

**Epidemiological situation, weeks 27 - 39**

455 suspect cases were reported this quarter from MenAfriNet districts conducting case-based surveillance with the largest number of cases reported from Burkina Faso. CSF samples were collected from 97% of suspect cases and 2% of suspect cases were confirmed (see Table 1). National Reference laboratory data for Togo or Niger and all case-based data for Chad were not submitted in time for inclusion in this bulletin.

**Table 1. Epidemiological situation, weeks 27 - 39**

	Burkina Faso	Mali	Niger	Chad	Togo	MenAfriNet
Characteristics	N (%)					
<b>Demographics</b>						
Population under Surveillance	19,632,147	11,602,530	20,651,070	677,785	1,064,686	53,628,218
Districts submitting data†	42/70(60)	8/33(24)	2/72(3)	0/4(0)	11/35(31)	63/214(29)
Aggregate suspected cases	552	128	92	199	141	1112
MenAfriNet suspected cases	342	55	14	N/A	44	455
Deaths <sup>∞</sup>	5	1	1	N/A	0	7
<b>Laboratory</b>						
	N (% of suspected cases)					
CSF collected	342 (100)	54 (98)	14 (100)	N/A (0)	32 (73)	442 (97)
CSF received at NRL	100 (29)	46 (84)	N/A (N/A)	N/A (0)	N/A (N/A)	146 (57)
CSF analyzed by PCR or culture ‡	31 (9)	46 (84)	0 (0)	N/A (0)	18 (41)	95 (42)
CSF analyzed with gram stain	148 (43)	47 (85)	7 (50)	N/A (0)	24 (55)	226 (50)
Probable bacterial meningitis**	18 (5)	51 (93)	N/A (N/A)	N/A (0)	44 (100)	113 (25)
Confirmed bacterial meningitis	7 (2)	4 (7)	N/A (N/A)	N/A (0)	N/A (N/A)	11 (2)

**Abbreviation:** CSF, cerebrospinal fluid; NRL, National Reference Laboratory; PCR, Polymerase Chain Reaction (real-time)

† MenAfriNet districts submitting case-based data (denominator = Total number of MenAfriNet districts performing case-based surveillance)

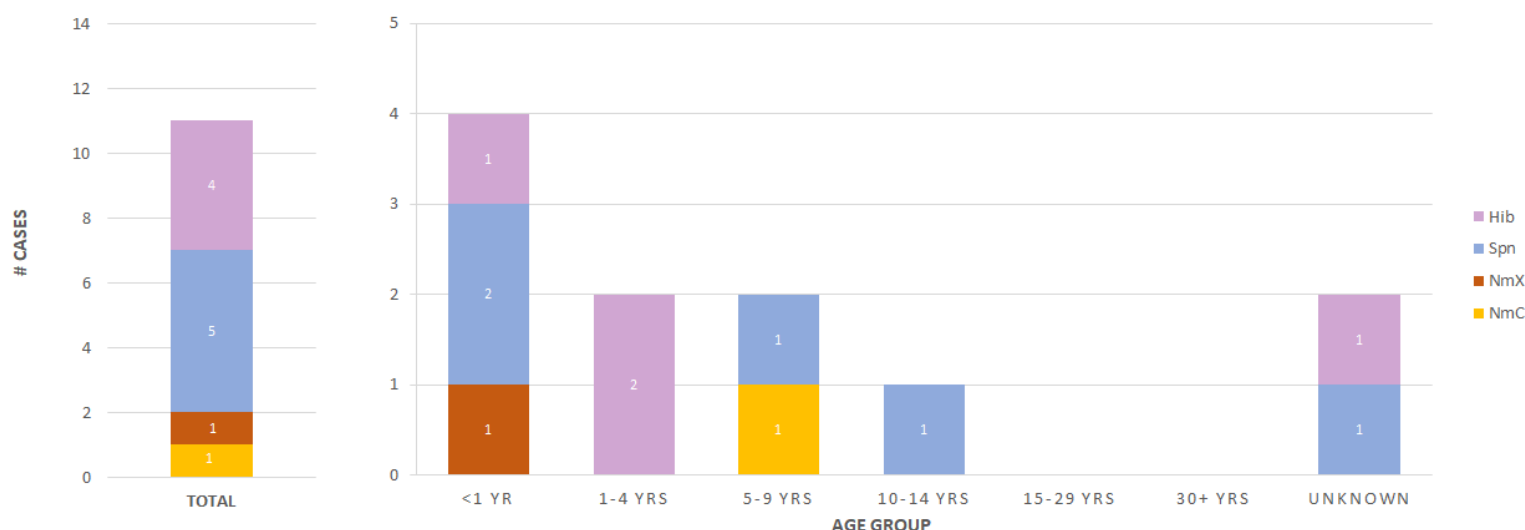
∞ Deaths listed as outcome in case-based data

