



MINISTRY OF HEALTH
AND SANITATION



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Sierra Leone

NEMS OPERATIONAL ACTIVITIES

MONTHLY REPORT: FEBRUARY 2022





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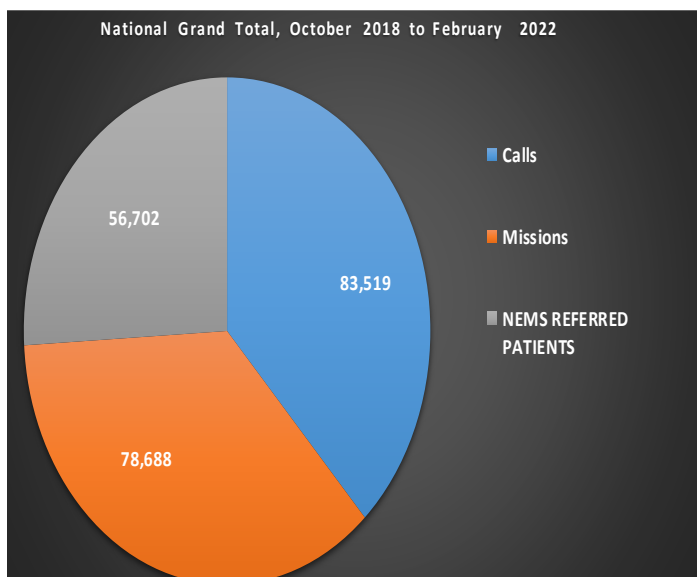


Brief description of NEMS Operational Services

Cumulative Number of Supported Indicators

The data collected from the NEMS database and the NEMS Referral Coordinators' database from **15th of October 2018 to the 28th of February 2022**, indicates that NEMS has accomplished over three (3) years of operations; delivering the following:

Cumulative total of **83,519 Calls**, **78,689 Missions** and **56,703 referrals**.



Distributions of the Ambulances

NEMS currently has **one hundred (100) ambulances** in operation nationwide. Each district has one ambulance allocated to the District Ambulance Supervisor (DAS) to serve as replacement in case an ambulance becomes inoperative, which summed to the total reported.

Ambulance Distributions	
District	Grand Total
BO	7
BOMBALI	6
BONTHE	5
FALABA	5
KAILAHUN	7
KAMBIA	5
KARENE	5
KENEMA	6
KOINADUGU	5
KONO	7
MOYAMBA	6
PORT LOKO	6
PUJEHUN	7
TONKOLILI	8
WESTERN AREA RURAL	7
WESTERN AREA URBAN	8
Grand Total	100

Km Travelled

In February, NEMS operated **about 35%** of the ambulances around the country; this includes both the DAS' allocated vehicles. They have travelled a cumulative total of **6,019,676 km**. Kambia emerged as the district with the highest KM travelled with 3302 **6,043 KM** covered.

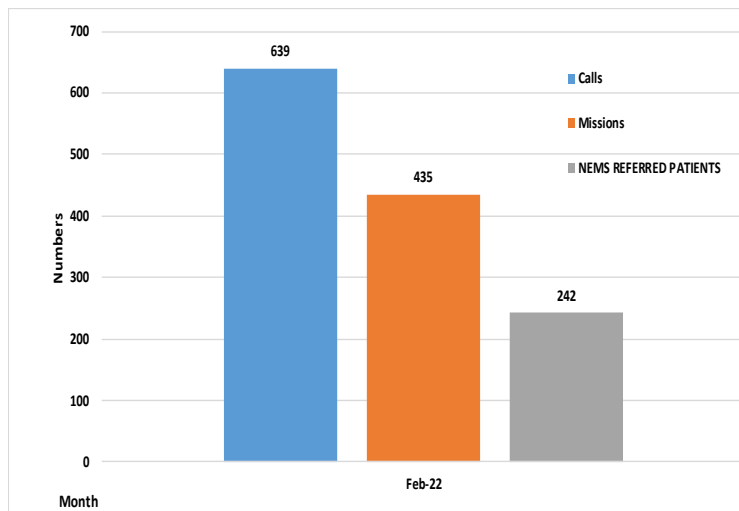
COVID-19 Response

The total number of **COVID-19** confirmed cases **referred by NEMS** in **February** 2022 is 0, with no suspected case reported. The cumulative figures since the COVID-19 outbreak in the country is **3,683 confirmed**, 258 **suspected**.



1. Overview of the Calls, Missions and Referrals

1.1.Fig1: *Calls, Missions and Referrals (February 2022)*



1.2.Table 1: *Cumulative and Percentage Trend of Calls, Missions, Referrals*

YEAR	MONTH	CALLS	Trend	MISSIONS	Trend	INCOMING REFERRALS	Trend
2022	Jan-22	942	-7%	686	-10%	426	-
2022	Feb-22	639	-19%	435	-22%	243	-27%
Total		1581		1121		669	
Grand Total		83519		78658		56703	

Table 1 above gives a comparative percentage trend analysis for the three (3) major indicators (i.e., **Calls, Missions, and Incoming Referrals**) by NEMS for the month of January and February 2022. The cumulative grand total for **Calls 83,519, Missions 78,658 and Incoming Referrals 56,703**.

The graph above displays the trend at which **Calls, Missions and Incoming Referrals** are supported by NEMS in the month of February.

It is observed that there is a decline in Calls by –19%, Missions by 22% and Incoming Referrals by 27%.

For the period under review, **639 Call, 435 Missions, and 243 Incoming Referrals** were supported.

1.3.Table 2: *NEMS Daily Activities Averages*

Daily Operations	Calls	Missions	Incoming Referrals
Jan-22	30	27	28
Feb-22	23	16	9

Table 2 shows the average daily Calls, Missions and Incoming Referrals.



Calls Analysis

2.0.Figure 2: Classifications of Calls

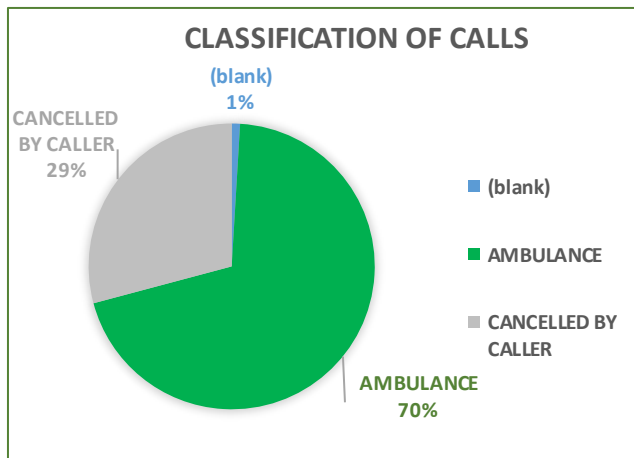


Figure 2 outlines the classification of Calls as they are received at the NEMS Call Center . The call center operators received a cumulative total of 639 Calls with 446 (70%) requiring ambulance, 186 (29%) cancelled by caller due to factors from the callers end e.g. poor mobile network, about 1% as blank call.

2.1.Figure 3: Breakdown of Calls by District

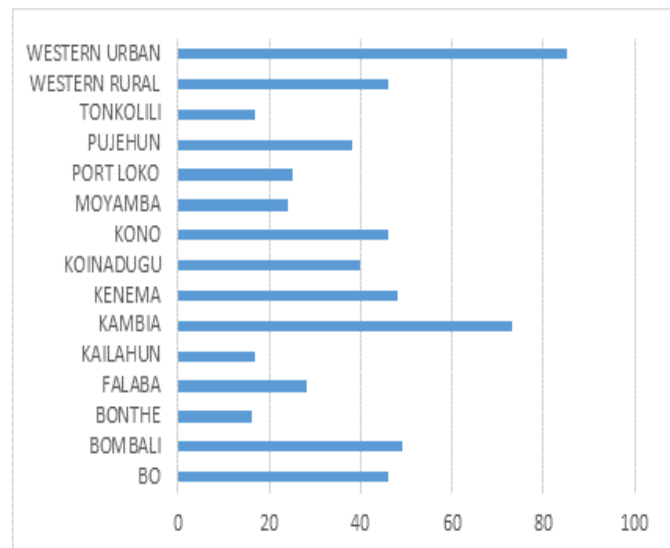


Figure 3 shows the breakdown of Calls by district . Western Area Urban and Kambia reports the highest number of calls received – 85 and 73 respectively. Bonthe records the lowest number of calls with 16 calls followed by Kailahun with the 2nd lowest at 17 calls.

