

Table 1. Epidemiological situation, week 1 - 13

96% of suspect cases reported in the MenAfriNet database had a lumbar puncture, 28% of whom were classified as probable bacterial meningitis. 22% of cases with a specimen collected tested positive for meningococcal meningitis. Vaccination status was complete (yes or no) for 45% of all suspect cases in MenAfriNet countries.

Characteristics	Burkina Faso	Mali	Niger	Tchad*	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†	63 (90)	8 (80)	14 (88)	3 (75)	2 (100)	90 (88)
Weekly suspect cases	1,137	43	913	63	129	2,285
MenAfriNet suspected cases	1071	50	872	47	137	2,196
Deaths	44 (4)	0 (0)	0 (0)	0 (0)	7 (5)	51 (2)
Age (years)						
<1	193 (18)	16 (32)	65 (8)	17 (31)	13 (9)	304 (14)
1-4	346 (33)	16 (32)	153 (19)	13 (24)	15 (11)	543 (26)
5-9	171 (16)	8 (16)	199 (24)	5 (9)	33 (24)	416 (20)
10-14	169 (16)	3 (6)	181 (22)	9 (16)	32 (23)	394 (19)
15-29	98 (9)	6 (12)	158 (19)	6 (11)	30 (22)	298 (14)
≥30	83 (10)	1 (2)	69 (8)	5 (9)	14 (10)	164 (8)
Sex						
Male	586 (55)	31 (63)	498 (57)	41 (64)	68 (50)	1,224 (56)
Vaccination status known	825 (77)	25 (50)	0 (0)	66 (100)	66 (48)	982 (45)
MenAfriVac§	13 (3)	2 (8)	0 (0)	8 (12)	1 (2)	94 (10)
Laboratory††						
CSF collected	1,039 (97)	47 (94)	818 (94)	66 (100)	135 (99)	2,105 (96)
Appearance	789 (76)	46 (98)	126 (15)	53 (80)	135 (100)	1,149 (55)
Probable bacterial meningitis	390 (38)	18 (38)	63 (8)	37 (56)	86 (64)	594 (28)
Probable meningococcal meningitis	62 (6)	0 (0)	22 (3)	7 (11)	28 (21)	119 (6)
Confirmed bacterial meningitis	314 (39)	12 (28)	290 (35)	38 (58)	36 (47)	690 (38)
Confirmed meningococcal meningitis	103 (13)	0 (0)	246 (30)	16 (24)	31 (40)	396 (22)

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/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 1 - 13