‡ CSF analyzed by PCR or culture at any lab (district, regional, or national levels)

\*\* Tested negative for all pathogens and serogroups. Further details of probable meningitis cases can be found here (page 4): <https://apps.who.int/iris/bitstream/handle/10665/312141/9789290234241-eng.pdf>

**Meningitis pathogens**

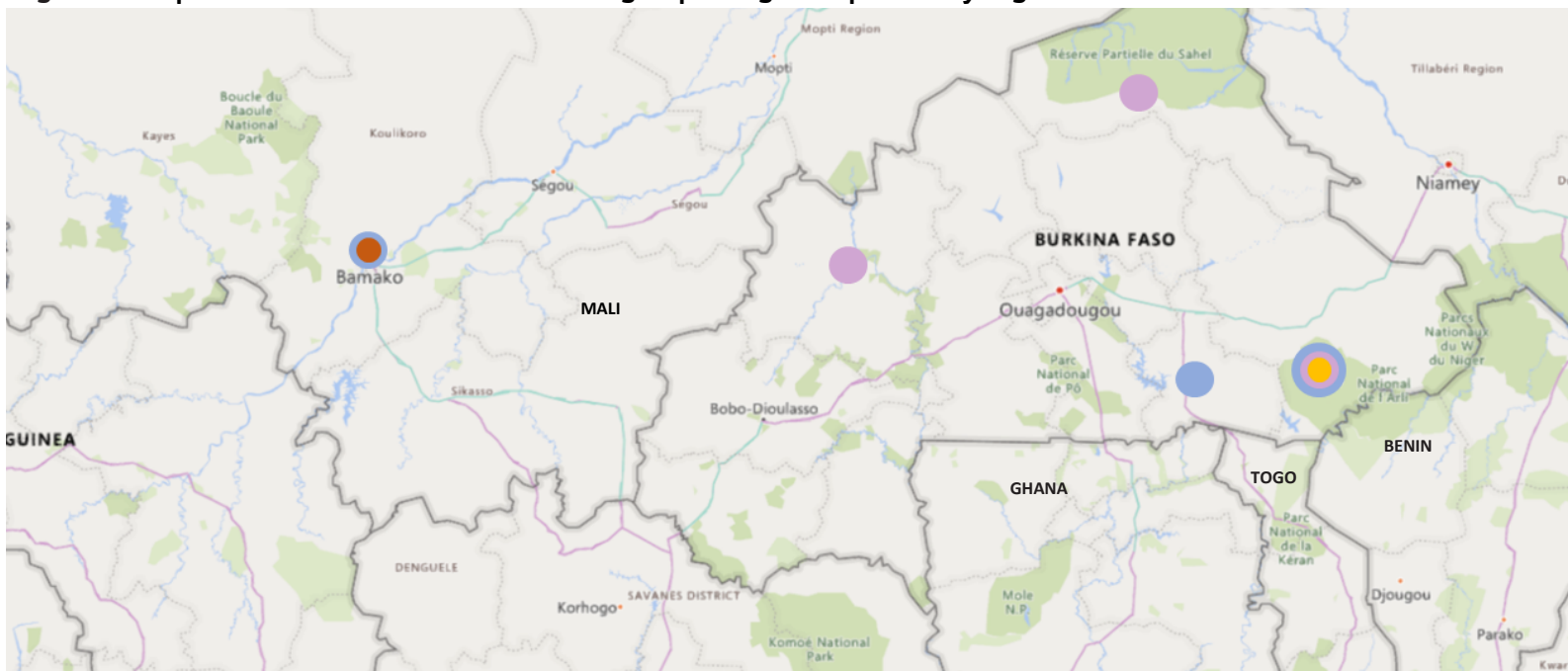
The leading reported causes of confirmed meningitis cases were *Streptococcus pneumoniae* and *Haemophilus influenzae B*, accounting for 82% of total confirmed cases. *Streptococcus pneumoniae* was most common in children less than 1 year old (see Figure 1).

**Figure 1. Meningitis pathogens by age group, weeks 27 - 39**

### ***Neisseria meningitidis* serogroup distribution**

*Neisseria meningitidis* C and X continue to be detected throughout the MenAfriNet countries with one case of NmX reported in Mali and one case of NmC in Burkina Faso. Zero *Neisseria meningitidis* A cases having been reported so far this season. *Streptococcus pneumoniae* remains the leading cause of confirmed bacterial meningitis.

**Figure 2. Map of all confirmed bacterial meningitis pathogens reported by region**



#### **Map Key:**

- *Neisseria meningitidis* C
- *Neisseria meningitidis* X
- *Haemophilus influenzae* B
- *Streptococcus pneumoniae*

\* Note: The size of circles is not reflective of number of cases and is used only to allow for visualization of multiple pathogens in the same geographic area.