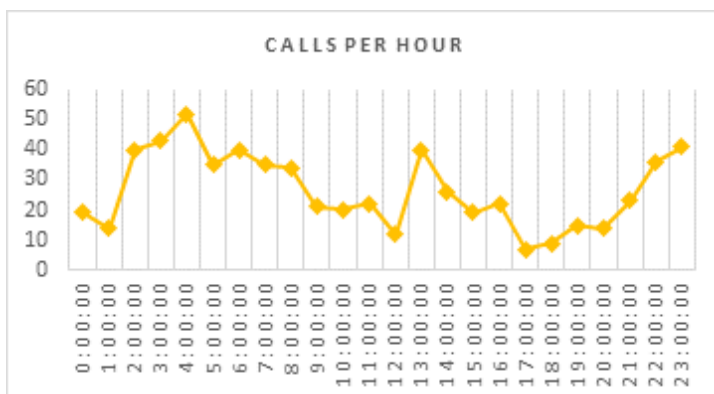
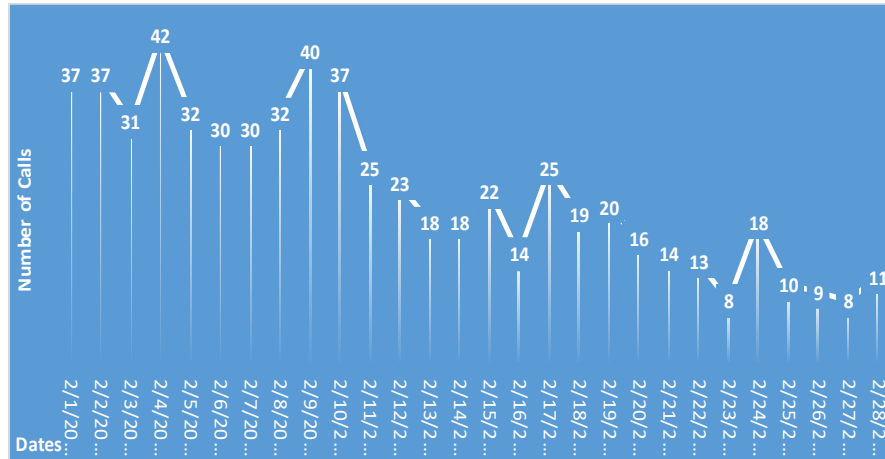


Figure 4 is a line graph that describes the number of calls received at NEMS operation center on an hourly base. The chart adjacent this narrative shows that, there was a surge in the number of calls received between the hours of 02:00 hours and 08:00hrs GMT. The operation center recorded its climax calls at around 04:00hrs GMT.



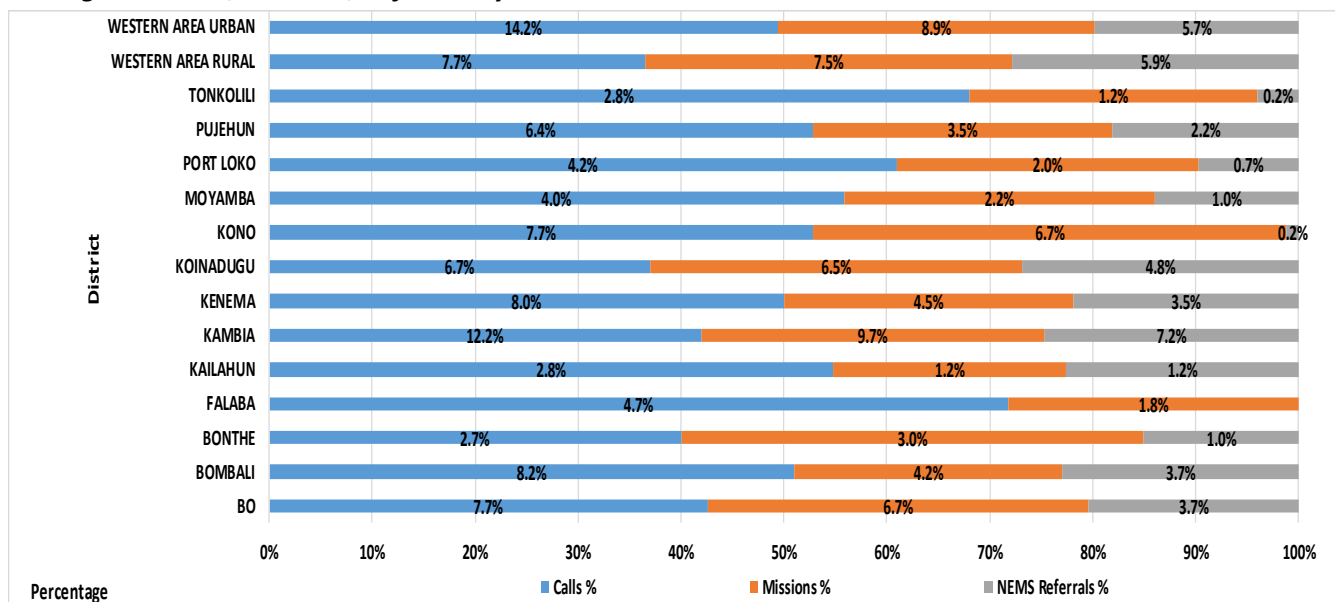
2.3. Figure 6: Number of Calls per Day



The chart demonstrates the trend of incoming calls to the NEMS call centre per day.

The least number of calls were recorded on the 23rd with 8 calls, and the highest recorded on the 4th with 42 calls.

2.4. Figure 7: Calls, Missions, Referrals by District



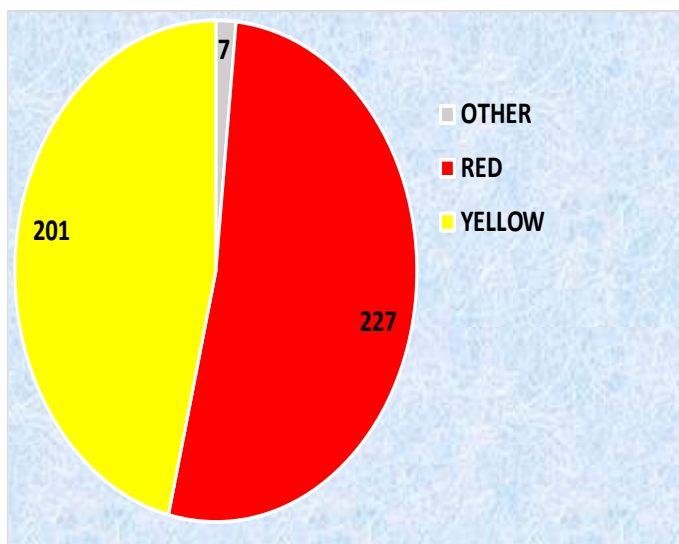
The bar chart above demonstrates the percentage of Calls, Missions and Incoming Referrals supported by NEMS per district in the month of February. On Calls, Western Area Urban recorded the highest percentage with 14.2% and Bonthe with the lowest 2.7%.

For Missions, Kambia—13.9% reported the majority of the missions undertaken, and Bonthe the lowest with 1.7%. For Incoming Referrals, Kambia reported 17.6% at its highest and Tonkolili and Kono recorded the lowest with 0.4% each. However Falaba had no referral for the month of February.



Chapter 3 -Missions

3.0.Figure 8: Categories of NEMS Missions



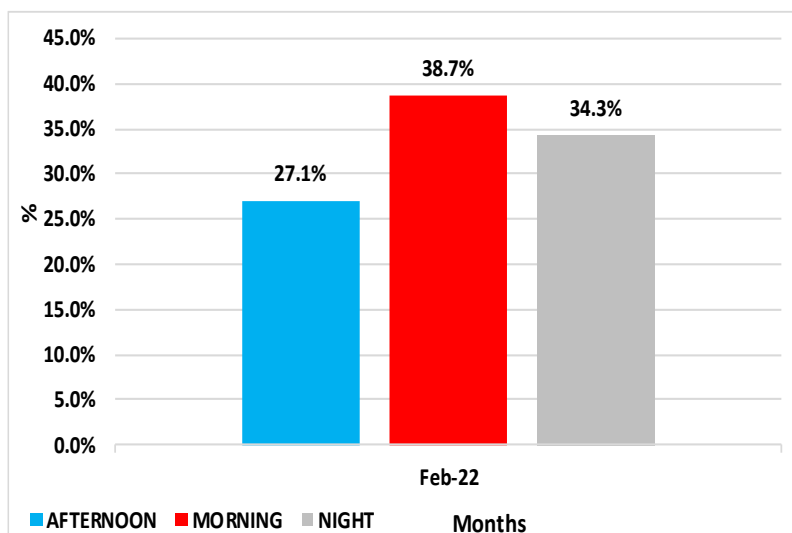
The chart **figure 8** gives an insight on how calls are categorized to determine a mission. The severity of the patient's condition has three major categories, with an additional color 'Other' (Red, Yellow and Green). A patient assessment (Triage) is done to determine the severity of the condition; separating the stable patient from the severely ill and then prioritize available resources. NEMS utilizes the triage process to determine whether the patient's condition matches the threshold of an emergency and dispatch an ambulance thereafter. A NEMS mission can be activated, and an ambulance dispatched if the condition of the patient matches the severity criteria for Yellow and/or Red. The color code Green and other are ascribed when the patient's condition does not match the threshold and incomplete information is shared with call center, for the operator to activate a mission and dispatch ambulance.

In this month's review, a total of 639 calls were received, out of which 435 were considered to be a missions, and 7 did not meet the requirement for emergency.

The 'time of the day' is a measure of the time of the call that activates a mission. The diagram labelled Figure 9 demonstrates the percentage of missions undertaken in the morning (i.e., from 8 am to 2 pm), afternoon (from 2 pm to 8 pm) and night (from 8 pm to 8 am) comparing the daily percentages for the month of February:

Figure 9 displays a comparative percentage analysis for the day. A significant number of missions were undertaken during morning hours, with 38.7%, while 34.3% were done at night. The least percentage of missions were done during the day, with 27.1%.

