



NEMS OPERATIONAL ACTIVITIES

MONTHLY REPORT: MAY 2021

Date	May 2021.
Districts	NEMS operation at a national level.

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According to the data collected from the NEMS database and the Referral Coordinators' data from 15th of October 2018 up to the 31st May 2021, NEMS has managed two years of activities:

INDICATORS	SUMMED
CALLS	71981
MISSIONS	69173
INCOMING REFERRALS	58597

- *Distributions of the Ambulances*

There is currently ninety-seven (97) NEMS ambulances in operation all over Sierra Leone as follows: WA Rural 8, WA Urban 7, Bombali 5, Pujehun 7, Kenema 6, Bo 7, Tonkolili 7, Bonthe 5, Kono 7, Kailahun 7, Moyamba 5, Koinadugu 5, Kambia 5, Falaba 5, and Karene 5.

NEMS outfit reviewed its operations in the COVID-19 response in the month of May 2021. An orientation training was conducted for all paramedics and District Ambulance Supervisors (DAS) and the dedicated ambulances were repurposed in each district. The ambulances that were set aside as backups were also repurposed by replacing oxygen cylinders and beds in the wake of the heightened COVID-19 infection cases to effectively manage the surge in the COVID-19 cases. All the ambulances are temporarily to the district headquarter town except for Western Area, Port Loko and Kenema districts. In May 2021, an ambulance was relocated to 34 Military Hospital to support the 34 Military Hospital due to the surge in the number of cases in the Country.

- *Km Travelled*

Since the start of the activities in October 2018, the ninety-seven (97) ambulances dispatched across the country have travelled a total number of **5,226,233 km**. In May 2021, Koinadugu emerged as the district with the highest KM travelled.

- *COVID-19 Response*

The total number of **COVID-19** confirmed cases **referred by NEMS** in May 2021 is 14, while the suspected case is 3. The cumulative figures since the COVID-19 outbreak in the country are 1,362 **confirmed**, 163 **suspected**.

- *Sample's Referrals*

In May, 2021 NEMS ambulances moved 17 samples to the referred facility. This involved **66** ambulance missions, out of this total **3** missions and **6** specimens related to Yellow Fever, Polio and Measles, while the rest involves the transportation of COVID-19 samples.

3 The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

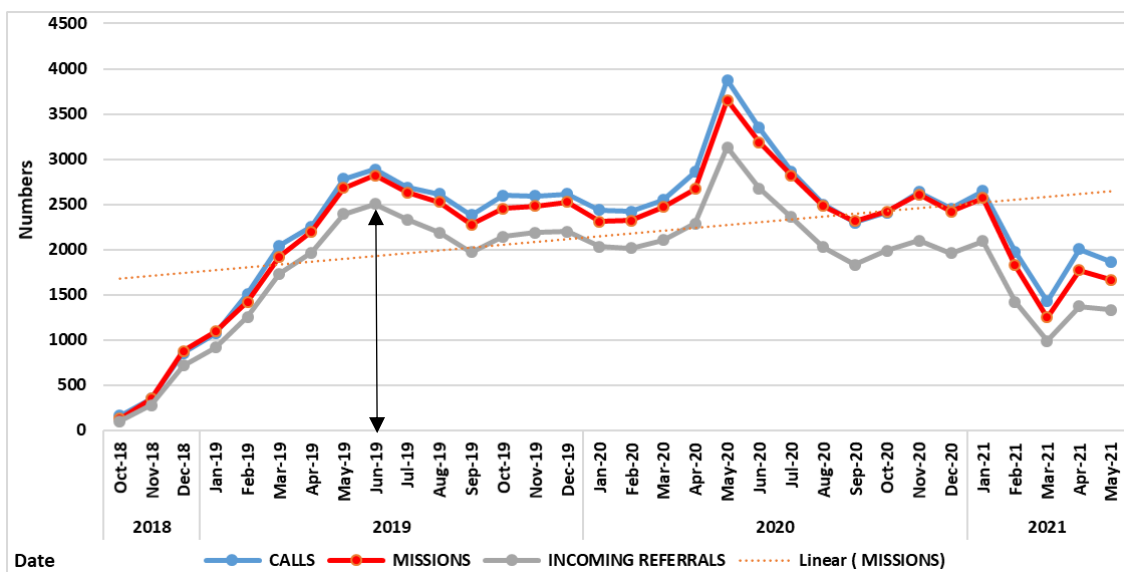
4 Missions refers to the emergency movement of NEMS ambulances from target (patient's location) to the referral health facility

1. Overview of the Calls, Missions and Referrals

The Figure 1 shows the trend of **Calls, Missions and Incoming Referrals** supported by NEMS since the commencement of operations in October 2018, in particular, the vertical line of **June 2019** indicates the start of **NEMS service at a national level**.

In May 2021, we recorded in total 1866, 1664 and 1331 for calls, missions and incoming referrals respectively¹.

Figure 1 Trend of Calls, Missions and Referrals (Oct 2018 – May 2021)



The figure 1 delineates a positive flow from the commencement of operations in October 2018 to June 2019, afterwards a displayed of a sharp drop in September 2019, with the lowest recorded services for more than six months. By June 2019, NEMS had inaugurated operation at every district in Sierra Leone.

Since the inception of NEMS operation in 2018, it was in May 2020 that NEMS reported its highest number of services offered, as the chart above displays. The line graph shows a gradual fall in the services offered up until September 2020 when compared with the highest recorded number of services offered by NEMS in May 2020.

Table 1 Calls, Missions, Referrals

YEARS	MONTH	CALLS	Trend	MISSIONS	Trend	INCOMING REFERRALS	Trend
2018	Oct-18	162	-	129	-	101	-
	Nov-18	351	37%	353	46%	277	47%
	Dec-18	858	42%	875	43%	716	44%
2019	Jan-19	1072	11%	1095	11%	919	12%
	Feb-19	1510	17%	1420	13%	1253	15%
	Mar-19	2043	15%	1923	15%	1730	16%
	Apr-19	2257	5%	2197	7%	1965	6%
	May-19	2782	10%	2683	10%	2392	10%

¹ We consider patients referred by NEMS in the main hospitals across the country.