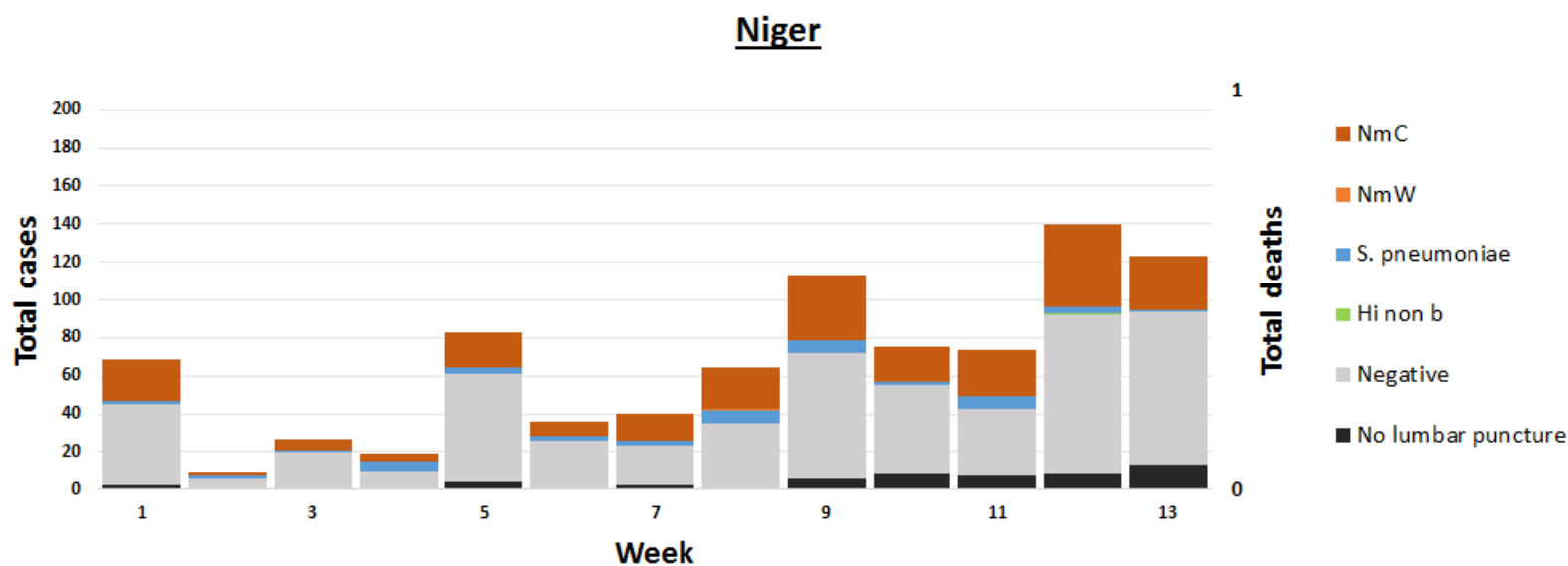
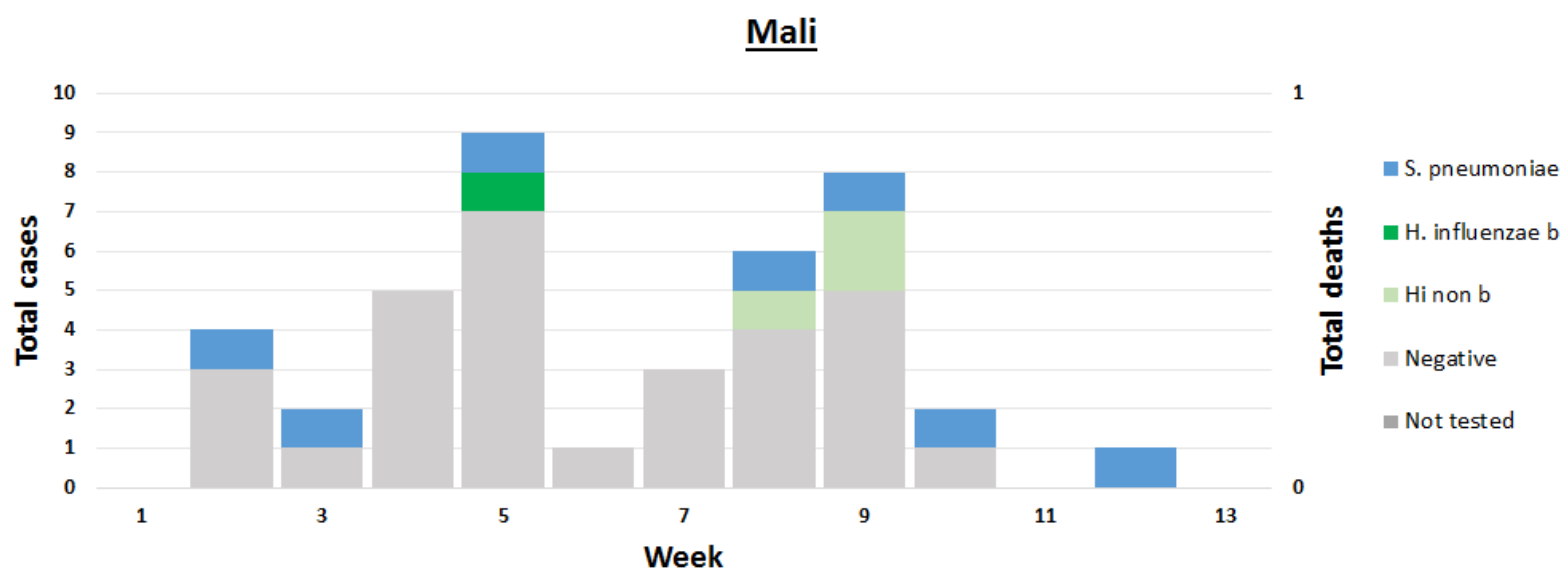
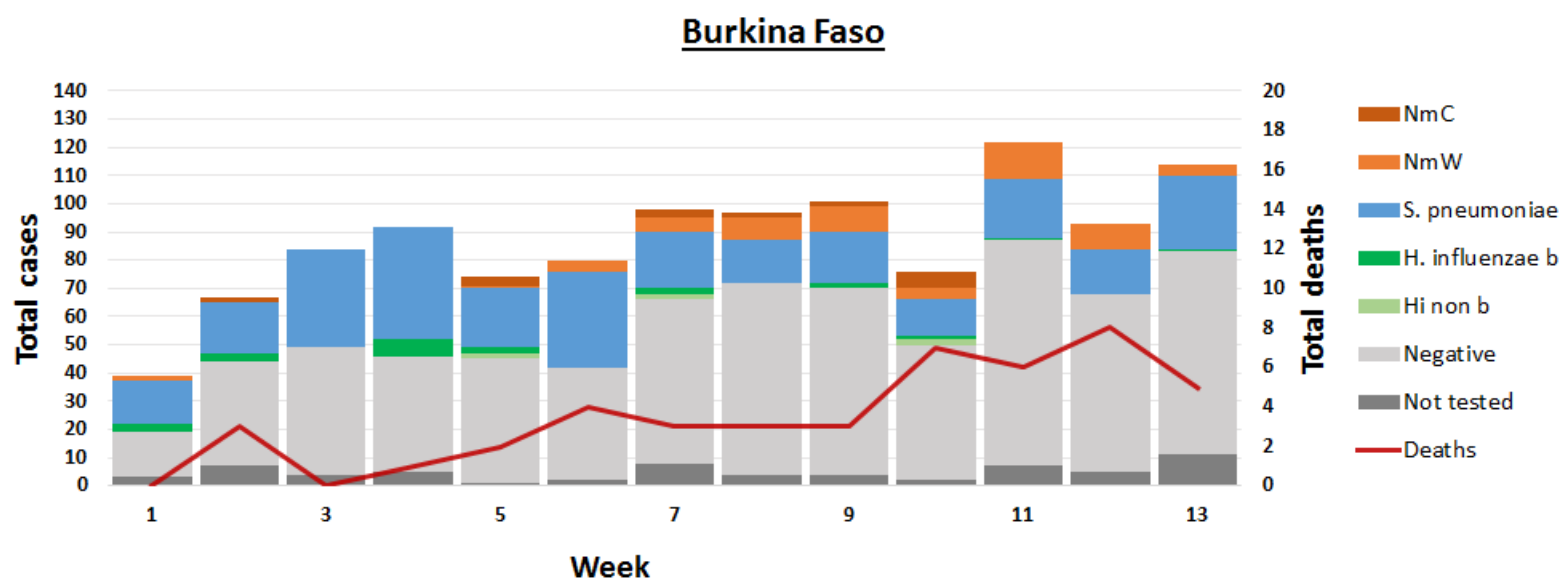
96% of specimens collected in MenAfriNet countries were tested by culture, PCR, Latex or a rapid diagnostic test. *S. pneumoniae* was the predominant pathogen (15%) followed by *N. meningitidis* serogroup C (14%).