3.1.Figure 9: Time of the day of the Missions





3.2. Figure 10: Comparative Analysis of NEMS Mission's complaints for the Previous month (January) to Current month February

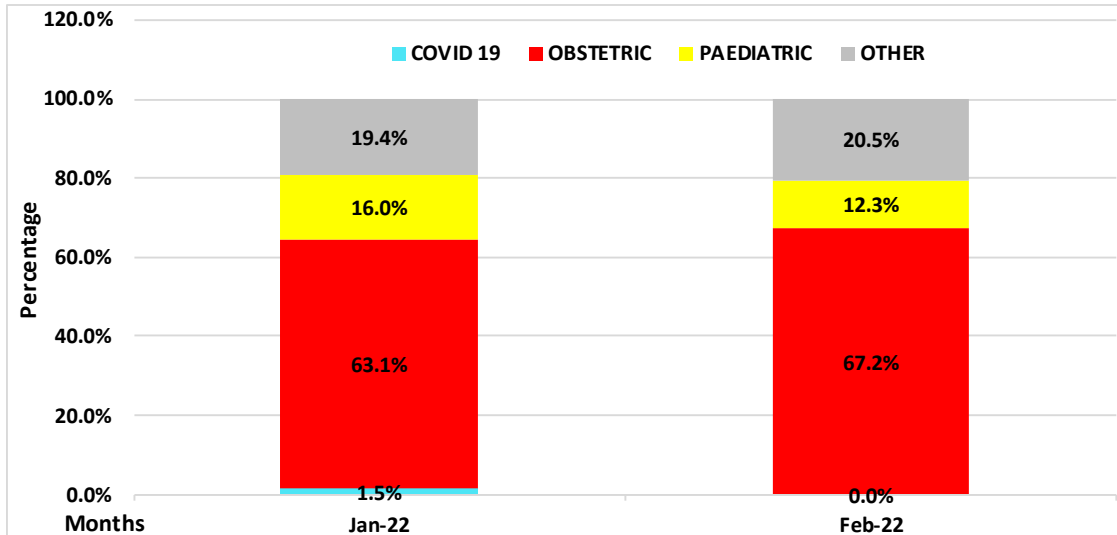


Figure 10 represents the major categories of complaints of the missions comparing **January and February 2022** data. The data for COVID-19 missions is 0 for both suspected and confirmed cases. It is visible that Obstetric cases are the majority of the missions transported to the various health facilities.

The indicator 'Other' is a combination of other complaints, such as Abdominal Pain, Animal Bite, Breathing, Burns, Chest Pain, Consciousness, Covid-19, Road Accident, Seizures, Trauma and etc. Between the months of **January and February**, there is a 1.1% increase in other cases. For Obstetric, there is an increase of 4.1% from the previous month, and for Paediatric a 3.7% increase. For Covid-19, there is a 1.5% decrease.

3.3. Figure 11: Typology of complaints that lead to Missions

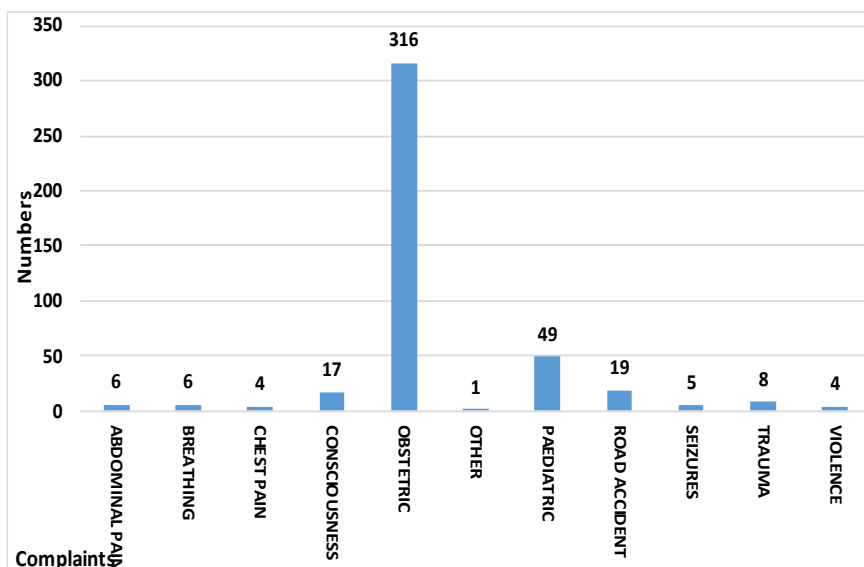
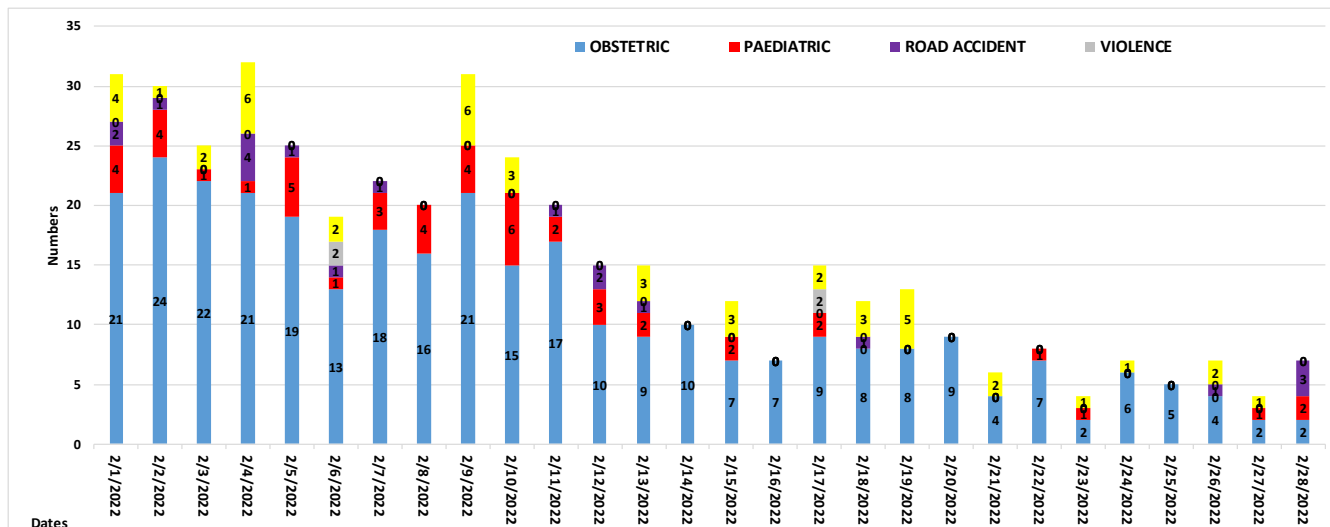


Figure 11 provides a detailed breakdown of the number of complaints received that are considered as missions. It is evidently clear that obstetric (316) complaints were the most occurring, seconded by Paediatric (49), while Chest Pain (4), Violence (4) and Other (1) cases happens to be the least complaints received for the month under review.



3.4. Figure 12: Trend of Missions complaints by day

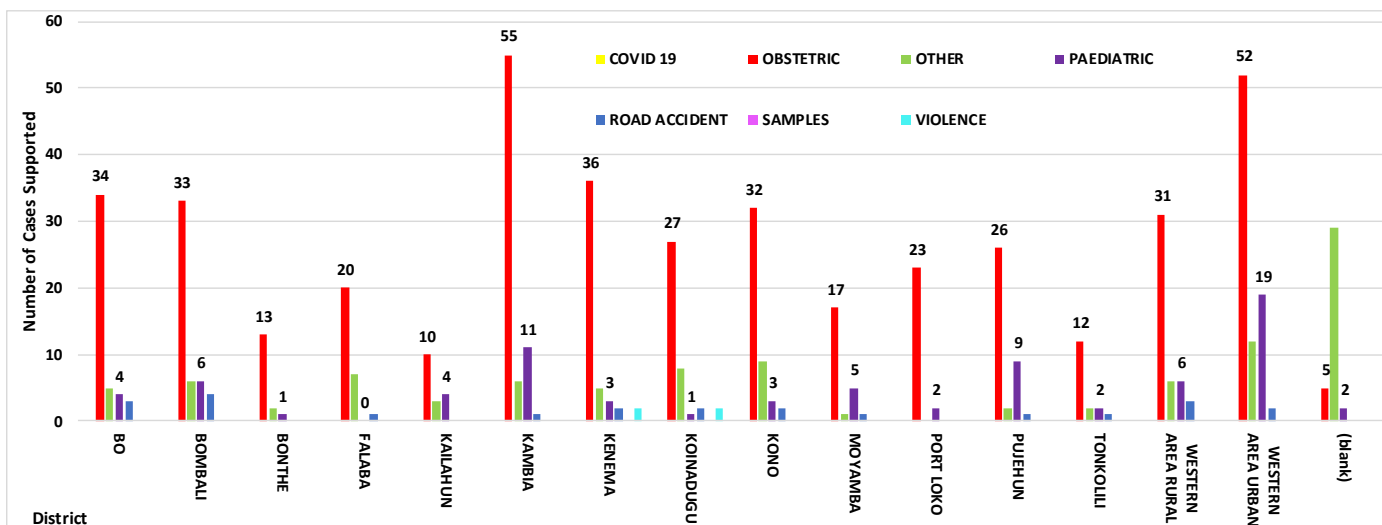


The data displayed in the stacked column chart labelled figure 12 above gives a further breakdown on the number of complaints per day and the trend at which complaints that lead to missions are reported for the month of February 2022.

The chart showed a positive increase on the number of complaints for each day, with a sharp drop on the 23rd and 27th. As displayed on the diagram above, Obstetric happens every other day and Paediatric happens every other day, while 'Other' cases third the chart.