³ The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

⁴ Missions refers to the emergency movement of NEMS ambulances from target (patient's location) to the referral health facility



	Jun-19	2888	2%	2823	3%	2503	2%
	Jul-19	2685	-4%	2630	-4%	2332	-4%
	Aug-19	2614	-1%	2527	-2%	2189	-3%
	Sep-19	2383	-5%	2276	-5%	1973	-5%
	Oct-19	2597	4%	2454	4%	2146	4%
	Nov-19	2594	0%	2480	1%	2190	1%
	Dec-19	2615	0%	2528	1%	2200	0%
2020	Jan-20	2436	-4%	2308	-5%	2033	-4%
	Feb-20	2421	0%	2321	0%	2015	0%
	Mar-20	2546	3%	2471	3%	2102	2%
	Apr-20	2859	6%	2672	4%	2285	4%
	May-20	3873	15%	3654	16%	3129	16%
	Jun-20	3349	-7%	3189	-7%	2679	-8%
	Jul-20	2864	-8%	2822	-6%	359	-6%
	Aug-20	2497	-7%	2484	-6%	2025	-8%
	Sep-20	2299	-4%	2317	-3%	1835	-5%
	Oct-20	2411	2%	2422	2%	1989	4%
	Nov-20	2635	4%	2609	4%	2098	3%
	Dec-20	2453	-4%	2423	-4%	1961	-3%
2021	Jan-21	2651	4%	2571	3%	2094	3%
	Feb-21	1979	-15%	1828	-17%	1420	-19%
	Mar-21	1425	-16%	1251	-19%	986	-18%
	Apr-21	2006	17%	1774	17%	1370	16%
	May-21	1866	-4%	1664	-3%	1331	-1%
Total NEMS Project		71981		69173		58597	

The figure **Table 1** above, provides a cumulative and percentage trend for all services offered by NEMS from inception to date. It is obvious that there is an upward trend on the number of services offered from October 2018 to June 2019, as initially stated in **Figure 1**. The table further shows a negative trend from the third quarter of 2019. For Calls and Missions recorded in (November and December) 2019, there was no significant changes that occurred, while there was slight difference on the referrals reported on the said period.

Table 2: NEMS Daily Activities

DAILY ACTIVITIES	CALLS	MISSIONS ²	Incoming REFERRALS
May-21	60	54	52

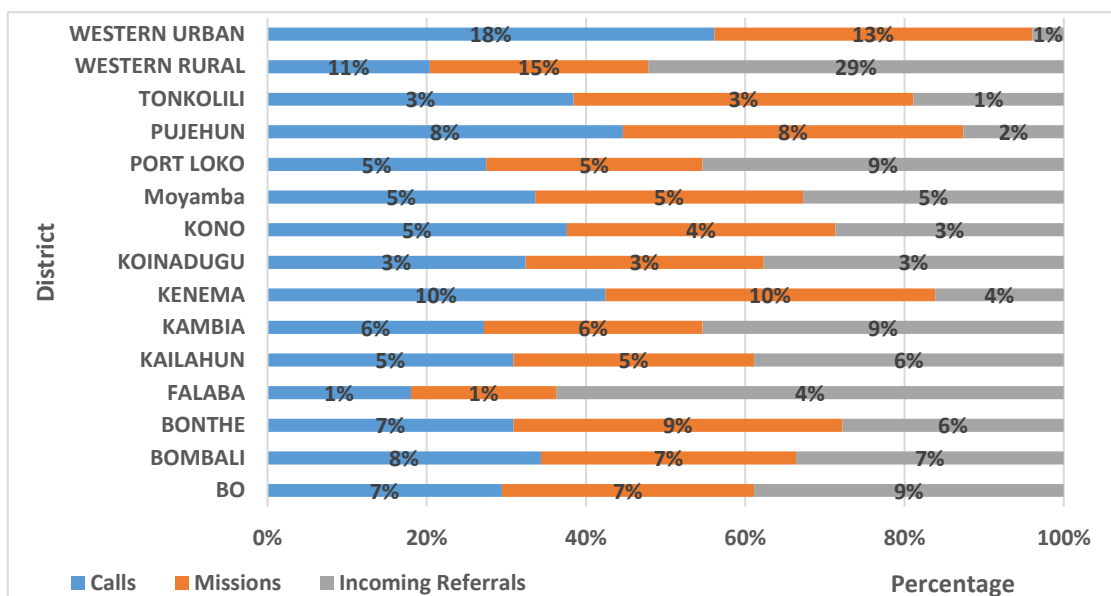
The Figure **Table 2** shows the average calls, missions and in-coming referrals supported **per day** in May 2021.

² This excludes the number of missions supported by MSF in Kenema district and Bombali DHMT ambulance located at Fintonia and managed in collaboration with NEMS. Incoming Referrals includes NEMS referrals and walked-In (Taxi, private car and other transportations).

³ The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

⁴ Missions refers to the emergency movement of NEMS ambulances from target (patient's location) to the referral health facility

Figure 2: Calls, Missions, Referrals by District



The bar chart above, is demonstrating the percentage of calls, missions and incoming referrals supported by NEMS per district in the month of May 2021. From the diagram above, Western Area Urban, recorded the highest percentage of Calls, and at the same time recorded the lowest percentage of incoming referrals supported. For Missions, Western Area Rural, reported the majority of cases transported to hospitals and the data also presented it as the district with the highest incoming referrals that made it to the respective facilities where Referral Coordinators are attached.

2. Time of the day of the Missions

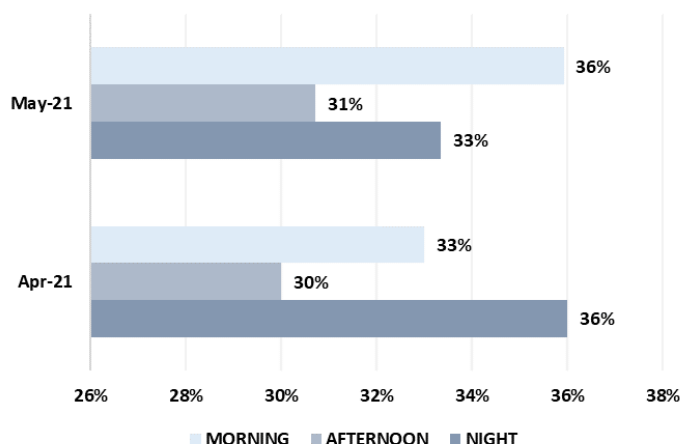
The 'time of the day' measure refers to the time of the call that consequently activates the NEMS mission. The diagram labelled **Figure 3** shows the percentage of missions undertaken in the morning (i.e. from 8 am to 2 pm); afternoon (from 2 pm to 8 pm) and night (from 8 pm to 8 am) comparing the data for April with the one May 2021 displays the following:

It can be seen that, the majority of the calls recorded in May 2021 that activated NEMS missions were done in the morning period (36%), 31% represents the calls recorded in the afternoon and the rest during were recorded at night.

