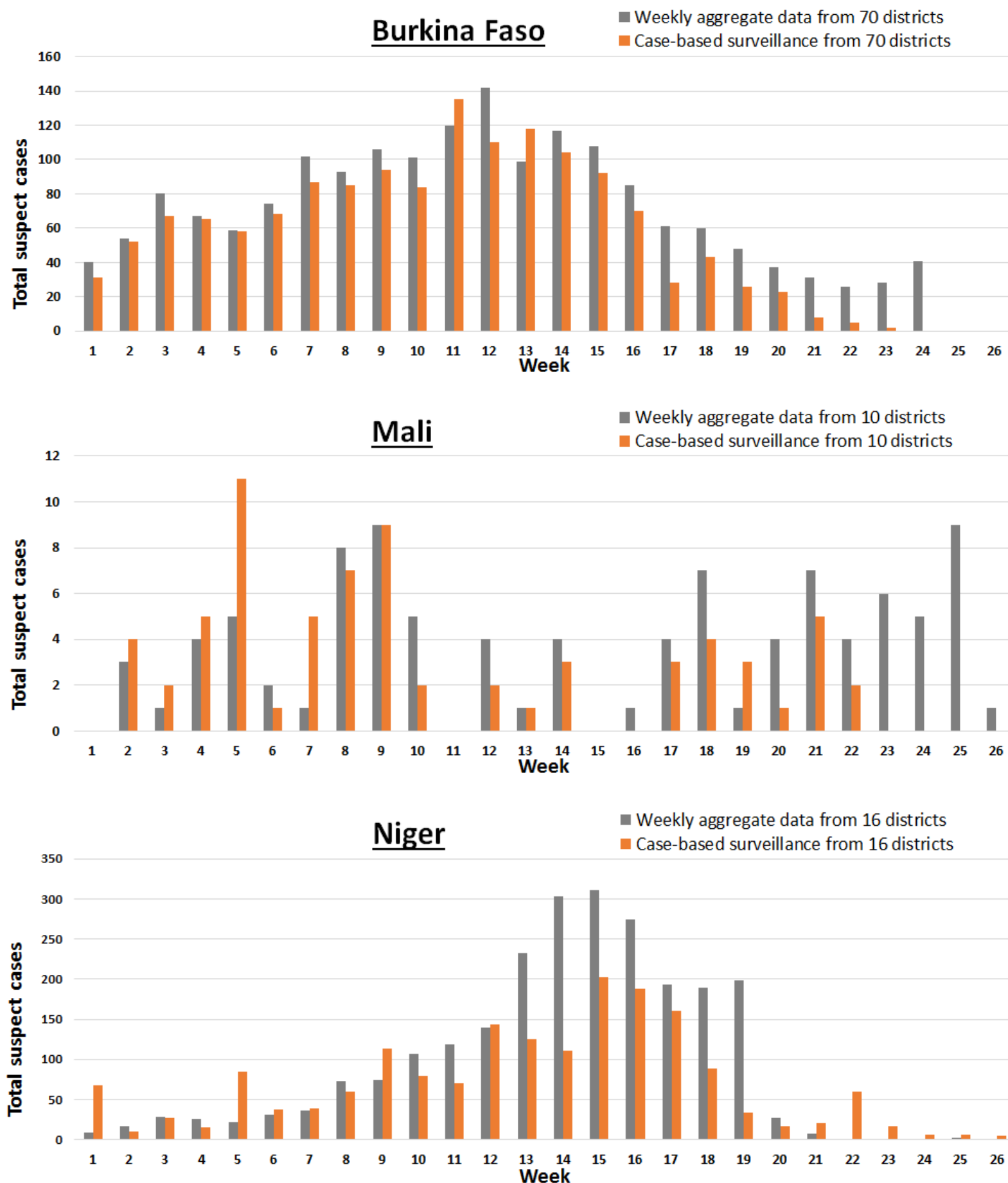


**(11)** — Percentage of CSF specimen contaminated for PCR procedure at the NRL  
Threshold: < 10%

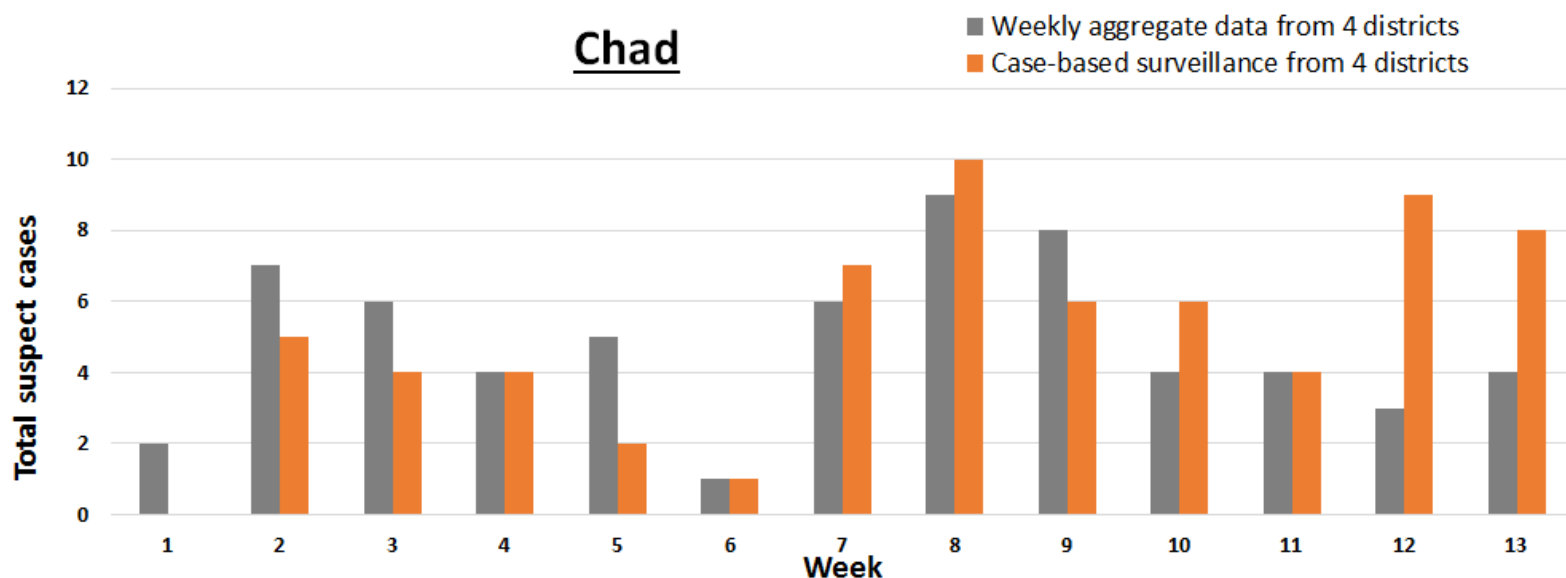


**(12)** — Percentage of CSF confirmed at the NRL for Hi, Sp and