Results	Burkina Faso	Mali	Niger	Tchad	Togo	MenAfriNet
	N (%)					
CSF collected	1,039 (97)	47 (94)	818 (94)	66 (100)	135 (99)	2,105 (96)
Gram Stain	548 (53)	47 (100)	90 (11)	47 (71)	121 (90)	853 (41)
CSF received at the NRL	863 (83)	43 (91)	818 (100)	66 (100)	123 (91)	1,913 (91)
CSF analyzed by a confirmatory test	974 (94)	47 (100)	799 (100)	66 (100)	124 (92)	2,029 (96)
Culture	265 (27)	42 (89)	0 (0)	64 (97)	119 (96)	490 (24)
PCR	794 (93)	40 (93)	818 (100)	65 (98)	77 (63)	1,794 (94)
Real-time PCR	794 (100)	40 (100)	818 (100)	65 (100)	0 (0)	1,717 (96)
Conventional	0 (0)	0 (0)	0 (0)	0 (0)	77 (100)	77 (4)
Latex	126 (13)	43 (91)	0 (0)	6 (9)	117 (94)	292 (14)
RDT	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Final Result						
<i>N. meningitidis</i>						
NmA	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
NmC	10 (1)	0 (0)	245 (30)	0 (0)	0 (0)	255 (14)
NmW	51 (6)	0 (0)	1 (0)	0 (0)	18 (23)	70 (4)
NmX	40 (5)	0 (0)	0 (0)	16 (24)	13 (17)	69 (4)
Nm ind	2 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (0)
<i>S. pneumoniae</i>	195 (24)	7 (16)	43 (5)	18 (27)	5 (6)	268 (15)
<i>H. influenzae</i>						
b	13 (2)	1 (2)	0 (0)	2 (3)	0 (0)	16 (1)
Non-b	3 (0)	0 (0)	1 (0)	1 (2)	0 (0)	8 (0)
Other germs	0 (0)	1 (2)	0 (0)	1 (2)	0 (0)	2 (0)
Negative§	484 (60)	31 (72)	528 (65)	28 (42)	41 (53)	1,112 (62)

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. Epidemic Curve, Week 1 - 13