Figure 3 Time of the day of the Missions

3 The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

4 Missions refers to the emergency movement of NEMS ambulances from target (patient's location) to the referral health facility



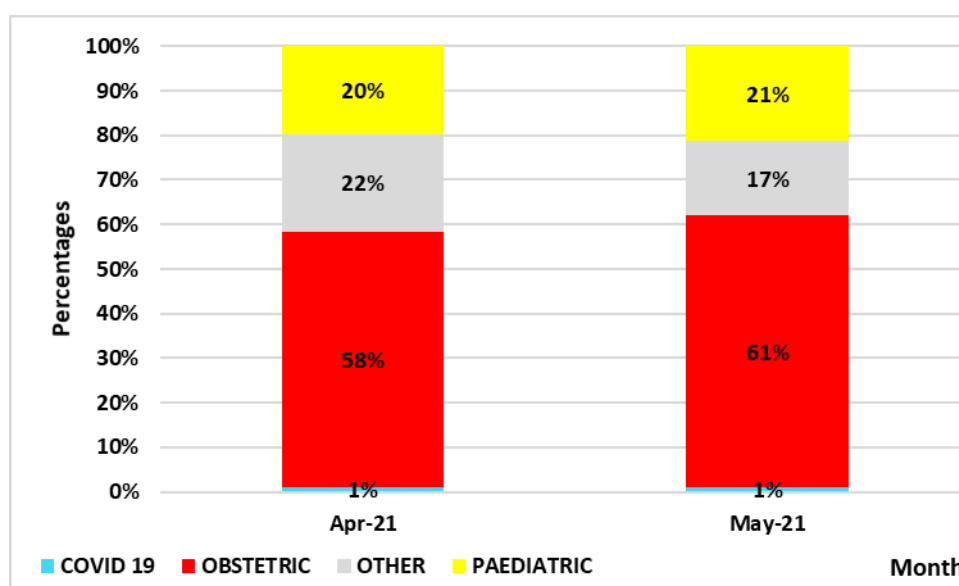
Comparing the time of the missions for April 2021 to May 2021 shows an increase (+3% and 1%) percentage in the missions undertaken in the morning and afternoon respectively for the month of May 2021. However, there was an observed increase in (3%) percent for missions undertaken in the night

At a district level: the majority of the above the average missions recorded in the afternoon are Western Area Urban (14%), Western Area Rural (11%) and Bo (11%), in the morning, Pujehun (13%), Western Area Urban (10%) and Western Area Rural (10%), while at night Western Area Rural and Bombali (10%) respectively.

3. Missions Complaints

The graph (Figure 4) represents the typology of complaints of the NEMS missions comparing December 2020 to January 2021 data. The data of COVID-19 missions include confirmed and suspected cases.

Figure 4 showing Main Mission's complaints



3 The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

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The May 2021 data presented in this diagram shows that 61% of NEMS missions are associated with **obstetric** complaints compared to April 2021 with 58%, indicating 3% increase in obstetric complaints in May 2021. When we compared the represented data, **paediatric complaints accounted for 21% in May 2021 compared to April with 20%**. The percentage of missions for complaints associated with COVID-19 demonstrated no change at 1% in April and May 2021 respectively. It is seen that, 17% of the complaints are grouped and classified as 'others'

Figure 5 *Typology of Mission complaints*

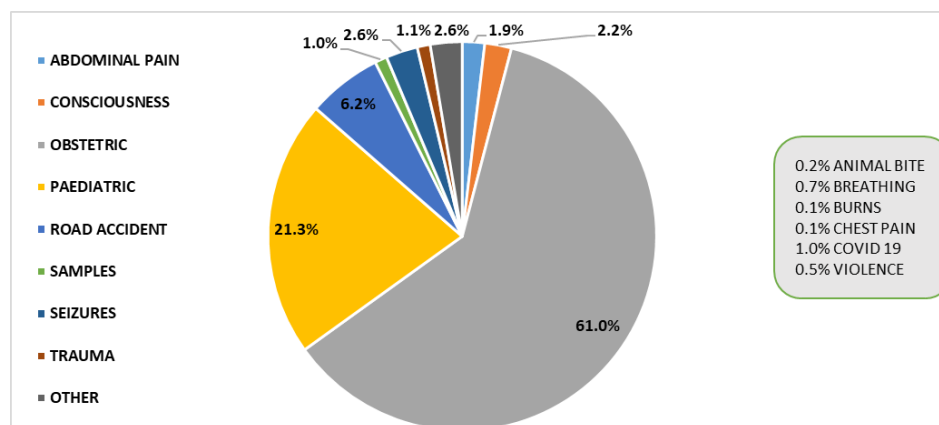
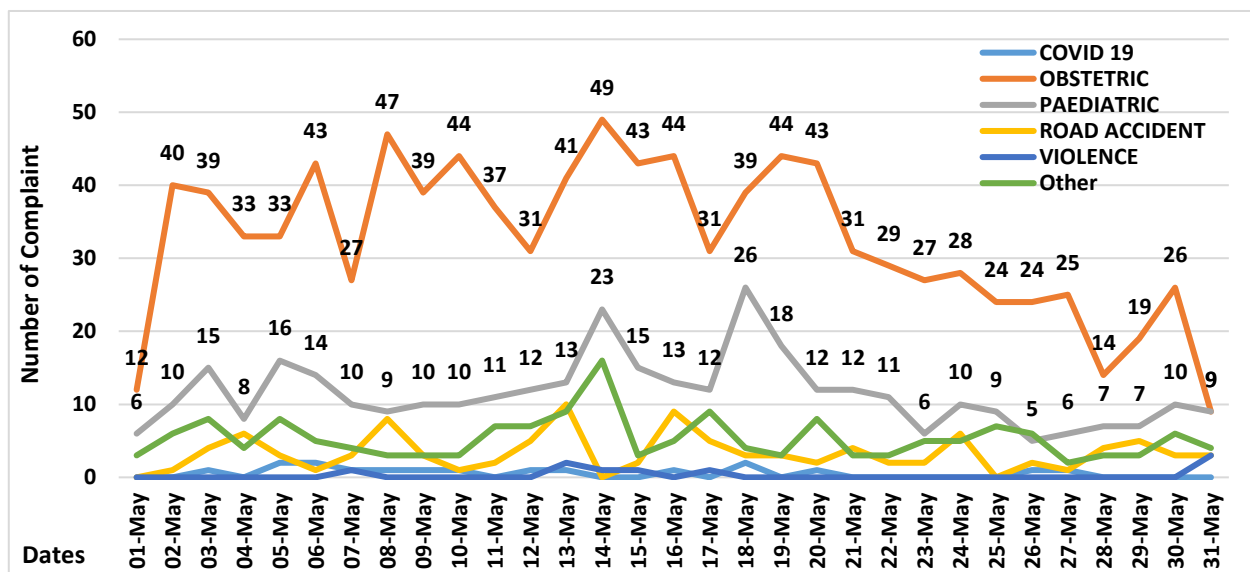