There are no Covid 19 complaints. A few numbers of violence complaints were received on the 6th of the month.

3.5. Figure 13: Missions Complaints by District



The chart above is a supplementary analysis on complaints with an in-depth description for the various categories of complaints by district for the month of February 2022. This figure does not only justified figure 3, but also that of figure 10 as western Area Urban reports the highest number of missions recording a massive number of obstetric complaints.



3.6. Figure 14: Number of Calls, Missions and Referrals Supported per Day

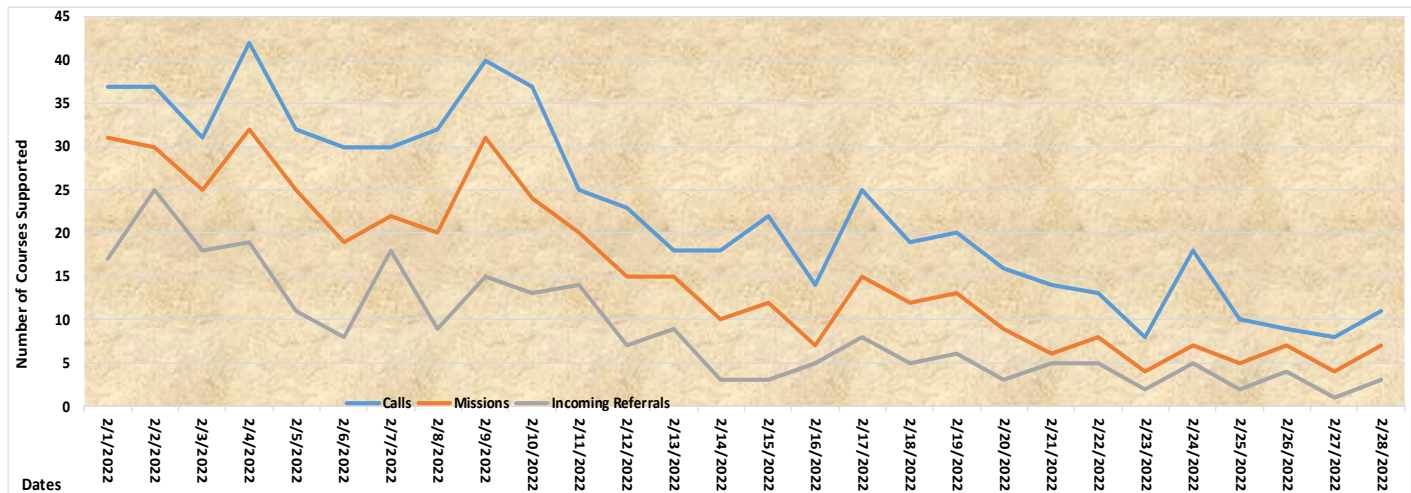


Figure 14 is a line chart that shows the number of Calls received, missions carried out, and referrals managed per day by NEMS. Throughout February, the indicators fluctuated. The average call were 23, Missions is 16 and referrals 9 for the month under review.

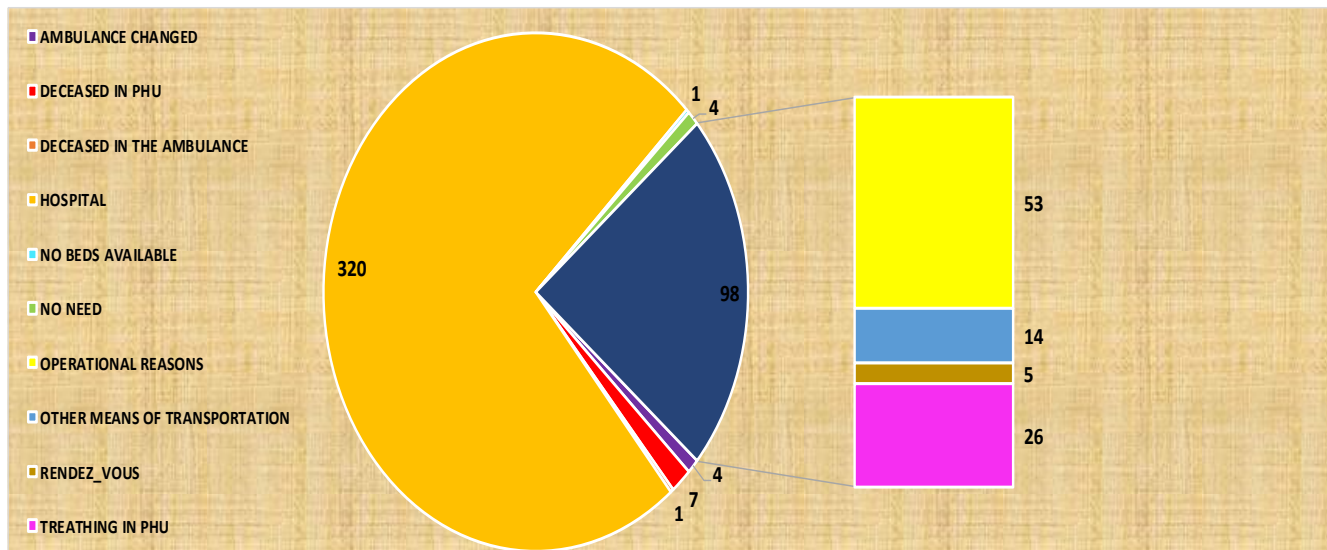


Figure 15 shows the outcome of missions carried out by NEMS in February 2022.

'Hospital' refers to mission lead referrals to a pre-identified health facility (Hospital). Referencing the data displayed in the pie chart above shows that (320) 73.6% of the missions leads referrals to a pre-identified specialist health facility. Compared to January 89.2% of the missions were referred to a pre-identified specialist health facility. This indicates a drop in the referrals from January to that of February 2022.



3.8. Table 4: Missions Outcome and the Reasons why missions are aborted

INDICATORS	ABORTED	DECEASED	HOSPITAL	NO NEED	RENDEZ_VOUS	Grand Total
AMBULANCE CHANGED	2	0	1	0	1	4
DECEASED IN PHU	0	7	0	0	0	7
DECEASED IN THE AMBULANCE	0	1	0	0	0	1
HOSPITAL	0	0	320	0	0	320
NO BEDS AVAILABLE	1	0	0	0	0	1
NO NEED	1	0	0	3	0	4
OPERATIONAL REASONS	53	0	0	0	0	53
OTHER MEANS OF TRANSPORTATION	14	0	0	0	0	14
RENDEZ_VOUS	0	0	0	0	5	5
TREATING IN PHU	26	0	0	0	0	26
Grand Total	97	8	321	3	6	435

Table 4 above serves as a supplementary analysis to the pie chart above showing the outcomes of missions for the month under review.

'Aborted', The February 2022 data shows that out of the 435 missions undertaken, 22.3% of those missions were cancelled before or after the arrival of the NEMS ambulance team at the Peripheral Health Unit. For a mission to be cancelled, there are diverse reasons, and these could be any of the following:

- ♦ 'Ambulance Changed' - the data reveals that out of 52 missions aborted, 2 (2.1%) of the aborted missions were due to 'ambulance changed',
- ♦ 'Deceased' – this mission outcome refers to death before the arrival of the NEMS ambulance team. February 2022 data shows that (8) of the mission were cancelled because the patient died. Out of the 8 missions cancelled, 7 of those aborted mission occurred because the patients passed away in the PHU and 1 of the missions was aborted because the patient passed away in the ambulance.
- ♦ 'Operational reasons' - this type of mission outcome has strong correlation with the ambulance technical problems. The table above shows that 53 (54.6%) of the aborted missions occurred because of technical problems with the ambulances in the month of February compared to January with 5.8% of aborted missions relating to 'operational reasons'
- ♦ 'Other Means of transportation' – refers to a situation where the patients or families of the patient decides to employ other medium of transportation after requesting for an ambulance. The February data shows that 14 (14.4) of the aborted missions occurred because the patients used other means of transportation.
- ♦ 'Treated at the PHUs' refers to a situation where either the PHU personnel or the ambulance team managed the emergency at the PHU level, with 26 (26.8%).
- ♦ 'Other reasons' includes 'no-need' of the ambulance (1).
- ♦ 'Rendezvous' has been used to describe situations that may require more than one ambulance to complete a mission. The NEMS data for February shows that 'Rendezvous' was used to accomplish 0 (0%) mission out of 435 mission outcomes compared to January that was 12 (1.8%).



Chapter– 4 BEDS

Facility	Adult Bed Capacity	% Average Bed Occupancy per Month	Maternity Bed Capacity	% Average Bed Occupancy per Month	Pediatric Bed Capacity	% Average Bed Occupancy per Month
Bo Government Hospital	139	44	54	71	72	73
Makeni Government Hospital	95	44	27	81	41	84
Matru UBC Hospital	36	41	12	80	19	67
Connaught Government Hospital	235	46	0		24	57
Kailahun Government Hospital	38	58	37	53	42	43
Kambia Government Hospital	49	72	0	0	35	56
Kenema Government Hospital	118	55	41	70	63	63
Kabala Government Hospital	49	39	37	47	55	38
Koidu Government Hospital	74	93	36	83	57	104
Lungi Government Hospital	40	37	20	45	20	39
Moyamba Government Hospital	48	18	24	32	39	56
Ola Doring Children Hospital	0		0		131	94
Princess Christian Maternity Hospital	0		115	88	18	
Port Loko Government Hospital	65	31	35	42	20	75
Pujehun Government Hospital	41	35	34	96	24	80
Tonkolilli Government Hospital	49	25	40	51	72	58
34M Military Hospital	82	91	22	50	10	81
King Harman Road Government Hospital	4	34	17	56	15	61
Rokupa Government Hospital	19	59	21	63	26	77
Lumley Government Hospital	12	0	10	0	4	0
Macaulay Government Hospital	12	34	10	39	4	33
Emergency Memorial Hospital	31	90	0	0	36	92
Total National Bed Capacity	1236	946	592	1045	827	1329

The tabular representation labelled table 5 above, provides further breakdown on the bed capacity and the percentage average for the different facilities.