### ***Streptococcus pneumoniae* serotype distribution**

To date 0% of the 5 reported *S. pneumoniae* cases had serotype results reported. Serotyping results have been delayed for this quarter of 2020 due to the COVID pandemic and insecurity.

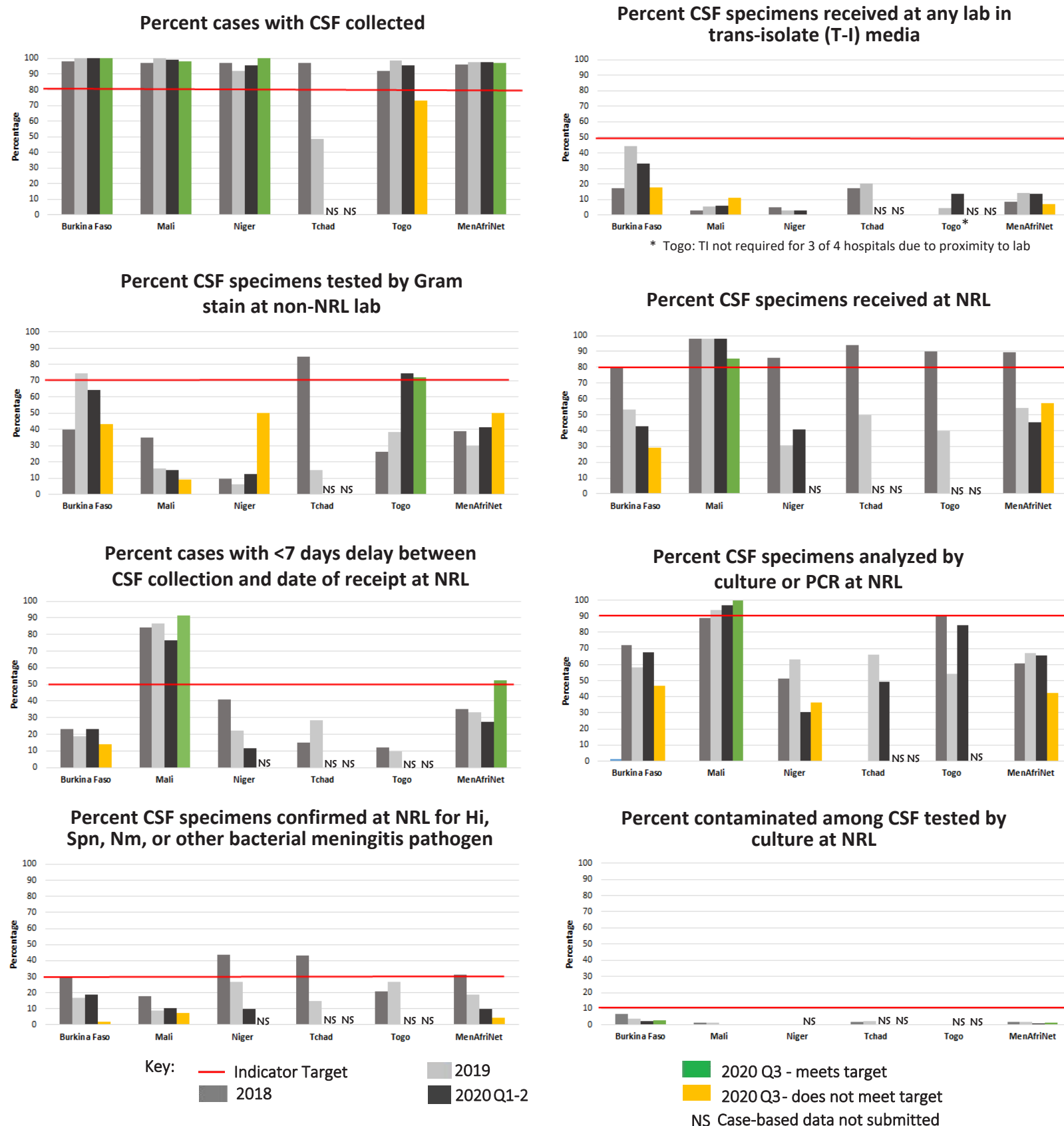
## **MenAfriNet Highlights, week 27 - 39**

- Due to the COVID-19 pandemic, bacterial meningitis surveillance, laboratory capacities, and data-related trainings of countries within the MenAfriNet Consortium have been negatively impacted. Case-based data in this bulletin, particularly laboratory data, are reflective of these impacts.