Figure 6 Showing *Trend of Missions complaints by day*



The diagram above displays the categories of mission complains by day for May 2021. The data shows that from 01 May 2021, obstetric complaints dominated the score throughout the month of May 2021. The highest score of Obstetric complaints recorded for the month under review is 49 and it occurred on 14th day of the month. Pediatric complaints is also a critical category of service in the suit of services provided by NEMS. Tracking the scores recorded by day for the month of May, indicated a general drop in the figures record by day, except for 17th May 2021 when the number drastically increased to 26 which was the highest score for the month under review. For COVID-19 Complaints. The data revealed that NEMS transported 17 COVID-19 samples, out of that 14 of the samples was tested positive and 3 suspected throughout the month May 2021. It is critical to mention that throughout the month of May 2021, the complaints on violence increased to 3.

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Figure 7 Missions Complaints by District

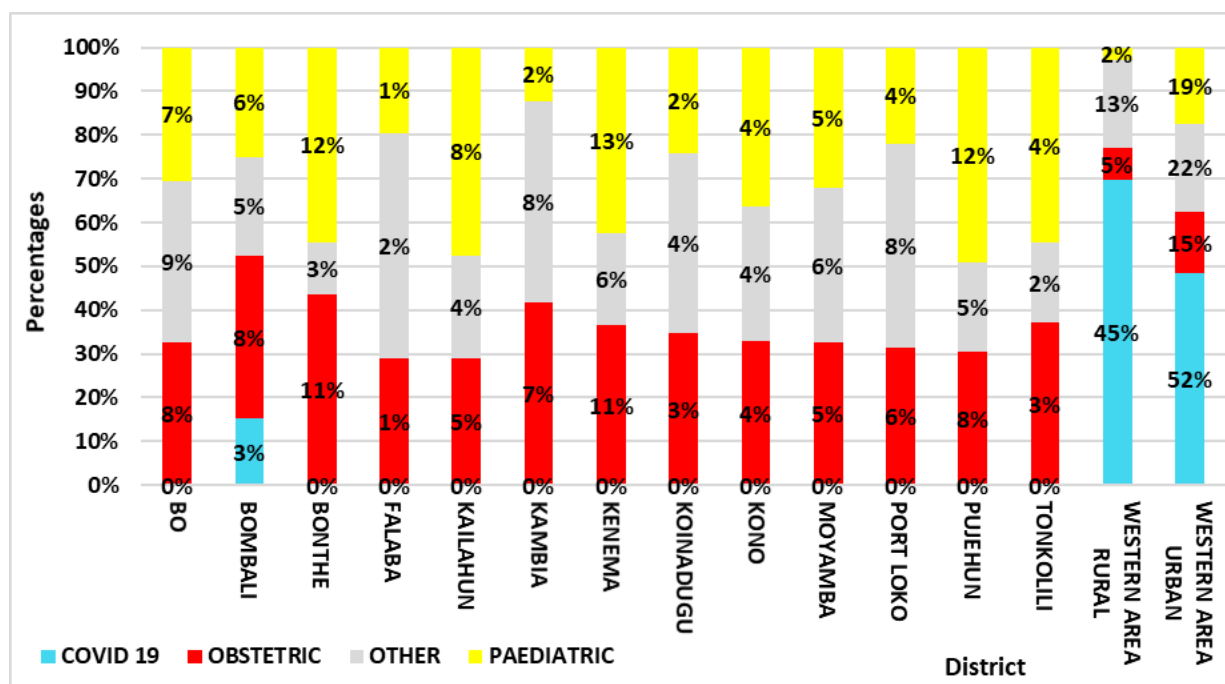


Figure 7 represents the typology of complaints **by district**³ for the month of May 2021.

By observing the diagram and comparing the data with April 2021, it is obvious that **obstetric** complaints dominated across 60% of the districts. Indicating that 60% of the districts requested more for Obstetric services in the month of May 2021. There was a general drop in the figures for May 2021 figure for WAU (15%) and WAR (5%) compared to the April 2021 data, we can see that for Western area Urban (WAU) and Western area Rural (WAR) accounted for 48% and 61% indicating 33% and 56% respective.

Pediatric complaints also displays a general fall in the record for May 2021 even though 40% of the districts data for Pediatric complaints surpassed the figures for Obstetric complains, there is an observed general drop across all the district. WAU recorded the highest score for pediatric complaints (19%) for May 2021 compared to the April 2021 figure that was 29% with Kenema, Pujehun and Bonthe recording (13%, 12% and 12%) respectively. The rest of the districts registered single digits between the ranges of (1% - 8%). The complaints categorized as 'other' also displayed a general fall in May 2021 figures. However, WAU and WAR were the only districts that recorded double digits i.e., 22% and 13% respectively, with the rest of the district recording single digits ranging between 2% and 9%.