Nm and other pathogens  
Threshold: > 30%

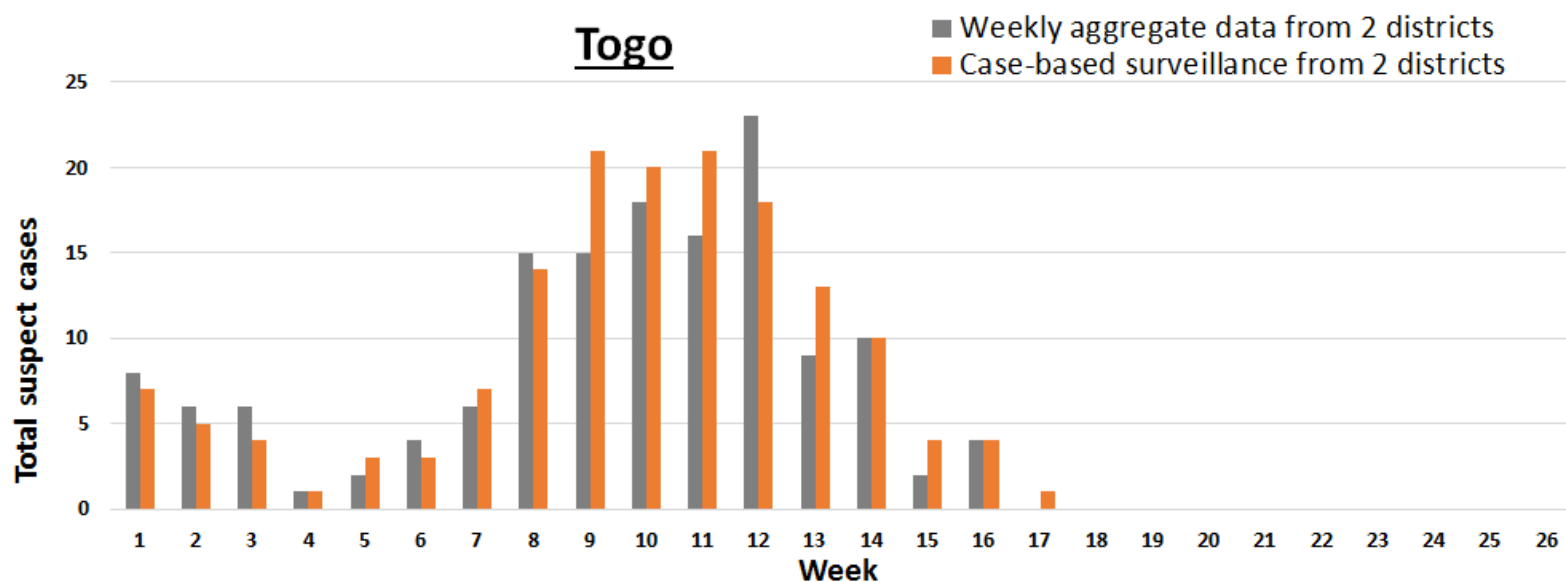
Figure 3. Comparison between aggregate reporting and case-based surveillance data from MenAfriNet supported districts, week 1 -26



## Chad



## Togo



## MenAfriNet