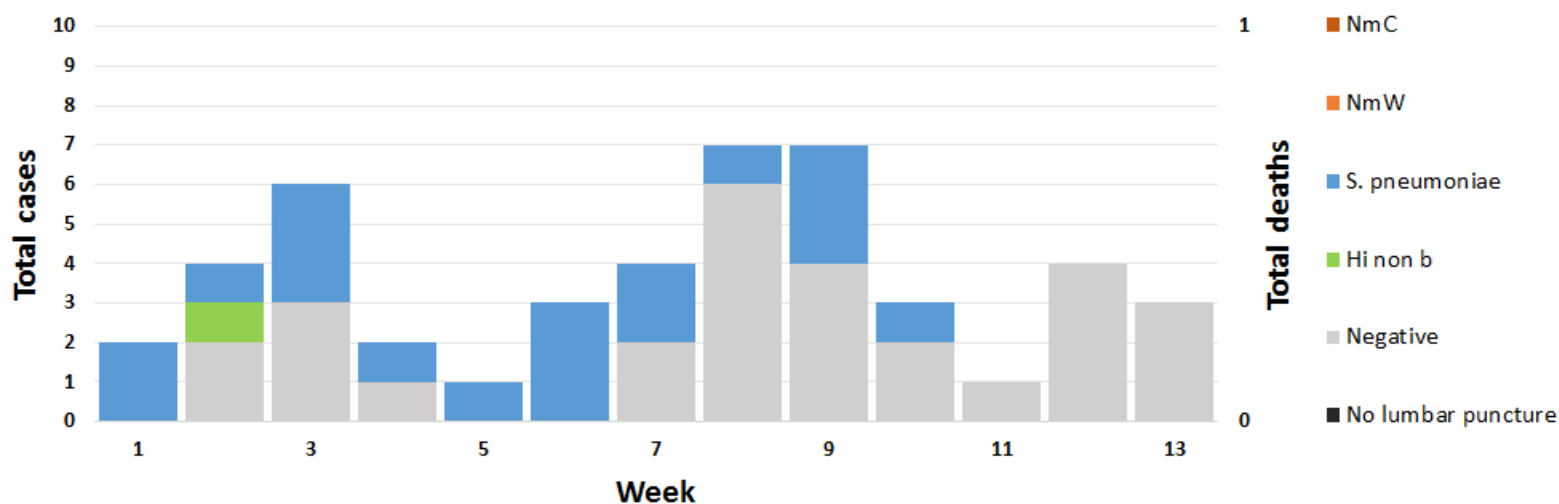
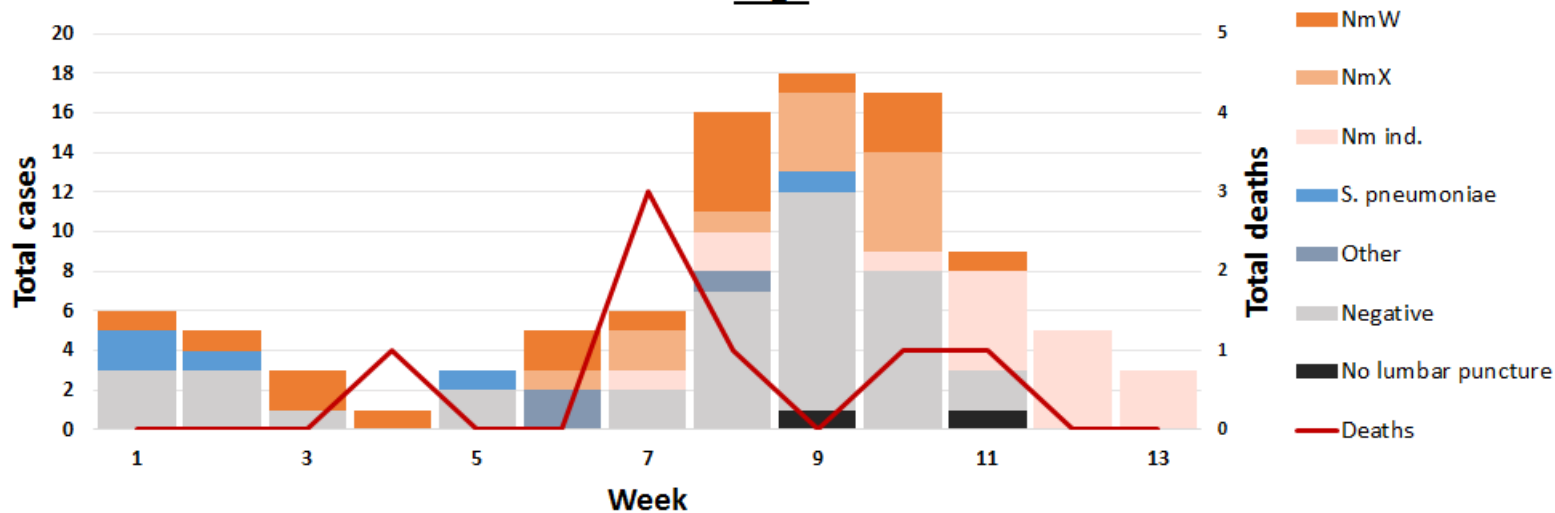
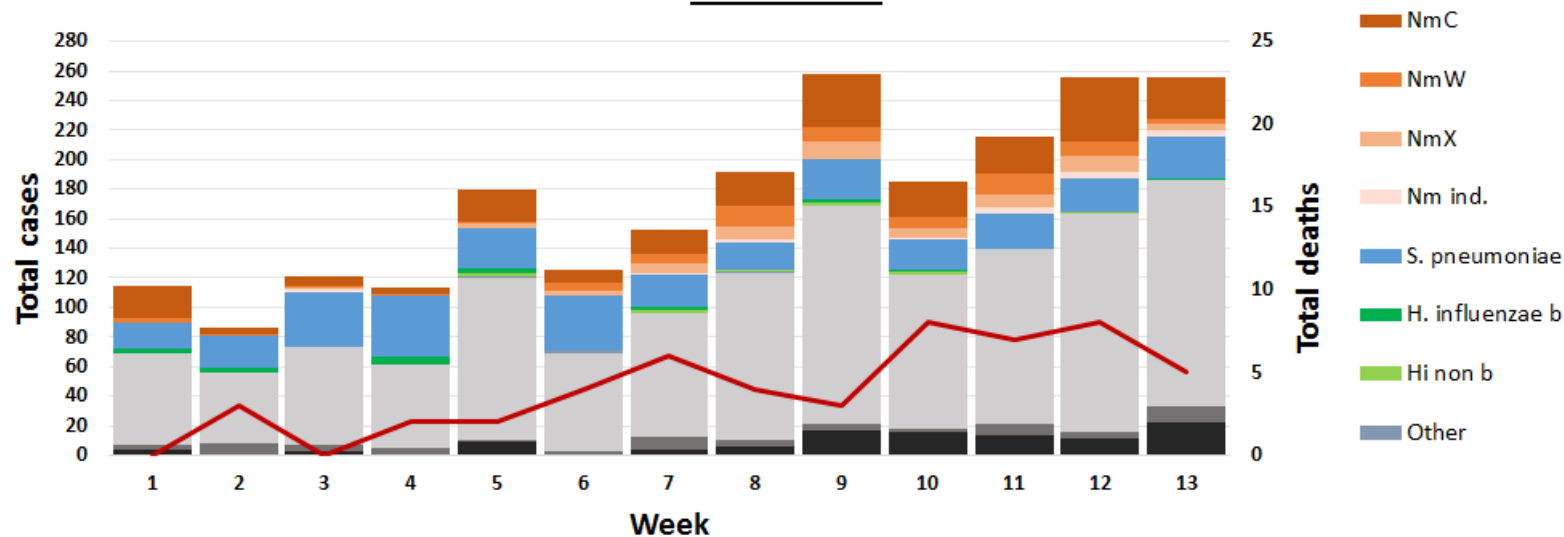
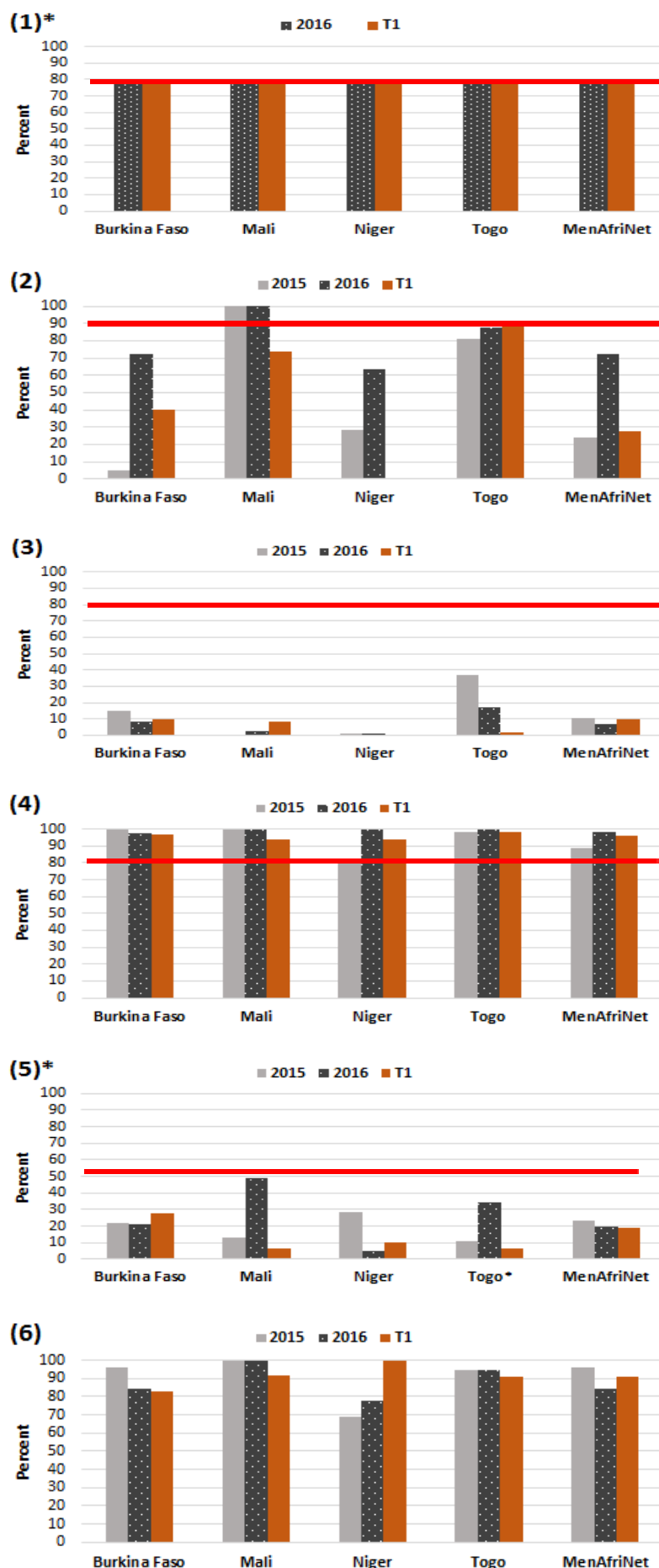
ChadTogoMenAfriNet