Finally, the data on **COVID-19** cases transported varied across the districts. May 2021 data shows that, the complaints relating to COVID missions are categorized by (confirmed or suspected cases). The diagram

³ The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

⁴ Missions refers to the emergency movement of NEMS ambulances from target (patient's location) to the referral health facility



showed that only WAU (52%), WAR (45%) and Bombali (3%) recorded significant score as see above for the month of May 2021.

Figure 8: Number of Calls, Missions and Referrals Supported per Day

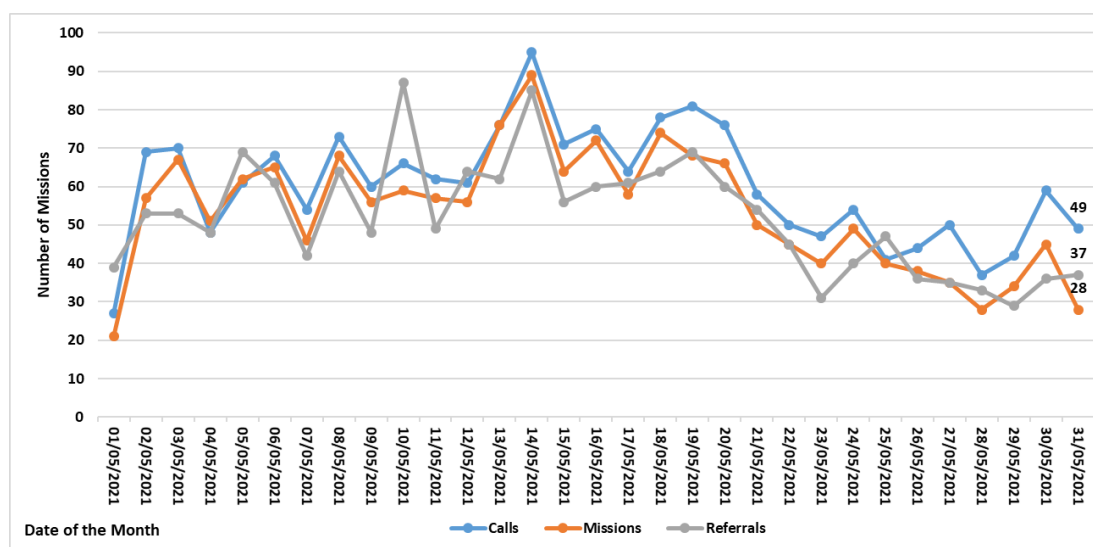


Figure 7: shows the number of Calls received, missions carried out, and referrals managed per day by NEMS for May 2021. Throughout May 2021, there were many fluctuations. The average call is 60, Missions is 54 and referrals 52 for the month under review

Figure 8: Outcome of the Missions

3 The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

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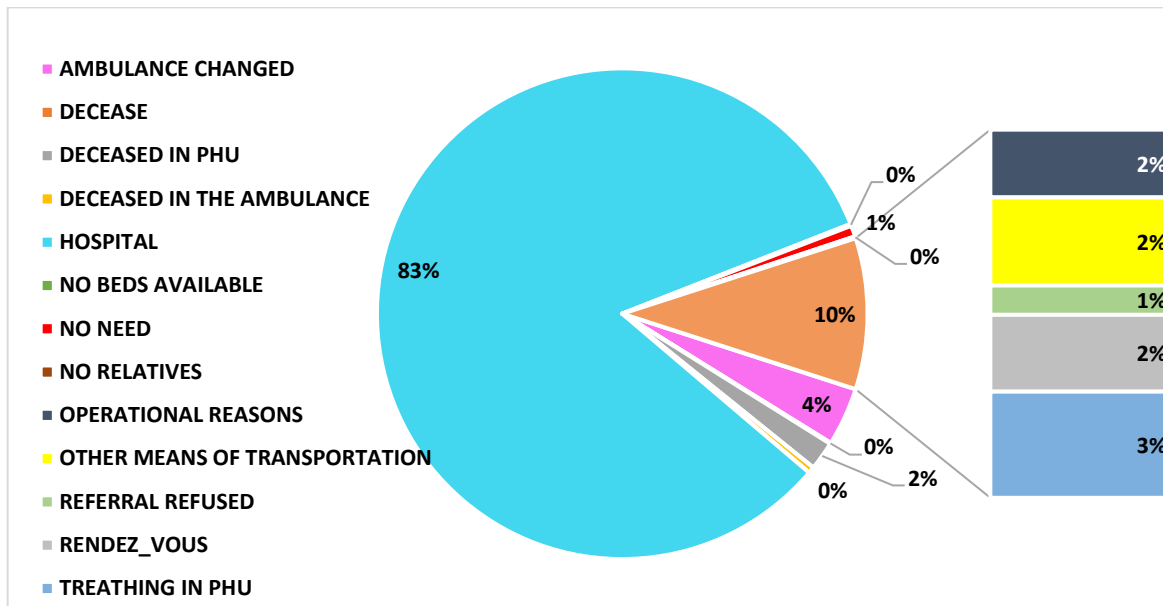


Figure 8 shows the outcome of missions carried out by NEMS in May 2021.

- **'Hospital'** refers to missions leading to referral to a pre-identified health facility. Referencing the May 2021 data, (1355) 83% of the missions led to referral to a pre-identified specialist health facility compared to the April 2021 figure that showed that 79% of the missions referred to a pre-identified specialist health facility. This indicates a steady rise in the figure for March 2021 compared to April 2021.