From the tabular presentation, Connaught Hospital does not directly provide care to pregnant women with maternal related complaints and there is no specific department to handle pregnancy related complaints. Ola Doring Children's Hospital (ODCH), is a specialized children hospital providing care to sick children, while Princess Christian Maternity Hospital (PCMH), located adjacent ODCH with the purpose to support and address maternity related issues.

- ♦ The Special Care Baby Unit SCBU beds available at PCMH and ODCH are not counted in determining the bed capacity of the facility, which is the same for the other district or tertiary hospitals nationwide.
- ♦ These beds serve a different purpose from the others. Nationwide, all district and tertiary hospitals have a total of 2,655 beds, which has decreased from its usual 2,672 useable beds.
- ♦ There are currently no referrals for admission to Lumley government hospitals and Kambia Maternal wing because they are currently undergoing rehabilitation. However, there is a provision for consultation available only for emergency cases that can be further referred if required.
- ♦ **Emergency Memorial Hospital** provides specialist care to patients requiring surgical care and cannot do so for maternity related complications.
- ♦ All other facilities listed in the table above provide care and has space for the various department listed in the table.
- ♦ **Adult Occupancy:** for the adult bed capacity, no facilities reported overcrowding in the month of **February**, while Koidu, Emergency, and 34M Government Hospital recorded over 80% average occupancy.
- ♦ **Maternity Occupancy:** the table shows that no facility reported overcrowding as previously recorded, while the highest percentage average is from Pujehun Government Hospital—96%.
- ♦ **Paediatric Occupancy:** Koidu Government Hospitals reports 104% average bed capacity for February, while all other facilities registered less than that.



4.1. Figure 15: National Percentage Bed Occupancy by Depart-

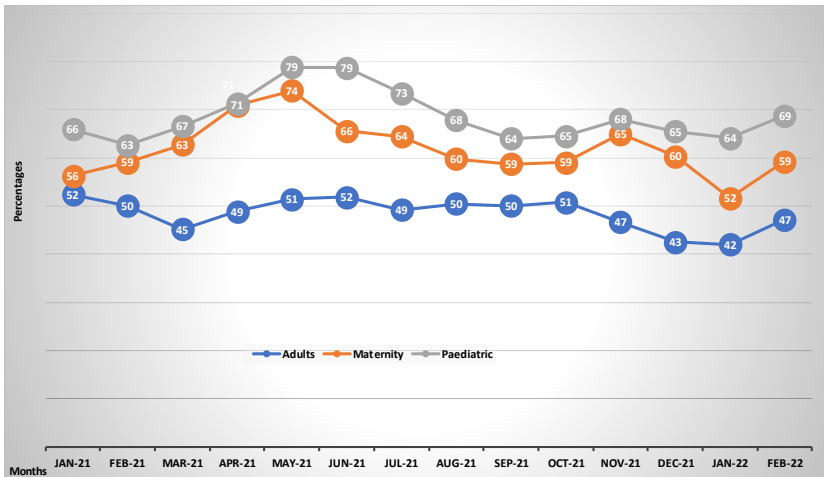


Figure 15 above provides an average percentage bed occupancy by month. Health facilities have various subsectors that are merged to form the major listed departments on the line chart. Since the commencements of 2021, the average bed occupancy has been below 80% for the different departments and all the various health facilities. slight decrease to 64% for the month of February.

Chapter– 5 Referrals

5.0. Table 7: Number of Incoming and Outgoing Referred pa-

From the diagram labelled table 7 adjacent this narrative shows the total of 761 referrals were supported by NEMS. In that number 664 were classified as incoming referrals, while 97 represented the total outgoing referred patients supported. In February, Kenema recorded the highest number of incoming referred patients, while King Harman Road, Kono, Lumley and Lungi reported the least.

No:	National Referrals by District, February 2022				
	Facility	Total Referrals	Incoming Referrals	Outgoing Referrals	NEMS Referrals
	National Total	761	664	97	263
	Nationwide %	100	87	13	35
1	34M	41	16	25	1
2	Bo	27	23	4	24
3	Bombali	22	22	0	22
4	Bonthe	4	4	0	4
5	Connaught	13	13	0	12
6	Emergency	31	12	19	6
7	Kailahun	62	59	3	5
8	Kambia	42	42	0	42
9	Kenema	100	99	1	25
10	King Harman Road	0	0	0	0
11	Koinadugu	53	40	13	37
12	Kono	0	0	0	0
13	Lumley	12	0	12	5
14	Lungi	0	0	0	0
15	Macauley Street	9	2	7	0
16	Moyamba	4	3	1	4
17	ODCH	112	106	6	8
18	PCMH	114	113	1	47
19	Port Loko	42	40	2	4
20	Pujehun	46	46	0	14
21	Rokupa	2	2	0	2
22	Tonkolili	25	22	3	1



5.1. Table 8: The Outcome of the Number of Incoming Referred Patients by Districts

Number of Incoming Referrals by patients' outcome, February 2022										
Admission ongoing	Death	Death on arrival	Discharge against medical advice	Discharged	Onward referral	Patient did not arrive	Rejected referral	Unable to admit	Death in Ambulance	Total
252	35	1	18	350	3	0	0	3	0	662
38	5	0	3	53	0	0	0	0	0	100
16	0	0	0	0	0	0	0	0	0	16
1	1	0	1	20	0	0	0	0	0	23
9	0	0	0	13	0	0	0	0	0	22
0	0	0	1	3	0	0	0	0	0	4
0	0	0	0	13	0	0	0	0	0	13
7	0	0	0	3	0	0	0	1	0	11
22	1	0	1	35	0	0	0	0	0	59
11	1	0	2	28	0	0	0	0	0	42
12	9	0	1	75	0	0	0	2	0	99
0	0	0	0	0	0	0	0	0	0	0
1	1	1	2	35	0	0	0	0	0	40
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	1	1	0	0	0	0	2
3	0	0	0	0	0	0	0	0	0	3
34	18	0	4	48	2	0	0	0	0	106
110	1	0	0	2	0	0	0	0	0	113
10	0	0	5	25	0	0	0	0	0	40
10	3	0	1	32	0	0	0	0	0	46
0	0	0	0	2	0	0	0	0	0	2
6	0	0	0	15	0	0	0	0	0	21

The outcomes of incoming referrals to the various health facilities nationwide are presented in the tabular diagram labelled Table 8 for the month under review. A significant portion of the referred patients were discharged (350), while out of the 761 patients, 35 of those were reported dead. 252 of the total patients were reported to still be in the various facilities receiving care.

5.2. Table 9: Number of Incoming Hospital Referrals supported by Cate-

Facility	Lactating	Non-FHCl	Pregnant	Under 5	EVD Survivor	Yes - other	Total
34M	0	15	0	0	0	1	16
Bo	0	2	20	1	0	0	23
Bombali	0	4	15	3	0	0	22
Bonthe	0	1	3	0	0	0	4
Connaught	0	11	0	2	0	0	13
Emergency	0	9	0	3	0	0	12
Kailahun	6	12	34	7	0	0	59
Kambia	1	4	33	4	0	0	42
Kenema	6	8	58	26	1	0	99
King Harman Road	0	0	0	0	0	0	0
Koinadugu	2	8	23	7	0	0	40
Kono	0	0	0	0	0	0	0
Lumley	0	0	0	0	0	0	0
Lungi	0	0	0	0	0	0	0
Macauley Street	0	0	0	1	0	1	2
Moyamba	0	0	3	0	0	0	3
ODCH	0	11	0	95	0	0	106
PCMH	8	0	105	0	0	0	113
Port Loko	4	2	20	14	0	0	40
Pujehun	3	0	21	22	0	0	46
Rokupa	0	0	2	0	0	0	2
Tonkolili	0	0	1	21	0	0	22
Total	30	87	338	206	1	2	664

Table 9 above explains the categories of incoming referred patients at the various health facilities nationwide for the month of February. EVD survivors have dropped significantly and are hardly captured in our datasets. The various facilities supported a total 664 incoming referred patients. Every active hospital do have records for either pregnant women, with the exception of ODCH, Connaught Hospital and Emergency, that do not provide hospitalized care for these categories.