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

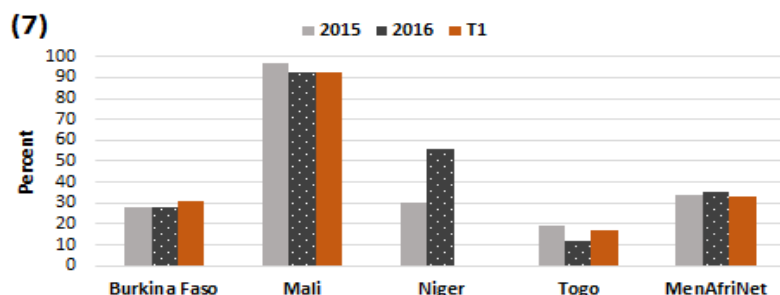
(5)* — Percentage of CSF specimen received at any lab in trans-isolate (T-I)

Threshold: > 50%

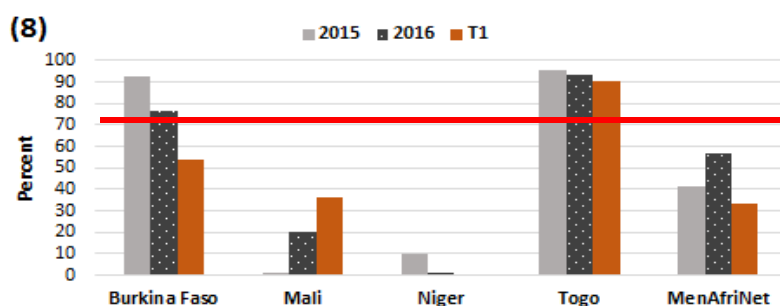
*Togo: the protocol does not require the use of TI for 3 of the 4 hospitals because of their proximity to the lab.

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

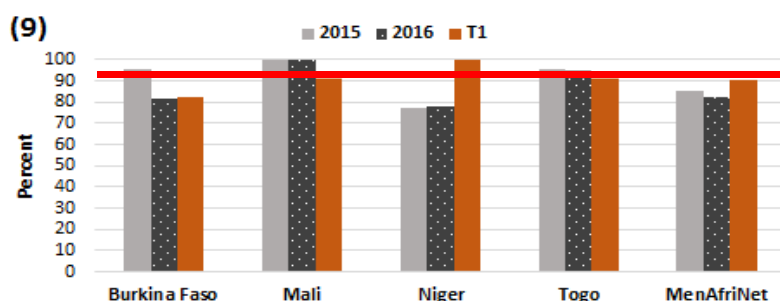
Threshold: > 70%



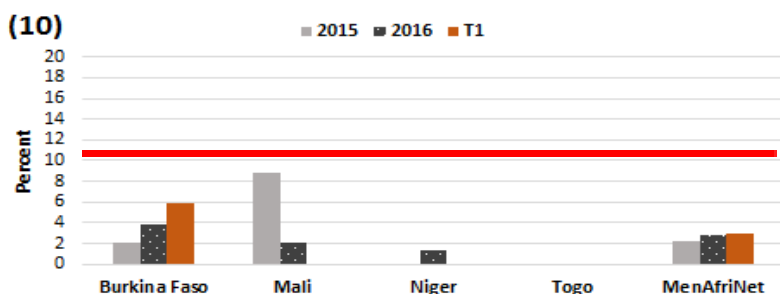
(7) — Percentage of cases with a delay of <7 days between CSF collection date and date CSF received at NRL
Threshold: > 50%