Table 2: Displays missions outcome and the reasons

	ABORTED	DECEASE	DECEASED	HOSPITAL	RENDEZ_VOUS
AMBULANCE CHANGED	63				
DECEASE		1			
DECEASED IN PHU			31		
DECEASED IN THE AMBULANCE			7		
HOSPITAL				1355	
NO BEDS AVAILABLE	2				
NO NEED	12				
NO RELATIVES	2				
OPERATIONAL REASONS	30				
OTHER MEANS OF TRANSPORTATION	39				

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REFERRAL REFUSED	13				
RENDEZ_VOUS					34
TREATMENT IN PHU	47				
Total	208	1	38	1355	34

'Aborted', The May 2021 data showed that out of the 1636 missions undertaken, 208 (13%) of those missions were cancelled before or after the arrival of the NEMS team on the scene. There are several varying reasons attached to missions cancellation as follows:

- 'Ambulance Changed' - the data for May 2021 revealed that out of 208 missions aborted, 63 (30%) of the aborted missions or (4%) of all the missions in May 2021 were due to 'ambulance changed',
- 'Deceased' – this mission outcome refers to death before the arrival of the NEMS ambulance team. May 2021 data showed that (38) mission was cancelled because the patient died. Out of the 38 missions cancelled, 31 of those aborted mission occurred because the patients passed away in the PHU and 7 of the missions were aborted because the patients passed away in the ambulances
- 'Operational reasons' - this type of mission outcome has a strongly correlation with the ambulance technical problems. The table above shows that 30 (14%) of the aborted missions occurred because of technical problems with the ambulances in the month of May 2021 compared with April with 7% of aborted missions relating to 'operational'
- 'Other Means of transportation' – refers to a situation where the patients or families decided to employ other medium of transport after requesting for an ambulance. The May 2021 data showed that 39 (14%) 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.
- 'Referral refused' the table above shows that out of 208 missions aborted, 13 (6%) was due to the patients or family members refusal to use the ambulance dispatched by NEMS,
- 'Other reasons' includes 'no-need' of the ambulance (12), 'no beds available at the referral hospitals' (2), 'no relative' to follow the patient to the referral facility (2).
- **'Rendezvous'** has been used to describe situations that may require more than one ambulance to complete a mission. The NEMS data for May 2021 shows that **'Rendezvous'** was use to accomplish 34 (2%) mission out of 1636 mission outcomes compared to April 2021 that was (1%). The figure for **'Rendezvous'** missions, grew by 1%. The April 2021 data showed that 'Rendezvous' missions were primarily linked to Bonthe (60%), Kono (16%) and Moyamba (8%). The monthly data indicates that **'Rendezvous'** missions for Moyamba are largely the referrals coming from the PHUs in Bonthe to UBC Matru.

5. Referrals by Hospital

Table 3 - Referral by Hospitals

REFERRAL HOSPITAL	May-21	Apr-21
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3 The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

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Tertiary Facilities Total	42.7%	19.0%
Connaught Hospital	9.8%	6.0%
Ola During Children's Hospital	8.8%	3.0%
Princess Christian Maternity Hospital	24.0%	10.0%
Regional and District Hospital Total	48.5%	74.0%
Bo Government Hospital	6.6%	9.0%
Bonthe Government Hospital	0.7%	1.0%
Kabala Government Hospital	3.1%	7.0%
Kailahun Government Hospital	3.1%	6.0%
Kambia Government Hospital	4.3%	5.0%
Kenema Government Hospital	7.2%	7.0%
Koidu Government Hospital	2.9%	7.0%
Lungi Government Hospital	0.4%	1.0%
Magburaka Government Hospital	1.7%	4.0%
Makeni Government Hospital	4.5%	7.0%
Moyamba Government Hospital	2.6%	2.0%
Port Loko Government Hospital	3.5%	7.0%
Pujehun Government Hospital	7.2%	8.0%
Segbwema Government Hospital	0.8%	2.0%
Other Government Facility	0.1%	7.0%
Kingharman Road Government Hospital	0.1%	1.0%
Other Government facilities (i.e. Macauley, Lumley)	-	-
Rokupa Government Hospital	-	6.0%
Private/NGO facility Total	7.2%	7.0%
Emergency	0.1%	1.0%
Kamakwie	1.3%	2.0%
Masanga	0.1%	0.0%
Mattru UBC Hospital	4.3%	3.0%
MSF Hospital – Kenema	1.4%	1.0%
Another Private facility (i.e. Lion Heart)	-	-
St. John Of God Catholic Hospital Lunsar	-	-
Yele	0.1%	-
SERABU	0.1%	-
COVID-19 CTC/CCC/ISOLATION	1.0%	1.0%

Table 3 displays the percentages of NEMS general monthly referrals to the main hospitals for the month of May 2021. The tabular diagram compares the data between May 2021 and April 2021.

You can see that for month under review, The tertiary facilities account for the highest receipt of referral (43%) as follows: **Connaught (10%), Princess Christian Maternity hospital (PCMH)(9%), and Ola During Children's Hospital (ODCH)(24%) respectively** compared to April 2021 with a total receipt of 19% for tertiary institutions. This indicated 24% more referrals than April 2021 as follows: Connaught received 4% more referrals in March 2021, PCMH 6% more referrals and 14% more referrals respectively. The comparison further showed that as was the case in April 2021, PCMH emerged as the tertiary institution where more patients were referred in March 2021.

3 The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

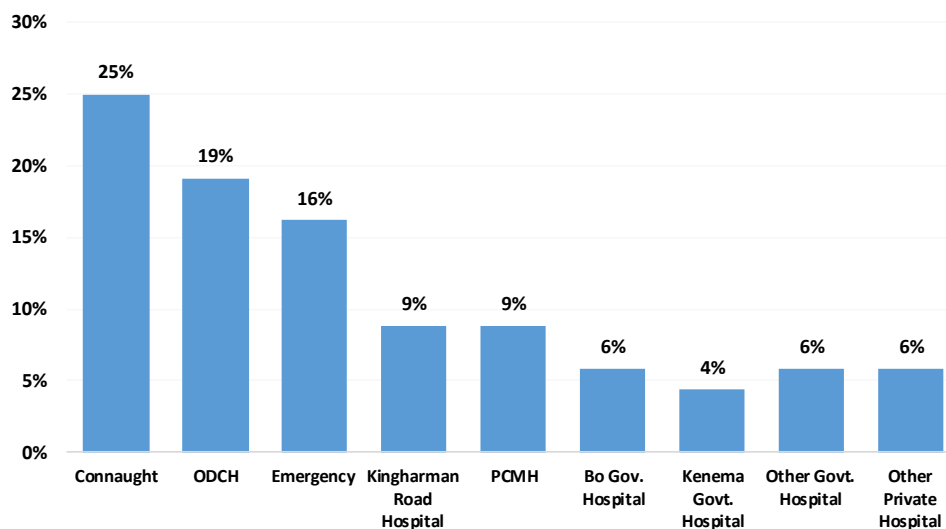
4 Missions refers to the emergency movement of NEMS ambulances from target (patient's location) to the referral health facility

For the month under review, the **Regional and District Hospitals** received 49% of all referrals compared to April 2021 with 74% of the referrals. This indicates a significant drop by 25% in the percentage of patients referred to the **Regional and District Hospitals**.