5.3. Table 10: Outcome of Referred Patients by Free Health Care Category

FHC	Admission ongoing	Death	Death on arrival	Discharge against medical advice	Discharge	Onward referral	Patient did not arrive	Rejected referral	Unable to admit	Death in Ambulance	Total
Lactating	10	0	0	1	19	0	0	0	0	0	30
Non-FHCI	33	3	1	5	42	1	0	0	1	0	86
Pregnant	147	4	0	3	184	0	0	0	0	0	338
Under 5	61	28	0	9	104	1	0	0	2	0	205
EVD Survivor	0	0	0	0	1	0	0	0	0	0	1
Yes - other	1	0	0	0	0	1	0	0	0	0	2
Total	252	35	1	18	350	3	0	0	3	0	662

The February 2022 data shows that, a significant portion of both pregnant, under 5 and Non-FHCI cases were discharged, while another proportion are still at the various health facility by the time this report is produced. Under 5 reported the highest number of death

5.4. Table 11: Referral by Health Facilities

REFERRAL HOSPITAL	Jan-22	Feb-22
Tertiary Facility Total	140	77
Connaught Hospital	51	16
Ola During Children's Hospital	17	9
Princess Christian Maternity Hospital	72	52
Regional and District Hospital Total	377	206
Bo Government Hospital	68	29
Bonthe Government Hospital	-	-
Kabala Government Hospital	33	31
Kailahun Government Hospital	17	5
Kambia Government Hospital	56	43
Kenema Government Hospital	44	25
Koidu Government Hospital	29	26
Lungi Government Hospital	6	1
Magburaka Government Hospital	8	2
Makeni Government Hospital	30	22
Moyamba Government Hospital	14	4
Port Loko Government Hospital	22	4
Pujehun Government Hospital	48	14
Segbwema Government Hospital	2	-
Other Government Facility	22	16
Kingharman Road Government Hospital	3	5
Other Government facilities (i.e. Macauley)	2	-
Rokupa Government Hospital	15	9
34 MILITARY HOSPITAL	2	2
Private/NGO facility Total	0	0
Emergency	20	7
Kamakwie	2	3
Masanga	6	1
Mattru UBC Hospital	11	4
MSF Hospital – Kenema	6	-
SERABU	-	-
LIFE CARE HOSPITAL	2	-
YELE	2	-
CHOITHRAM MEMORIAL HOSPITAL	3	4
SENDUGU	1	-
SHUMA HOSPITAL	1	-
CHINESE HOSPITAL	-	1
COVID-19 CTC/CCC/ISOLATION	8	-
RENDEZ VOUS	12	6

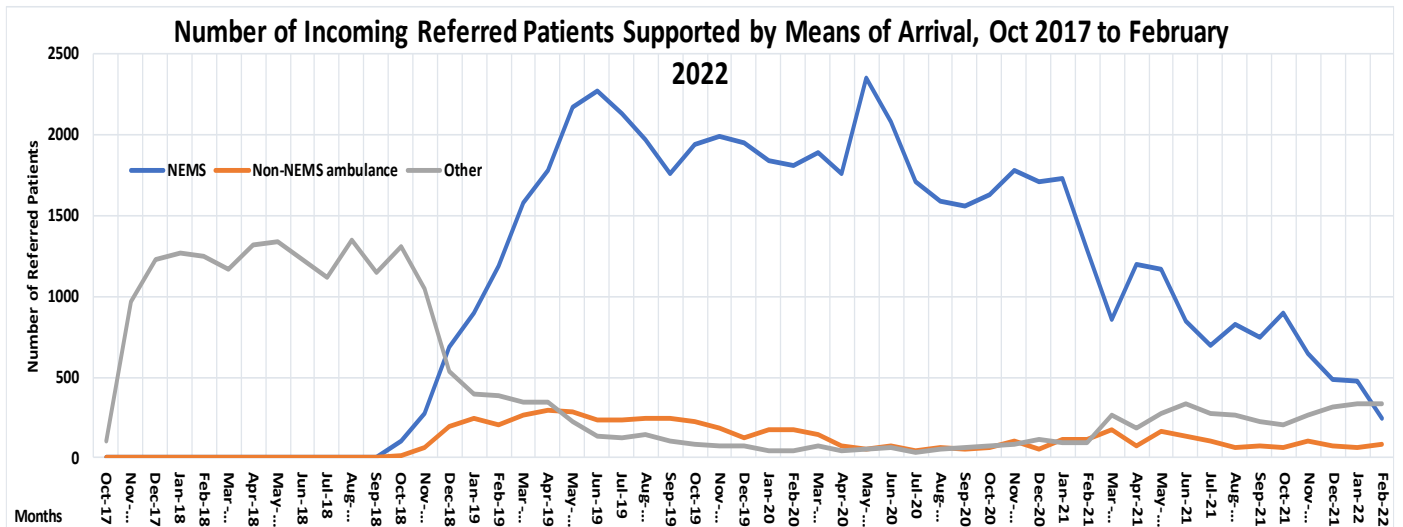
Table 11 shows the NEMS general monthly referrals to the main hospitals for the month of February. The table compares the data between January and February 2022. You can see that for the month under review, the tertiary facilities accounts as the least recipient of referrals (77) as follows:

- ◆ Connaught Hospital (16), Princess Christian Maternity hospital (PCMH) (52), and Ola During Children's Hospital (ODCH) (9) compared to January with a total receipt of 140 for tertiary institutions. This indicates a decrement in the February 2022 referrals data.
- ◆ For the month under review, the Regional and District Hospitals received 206 of all referrals compared to January with 377 of the referrals. This indicates a drop in the number of patients referred to the Regional and District Hospitals.
- ◆ Furthermore, the table adjacent to this narratives displays the number of patients referred to COVID-19 Treatment Centers and Isolation Units, with a drop to 0 on the number of confirmed cases in February 2022. There is a drop in Rendezvous from 12 in January to 6 in February 2022.

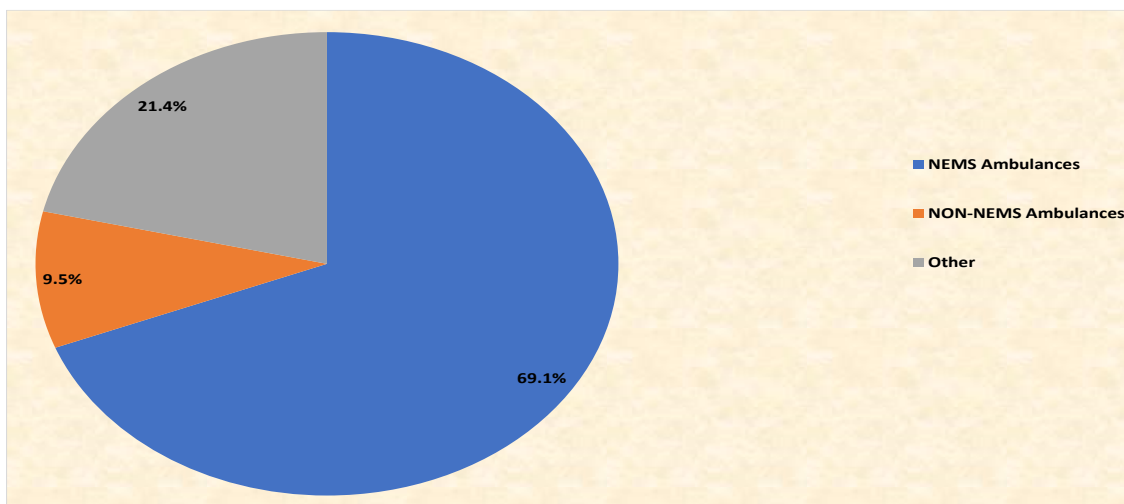


5.5.1 Figure 17: Number of Referred Patients by Arrival

The graph labelled figure 17 provides a detailed analysis on patients' arrival at the various hospital where referral coordinators are attached. The data for February 2022 demonstrates that major or most common means of arrival at hospital is through the utilization of NEMS' ambulances since the inception of this programme in Sierra Leone's health sector.



5.2. Table 12: Arrival Methods of the Referrals by Hospital



The pie chart labelled figure 12 above, exemplifies the methods of arrival at the various health facilities nationwide for the month of February 2022. 69.1% of the total number of referred cases received by the respective hospitals were transported by NEMS' ambulance, while a combined total of 30.9% of the total number of referred cases used other means of transportation as displayed on the pie chart above.



Table 12: Arrival Methods of the Referrals by Hospital

REFERRAL FACILITIES	NEMS Ambulances	NON-NEMS Ambulances	Other
Tertiary Facility	52.2%	15.2%	32.6%
34 Military Hospital	0.0%	62.5%	37.5%
Connaught Hospital	92.3%	7.7%	0.0%
Kingharman Road Govt. Hospital	-	-	-
Lumley Govt. Hospital	72.5%	0.0%	27.5%
Ola During Children's Hospital	6.6%	11.3%	82.1%
Princess Christian Maternity Hospital	41.6%	9.7%	48.7%
Rokupa Govt. Hospital	100.0%	0.0%	0.0%
Private/NGO facility Total	100.0%	0.0%	0.0%
Matru UBC Hospital	100.0%	0.0%	0.0%
Regional/District Hospital	55.1%	13.4%	31.4%
Kabala Govt. Hospital	72.5%	0.0%	27.5%
Bo Govt. Hospital	100.0%	0.0%	0.0%
Kailahun Govt. Hospital	8.5%	1.7%	89.8%
Kambia Govt. Hospital	100.0%	0.0%	0.0%
Kenema Govt. Hospital	25.3%	17.2%	57.6%
Koidu Govt. Hospital	-	-	-
Lungi Govt. Hospital	-	-	-
Magburaka Govt. Hospital	4.8%	95.2%	0.0%
Makeni Govt. Hospital	100.0%	0.0%	0.0%
Moyamba Govt. Hospital	100.0%	0.0%	0.0%
Port Loko Govt. Hospital	10.0%	20.0%	70.0%
Pujehun Govt. Hospital	30.4%	0.0%	69.6%
Grand Total	69.1%	9.5%	21.4%

The tabular representation labelled table 12 provides a further breakdown on patients' arrival at secondary and tertiary hospital nationwide for the month of February 2022. For tertiary hospitals, there has been an increment on the percentage of NEMS arrival method, with Rokupa Government Hospital being the only tertiary hospitals in Western Area Urban to register 100% NEMS arrival method.