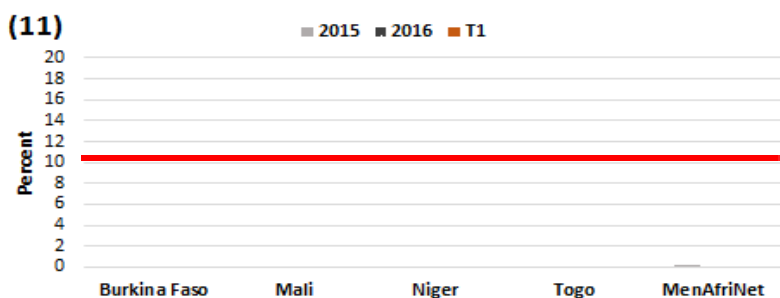
(8) — Percentage of CSF specimen tested at labs other than the NRL by a Gram stain test
Threshold: > 70%



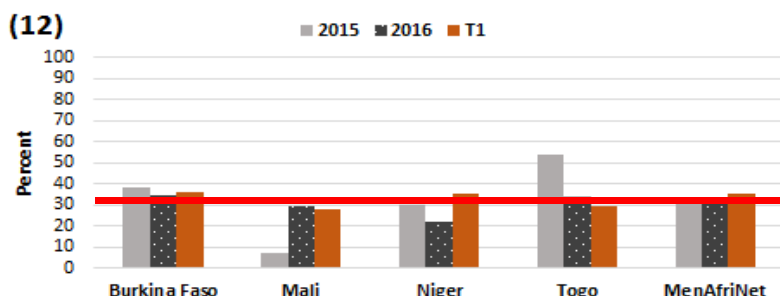
(9) — Percentage of CSF specimen received at the NRL and analyzed by a confirmatory test (culture, PCR, latex or rapid diagnostic test)
Threshold: > 90%



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



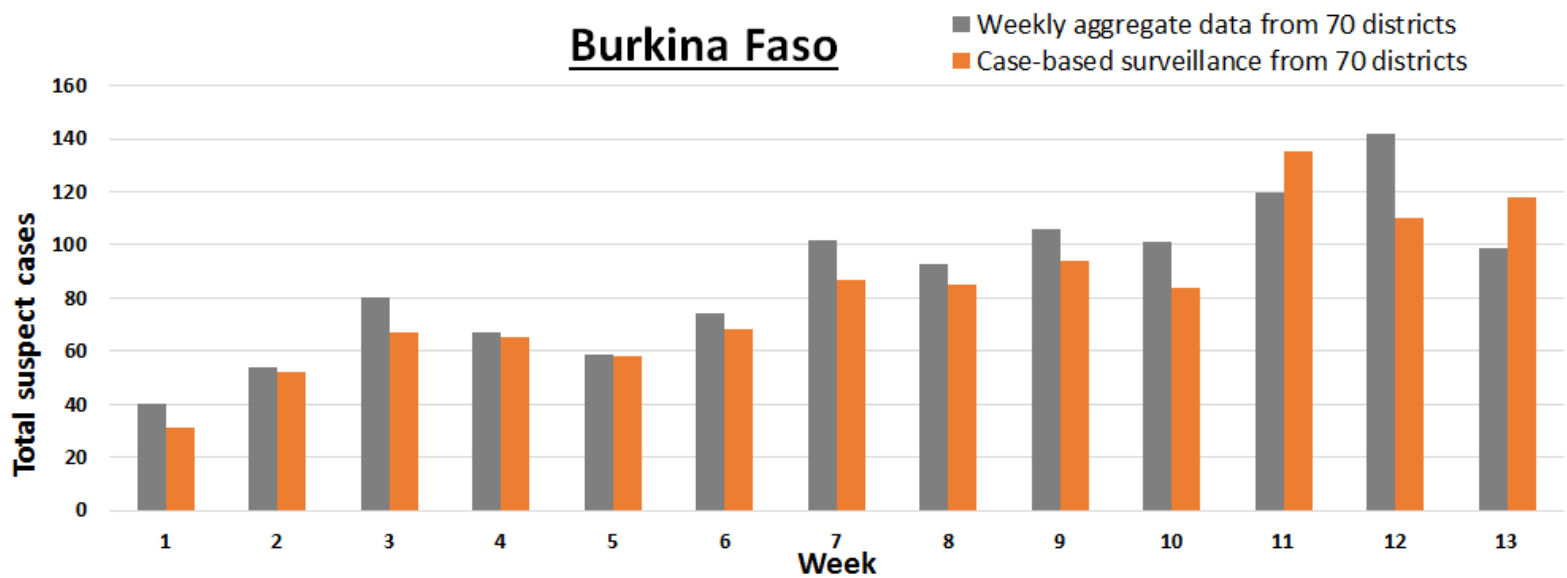
(11) — Percentage of CSF specimen contaminated for PCR procedure at the NRL
Threshold: < 10%