Furthermore, the table above displays the percentage of patients referred to **COVID-19 Treatment Centres and Isolation Units** remain constant at 1% in May 2021 compared to April 2021 that was also 1%.

6. Inter-hospitals Referrals

Figure 9 Showing **Destination Hospitals for Inter-Hospital Referrals**



You will observe from the representation in Figure 9 that, Connaught, ODCH and Emergency are the facilities receiving the highest percentages of inter-hospital referrals, with percentage score of 25%, 19% and 16% respectively.

The inter-hospital referrals data showed that paediatric and road accident complaints account for most of the inter-hospital referrals with 43% and 18% of referrals respectively.

7. Arrival Methods

The figure 10 demonstrates the method of arrival at the various health facilities nationwide. 77% of the total number of referred cases received by the respective hospitals is transported by NEMS ambulance, while 23% used another means of transportation as displayed on the pie chart below. in general

Figure 10 **Arrival Methods at the Hospital of the Referrals**



3 The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

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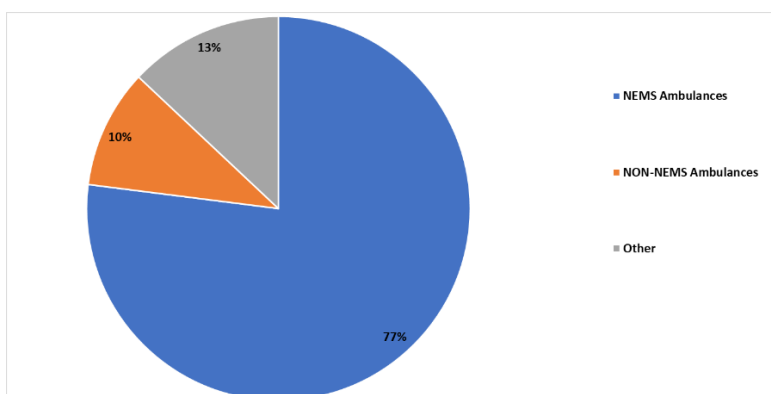


Table 6 Arrival Methods of the Referrals by Hospital

REFERRAL FACILITIES	NEMS Ambulances	NON-NEMS Ambulances	Other
Tertiary Facility	50%	16%	22%
34 Military Hospital	11%	63%	26%
Connaught Hospital	93%	8%	0%
Kingharman Road Govt. Hospital	69%	31%	0%
Lumley Govt. Hospital	17%	0%	83%
Macauley Govt. Hospital	0%	0%	0%
Ola During Children's Hospital	32%	23%	45%
Princess Christian Maternity Hospital	75%	1%	24%
Rokupa Govt. Hospital	100%	0%	0%
Private/NGO facility Total	99%	-	1%
Matru UBC Hospital	99%	0%	1%
Regional/District Hospital	81%	4%	15%
Kabala Govt. Hospital	82%	2%	16%
Bo Govt. Hospital	99%	0%	1%
Kailahun Govt. Hospital	48%	13%	39%
Kambia Govt. Hospital	100%	0%	0%
Kenema Govt. Hospital	52%	30%	18%
Koidu Govt. Hospital	100%	0%	0%
Lungi Govt. Hospital	40%	0%	60%
Magburaka Govt. Hospital	100%	0%	0%
Makeni Govt. Hospital	85%	1%	13%
Moyamba Govt. Hospital	100%	0%	0%
Port Loko Govt. Hospital	75%	1%	24%

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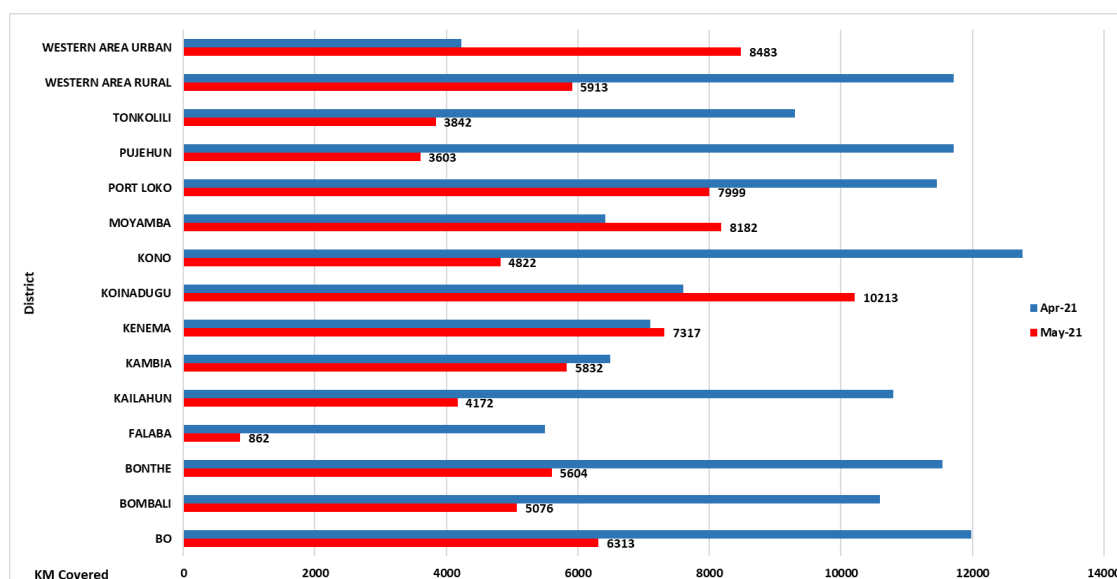


Pujehun Govt. Hospital	89%	1%	10%
Grand Total	77%	10%	13%

Table 6 above shows the percentage of arrival at the different hospital. A larger number of the patients referred utilized NEMS ambulance justified facilities RCs are attached. This table is a justification to **Figure 10**, as the grand total is the same to that of which is pictured on the Figure 10. Rokupa, Kambia, Koidu, Magburaka and Moyamba relied 100% on NEMS as the only reliable means of transporting urgent cases to the various secondary facilities in their districts. More than 80% of patients transported to Connaught, Pujehun, Makeni, Bo and Kabala used NEMS ambulance. 34 Military Hospital is only facilities that recorded more 60% of non-NEMS means of transportation.