Bo, Kambia, Makeni Government Hospital and Moyamba Government Hospital are the secondary hospitals that showed 100% NEMS arrival method only, while all the others reported less than 80% as NEMS arrival method except for Connaught with 92% . Overall, the major means of transporting emergency cases from peripheral health units nationwide is through NEMS. Matru UBC Hospital has 100% NEMS arrival.



5.2.Table 13: Time Taken to Triage

Time Taken to Triage	BO	BOMBALI	BONTHE	FALABA	KAILAHUN	KAMBIA	KENEMA	KOINADUGU	KONO	MOYAMBA	PORT LOKO	PUJEHUN	TONKOLILI	WESTERN AREA RURAL	WESTERN AREA URBAN	Grand Total Feb 2022	Percentage Feb 2022	Grand Total Jan 2022	Percentage Jan 2022
00:00:00 to 00:05:00	15	19	5	8	11	26	23	17	10	7	14	15	13	0	0	183	17.9%	324	35.0%
00:05:01 to 00:10:00	13	12	3	6	4	35	15	8	15	7	2	10	1	0	0	131	12.8%	337	36.4%
00:10:01 to 00:15:00	9	9	2	5	1	5	3	3	8	5	4	7	1	0	0	62	6.0%	118	12.7%
00:15:01 to 00:20:00	3	2	0	3	0	0	4	5	2	2	2	0	1	0	0	24	2.3%	43	4.6%
00:20:00 to 00:30:59	3	3	1	1	1	3	2	0	2	1	2	3	0	0	0	22	2.1%	30	3.2%
00:31:00 to 01:59:59	2	2	3	5	0	4	1	5	7	2	1	2	0	0	0	34	3.3%	57	6.1%
02:00:00 to 02:59:59	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	0.2%	10	1.1%
03:00:00 to 03:59:59	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0.2%	3	0.3%
04:00:00 to 04:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	2	0.2%
05:00:00 to 05:59:59	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0.2%	1	0.1%
06:00:00 to 06:59:59	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.1%	1	0.1%
07:00:00 to 07:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
08:00:00 to 08:59:59	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2%	0	0.0%
09:00:00 to 09:59:59	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.1%	0	0.0%
10:00:00 to 10:59:59	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1%	1	0.1%
11:00:00 to 11:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
12:00:00 to 12:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
13:00:00 to 13:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
14:00:00 to 14:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
15:00:00 to 15:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
16:00:00 to 16:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
17:00:00 to 17:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
18:00:00 to 18:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
19:00:00 to 19:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
20:00:00 to 20:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
21:00:00 to 21:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
22:00:00 to 22:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
23:00:00 to 23:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Grand Total/District	46	49	16	28	17	73	48	40	46	24	25	38	17	0	0	467	45.6%	927	100.0%

The table above delineates the time taken by Call Centre to triage a patient when a call is received. In February 2022, call centre took less than 15 minutes to triage 36.7% of the total Calls received, while in January 2022, it took less than 15 minutes to tri-

5.2.1.Table 13: Time Taken to Reach the Target

Time Taken to Reach the Target	BO	BOMBALI	BONTHE	FALABA	KAILAHUN	KAMBIA	KENEMA	KOINADUGU	KONO	MOYAMBA	PORT LOKO	PUJEHUN	TONKOLILI	WESTERN AREA RURAL	WESTERN AREA URBAN	Grand Total Feb 2022	Percentage Feb 2022	Grand Total Jan 2022	Percentage Jan 2022
00:00:00 to 00:30:59	11	10	4	1	3	20	9	11	12	2	4	2	1	27	39	90	40.4%	194	45.0%
00:31:00 to 01:59:59	15	8	5	1	3	25	11	11	13	3	2	10	1	11	6	108	48.4%	210	48.7%
02:00:00 to 02:59:59	0	0	0	2	0	0	3	7	0	0	0	1	2	0	0	15	6.7%	16	3.7%
03:00:00 to 03:59:59	0	2	0	3	0	0	0	1	1	0	0	0	0	0	0	7	3.1%	7	1.6%
04:00:00 to 04:59:59	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0.9%	2	0.5%
05:00:00 to 05:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	1	0.2%
06:00:00 to 06:59:59	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.4%	0	0.0%
07:00:00 to 07:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
08:00:00 to 08:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
09:00:00 to 09:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
10:00:00 to 10:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
11:00:00 to 11:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	1	0.2%
12:00:00 to 12:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
13:00:00 to 13:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
14:00:00 to 14:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
15:00:00 to 15:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
16:00:00 to 16:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
17:00:00 to 17:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
18:00:00 to 18:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
19:00:00 to 19:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
20:00:00 to 20:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
21:00:00 to 21:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
22:00:00 to 22:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
23:00:00 to 23:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Grand Total/District	26	20	9	8	6	45	23	32	26	5	6	13	4	38	45	223	100.0%	431	100.0%

When a decision is made to allocate an ambulance for a specific mission, the time taken by the ambulance team to reach the targeted Peripheral Health Unit (PHU) or a health facility is shown in the table above. In February 2022, 95.5% of the missions transported took less than 3-hour to reach the targeted PHU, while in January 97.4% of the total missions supported by NEMS took less than 3-hour to get to the particular health facility that requested for an ambulance. Those missions that took more than 2- hour to locate the respective PHUs, were 4.4% in February 2022.



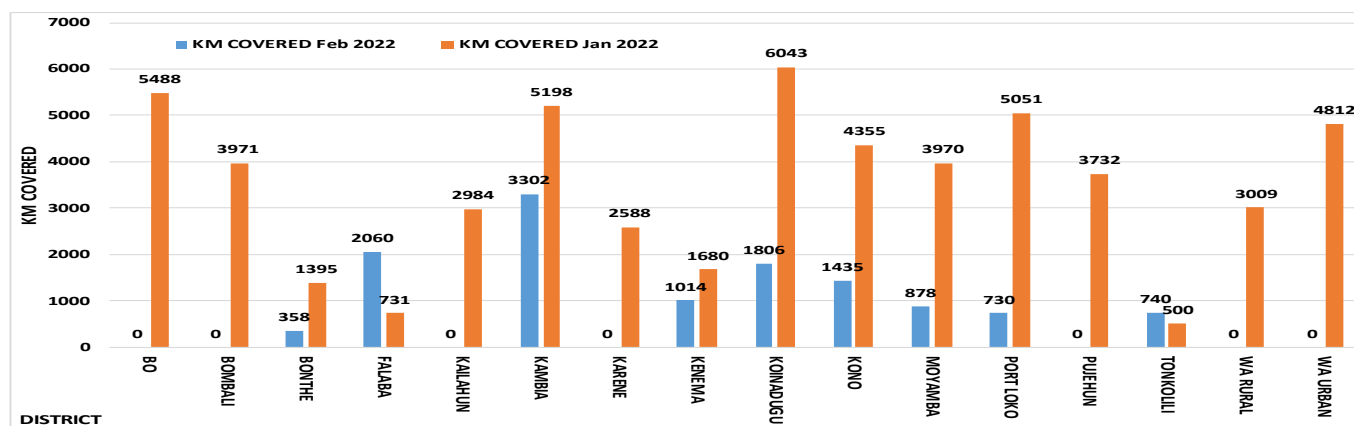
5.2.2. Table 14: Time Taken to Reach the Hospital

Time Taken to Reach the Hospital	BO	BOMBALI	BONTHE	KAILAHUN	KAMBIA	KENEMA	KOINADUGU	KONO	MOYAMBA	PORT LOKO	PUJEHUN	TONKOLILI	WESTERN AREA RURAL	WESTERN AREA URBAN	Grand Total Feb 2022	Percentage Feb 2022	Grand Total Jan 2022	Percentage Jan 2022
00:00:00 to 00:30:59	12	8	2	0	11	4	4	5	2	1	6	0	7	22	84	28.2%	176	30.1%
00:31:00 to 01:59:59	13	8	8	6	25	15	13	14	6	4	6	3	27	22	170	57.0%	331	56.7%
02:00:00 to 02:59:59	0	1	1	0	1	1	5	1	0	0	0	2	1	2	15	5.0%	30	5.1%
03:00:00 to 03:59:59	1	0	0	0	0	0	3	0	0	0	0	0	1	0	5	1.7%	15	2.6%
04:00:00 to 04:59:59	2	0	0	0	2	2	2	2	0	0	1	0	0	1	12	4.0%	11	1.9%
05:00:00 to 05:59:59	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0.7%	3	0.5%
06:00:00 to 06:59:59	0	0	0	0	0	0	3	2	0	0	0	0	0	0	5	1.7%	8	1.4%
07:00:00 to 07:59:59	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3%	3	0.5%
08:00:00 to 08:59:59	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.3%	3	0.5%
09:00:00 to 09:59:59	0	0	0	0	1	0	0	2	0	0	0	0	0	0	3	1.0%	0	0.0%
10:00:00 to 10:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
11:00:00 to 11:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	1	0.2%
12:00:00 to 12:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	1	0.2%
13:00:00 to 13:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	1	0.2%
14:00:00 to 14:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
15:00:00 to 15:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
16:00:00 to 16:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
17:00:00 to 17:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
18:00:00 to 18:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	1	0.2%
19:00:00 to 19:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
20:00:00 to 20:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
21:00:00 to 21:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
22:00:00 to 22:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
23:00:00 to 23:59:59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
	29	18	11	6	41	22	31	26	8	5	13	5	36	47	298	100.0%	584	100.0%

After locating the health unit that requested for an ambulance, the ambulance team then travel with the patients to a specific health facility that has the required health services needed by the patients. The table above this narrative provides an in-depth analysis on the time taken to reach secondary or tertiary health facility. It is visible that in February 2022 95.5% of the missions supported took less than 3 hours to reach the required health facilities, while in January, we saw a total of 97.4% of the number of missions supported by NEMS within 3-hour to reach their various health facilities, which decreased by 1.9% to the previous month.