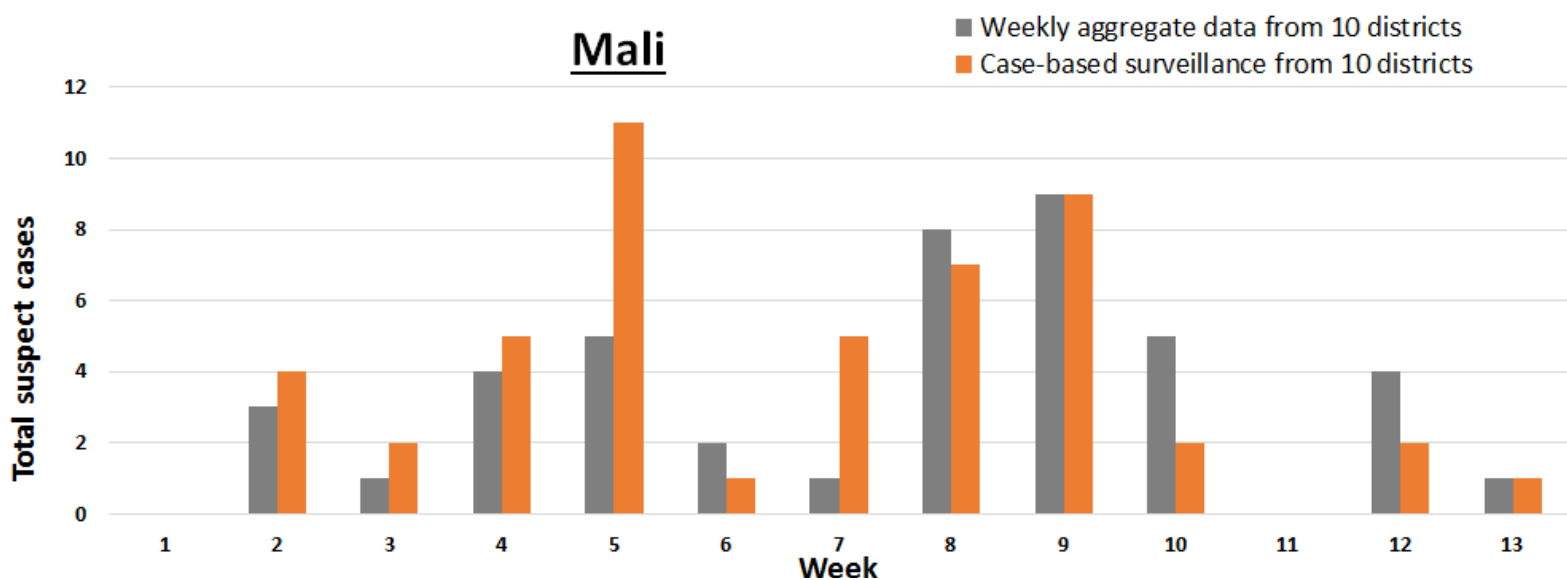
(12) — Percentage of CSF confirmed at the NRL for Hi, Sp and Nm and other pathogens
Threshold: > 30%

Figure 3. Comparison between aggregate reporting and case-based surveillance data from MenAfriNet supported districts, week 1 - 13