## MenAfriNet case-based surveillance performance indicators

- CSF collection rates remain high across y MenAfriNet countries with continued low contamination rates
- No data were received from Chad and there were significant missing laboratory data from Togo
- Of specimens collected for which data were submitted, 7% of specimens were received at the NRL
- The MenAfriNet Consortium aims to more deeply engage and support countries to improve quality of data

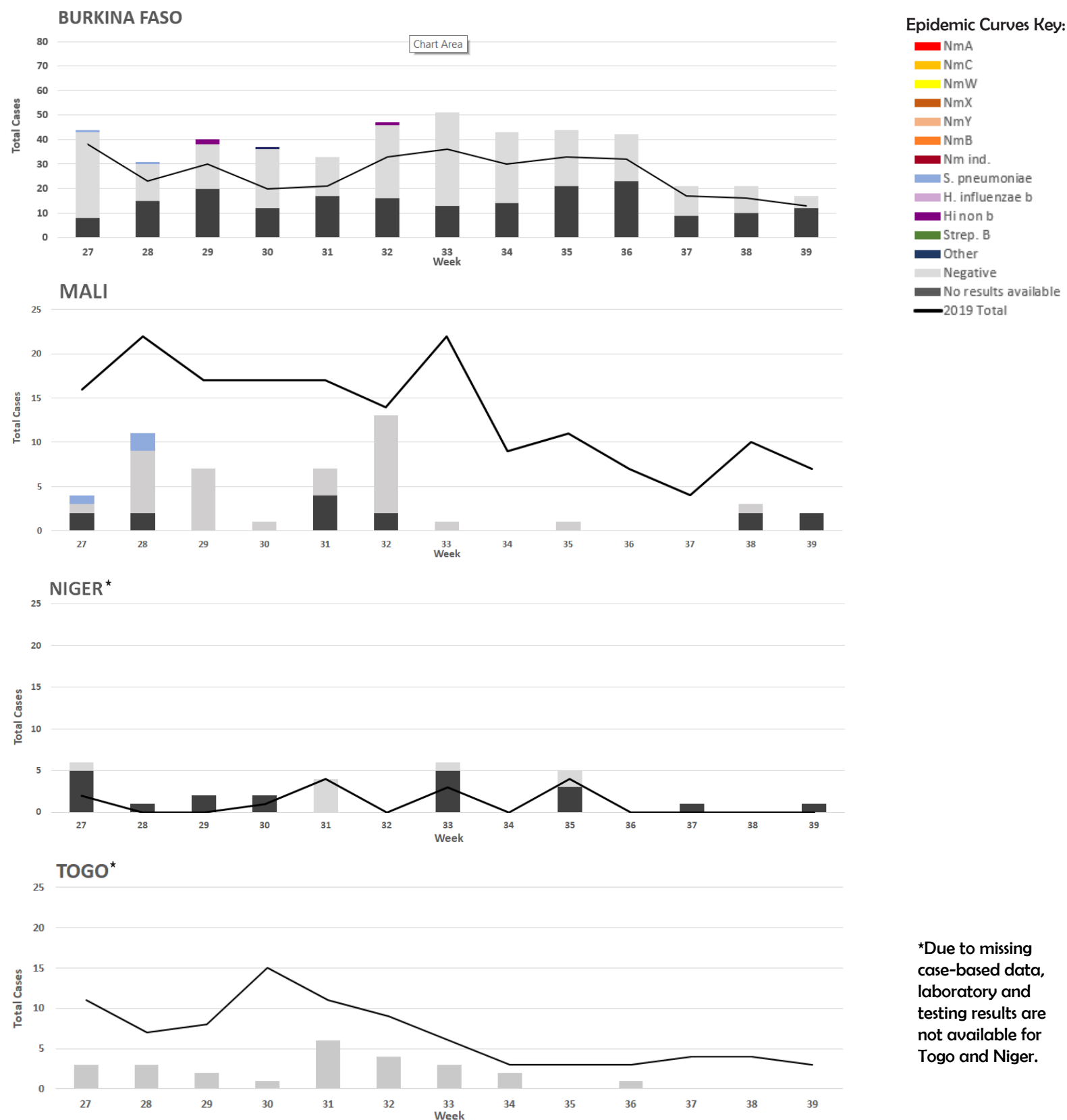
Figure 4. Quarterly Trends of Surveillance and Laboratory Performance Indicators



### Epidemiological trends over time

While a significant amount of case-based data were not submitted in time for this bulletin (likely due to the COVID-19 pandemic) resulting in challenges identifying trends, cases remained low in quarter three with totals similar to, or lower than, those reported in 2019. No data were submitted for Chad and significant Togo and Niger laboratory data are missing.

**Figure 5. Epidemic curves by country, weeks 27 - 39, 2020** (Note y-axes vary by country)



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