5.3. Missions by Ambulances:

Figure 19: Km Travelled by District



The District Ambulance Supervisors (DAS) Monthly Kilometre Reports showed that, In February 2022 data, a cumulative **12,323** km was travelled, when put in contrast with the January 2022 data with **55,507** Km it indicates a significant drop by **43,184** km in the kilometres travelled by NEMS ambulances for the month under review. This reduction is consistent with the general drop in the number of missions undertaken by NEMS in February 2022.

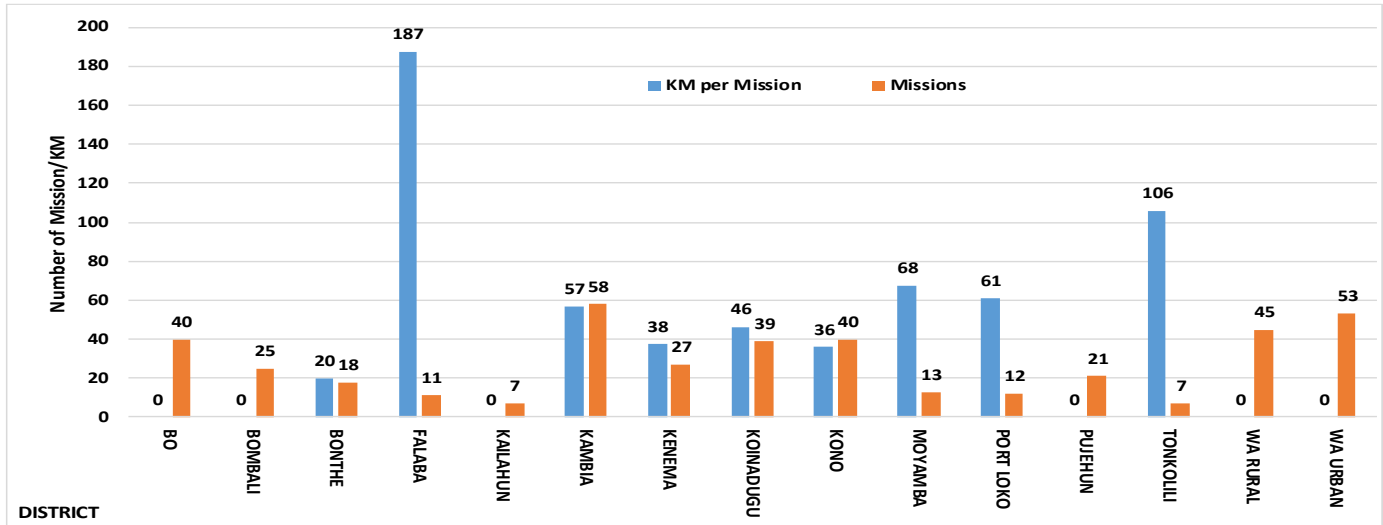
The two graphs (Figure 19 and Figure 20) displays the number of km travelled by NEMS ambulances per district and the average km/mission covered per district, with the calculation of all the missions undertaken by NEMS as recorded in the NEMS database. A comparison of the inter-district figures for February and January calculated the average km/mission for all the missions handled by NEMS as per our database (and not only the one ending with a referral to the hospital, but those which required the ambulance to move from its location).

Assessment of the district data showed that, there was a general drop in the February figure compared to the January figure for most districts, with the exception of Bo, Bombali, Kailahun, Karene, Pujehun, and Western Area Rural.

Another critical revelation of the February data evaluation is that Koinadugu covered above six thousand kilometres.



5.3.1. Figure 20: Average



The Bar chart labelled figure 20 compares the average KM covered for a mission by district for February. For the month under review, the district with the highest average KM per mission is Falaba with 11 missions, the ambulances covered a significant 187 Kilometers per mission (km/mission). The other districts that experienced significant increases include Tonkolili by (106) km, Moyamba by (68) km/mission, and Port Loko by 61 km/mission. It is essential to understand that, other district NEMS ambulances transported the missions recorded by Falaba and Karene.

Chapter– 6 Covid-19

Typology of Complain	Feb-22	Jan-22	Dec-21	Nov-21	Oct-21	Sep-21	Aug-21	Jul-21	Jun-21	May-21	Apr-21	Mar-21	Feb-21	Jan-21
Covid19 Confirmed Case	-	10	5	1	-	2	16	138	197	14	9	12	24	113
Covid19 Suspected Case	-	-	-	-	-	-	3	3	-	3	-	-	6	8
Covid19 Confirmed/Suspected Case	-	-	-	-	-	-	-	-	-	-	-	-	-	7
SAMPLES	-	-	1	3	-	26	6	28	16	17	34	19	40	66
TOTAL	0	10	6	4	0	25	25	169	213	34	43	31	70	194

Table 13 for this report reinforces you with adequate information on the general COVID -19 operations for the month of February 2022. The rigorous measures implemented by the authorities responsible to manage covid-19 in Sierra Leone has contributed to the fall of covid-19 cases in the month of February.



6.1. Figure 22: Trend of COVID-19 missions (confirmed and suspected)

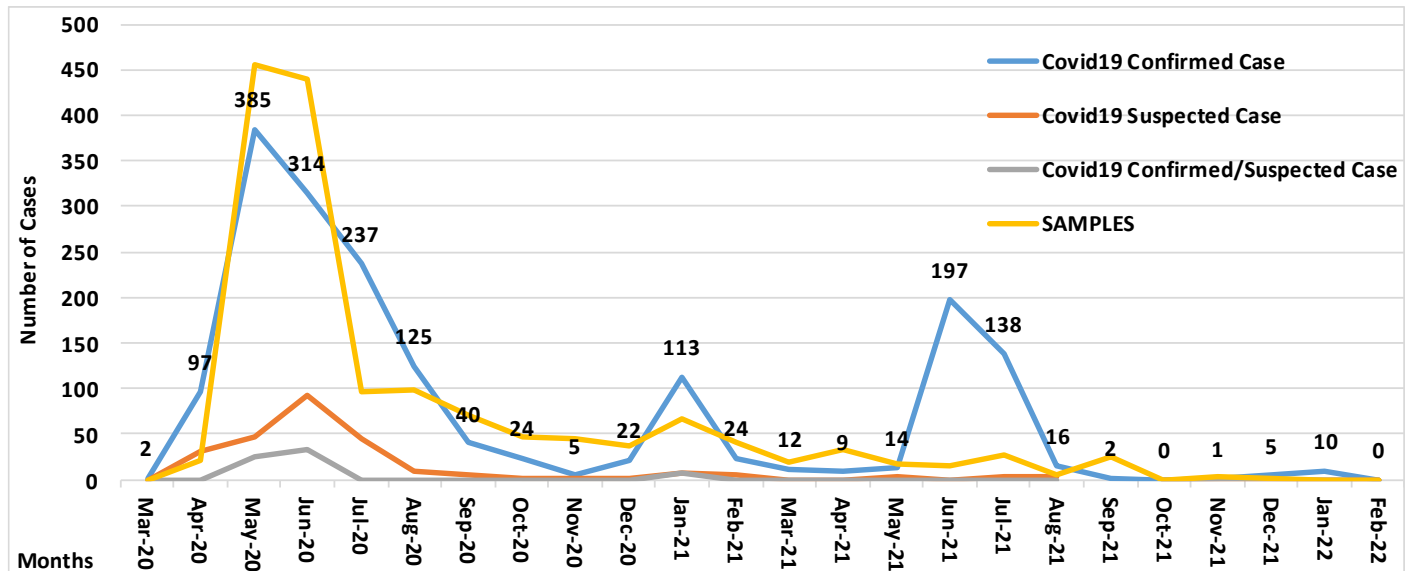


Figure 22 is a slightly oscillating line graph that illustrates the trend at which COVID-19 cases are reported to NEMS and transported by NEMS. A critical analysis from the chart above demonstrated that there has been a constant drop in the number of confirmed cases since the nation recorded its highest number of confirmed COVID19 cases in May 2020 and commenced a steady drop until January 2021 when it started to rise again. It declined in February 2021 and remained steady until June 2021 when we saw a sharp rise in the number of confirmed cases. The management of the covid-19 cases noted a rise in the numbers recorded for the month of January. However in February 2022 the Covid-19 cases has fallen back to 0 with no samples or suspected case transported.

COVID-19 Confirmed Cases

From NEMS data sources related to February 2022.

The pie chart figure 20 describes the transportation outcome of COVID-19 activated missions. Overall, the data showed that there are no covid-19 cases to be transported.

A detailed analysis of the number of coronavirus (COVID-19) cases is done here. No case was recorded in the month of February 2022.

The current total number of confirmed COVID19 cases is at 3,683 since March 2020 to the month under review.

District of Origin of the Patients

There were no covid-19 suspected and/or confirmed patients, neither was there any sample to be transported.