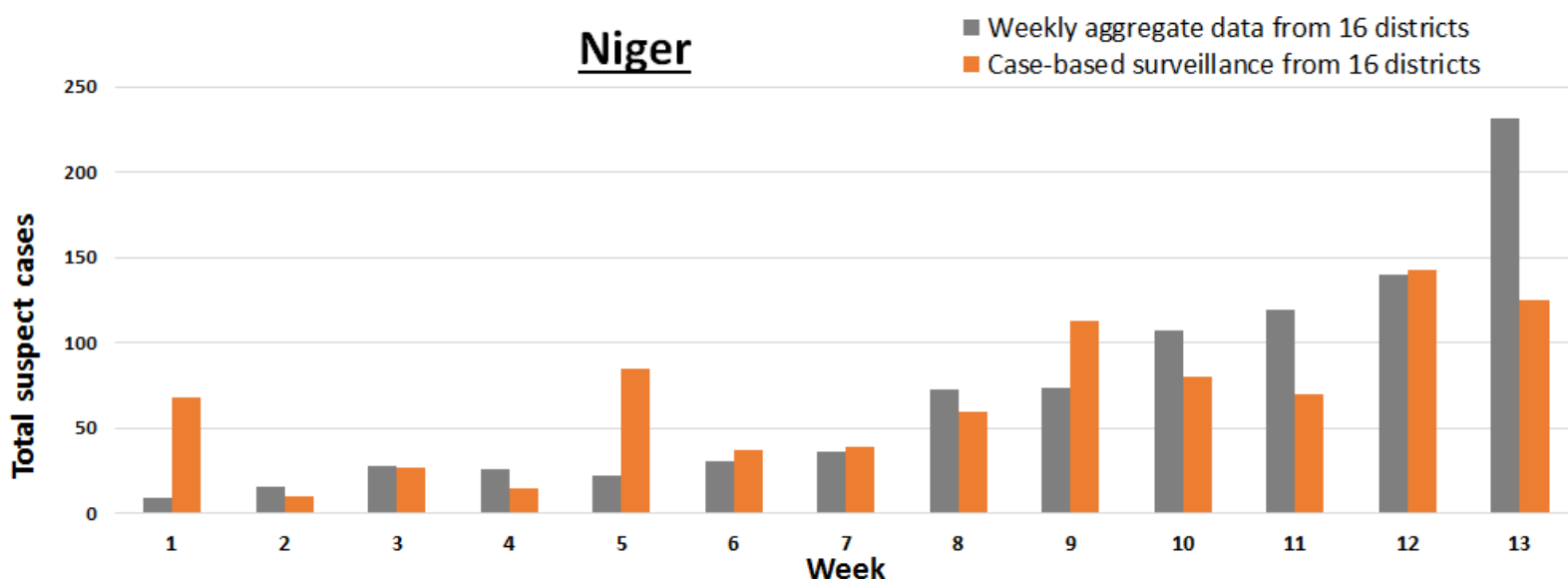
Burkina Faso

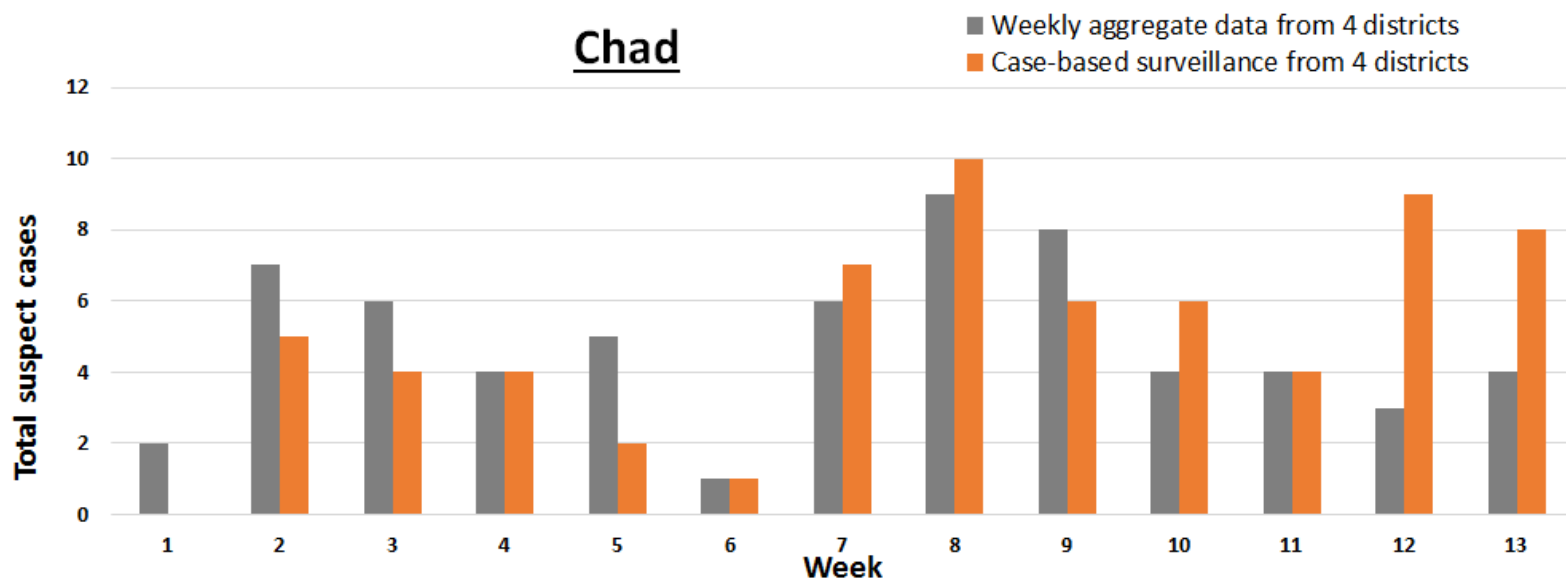
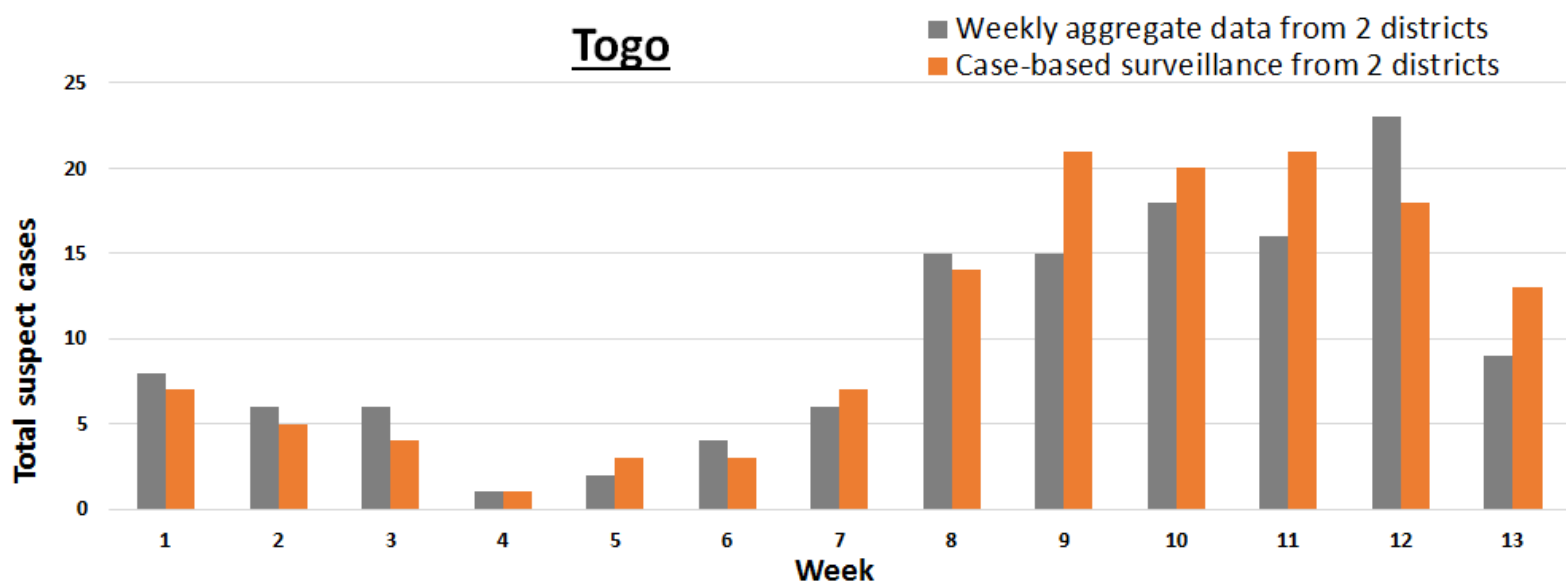


Mali



Niger



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