8. Missions by Ambulances

Figure 11 Km Travelled by District



The District Ambulance Supervisors (DAS) Monthly Kilometre Reports showed that, In May 2021 data, a cumulative **88,233 km** was travelled Compared to April 2021, with **138,671 Km** indicating a significant drop by 50,438km 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 undertake by NEMS in May 2021.

The graphs (Figure 11 and 12) displays the number of km travelled by NEMS ambulances per district and the average km/mission covered per district and calculated for all the missions⁴ undertaken by NEMS as recorded in the NEMS database. Compared the inter-district figures for May 2021 with April 2021. Calculated the average km/mission is for all the missions handled by NEMS as per our database (and not only the one ending with a referral to the hospital), with the only exception for the.

3 The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

4 Missions refers to the emergency movement of NEMS ambulances from target (patient's location) to the referral health facility

Evaluation of the district data showed that, there was a general drop in the May 2021 figure compared to the April 2021 figure. However, for the month of May 2021, Western Area Urban, Koinadugu and Moyamba experienced a significant increase that surpassed the April 2021 figure. Another critical revelation of the May 2021 data evaluation is that only one (1) district (Koinadugu) covered above ten (10) thousand kilometres compared to April 2021 with eight (8) districts (WAR, Pujehun, BO, Kono, Port Loko, Bombali, Kailahun and Bonthe) that travelled above ten (10) thousand kilometres.

We also observed from the graph that, Koinadugu that travelled the highest kilometres covered 10,213 KM compared with April 2021 district (Kono) with the highest 12,795 KM. A significant drop by 2,582 KM in May 2021

Figure 12 Average Km/Mission

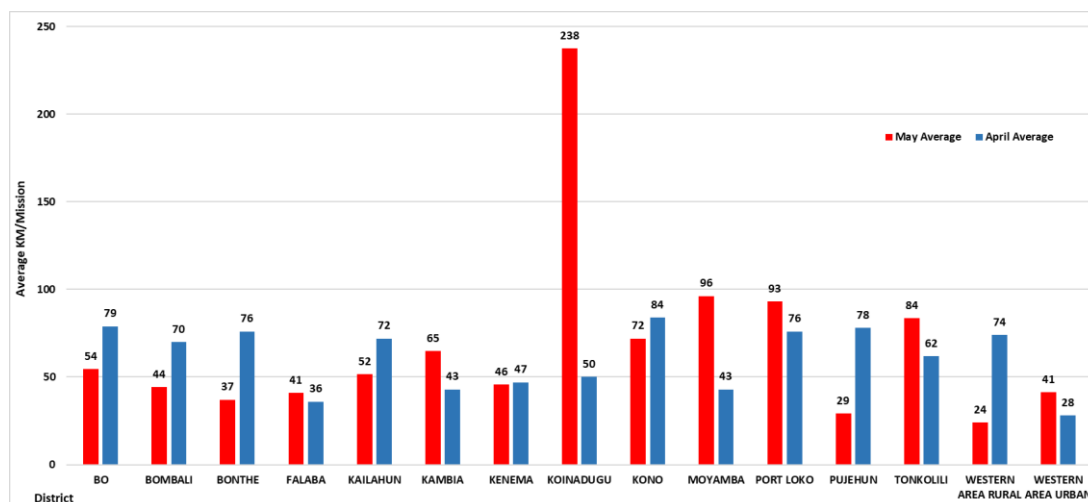


Figure 12 compares the **average km/mission by district** for March 2021 with April 2021. For the month under review, the district with the highest average km/mission is Koinadugu with 238 indicating a significant increase by 188 km/mission. The other districts that experienced significant increases include Moyamba by (53) km/mission, Port Loko by 17 km/mission, Tonkolili by 22 km/mission and WAU by 13 km/mission.

The graph further shows that in May 2021, five (5) districts covered an average km/mission of 70 and above compared with eight (8) districts in April 2021.

3 The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

4 Missions refers to the emergency movement of NEMS ambulances from target (patient's location) to the referral health facility

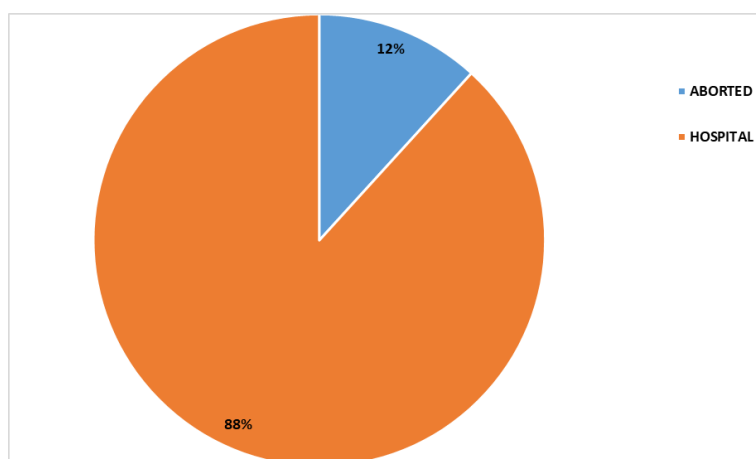
10. NEMS COVID-19 Response

a. COVID-19 Missions

Form NEMS data source, a total of 17 missions were undertaken and required NEMS ambulance for transportation, 14 of which came out positive, while the remaining three were suspected cases. The majority of the cases occurred in Freetown, with a minimal number of the province. NEMS ambulances transported a total 14 confirmed cases and the suspected were transported by NEMS.

The figure 13th describes the transportation outcome of COVID-19 confirmed and suspected cases. Overall, the majority of cases were transported to their various care centers, which is 88% of the total reported.

Figure 13 Outcome of COVID-19 Missions



b. COVID-19 Missions and Samples transported

The 9th table for this report provides you with adequate information on the number of confirmed cases. In May 2021, a total of 17 samples were transported by NEMS and 14 of those came out positive, while 3 of those still remain to be suspected cases by the period this report is coming out. So far, the trend showed that, there is a gradual increase on the number of confirmed COVID-19 cases as to the previous month.

Table 9 Overview of COVID-19 Missions

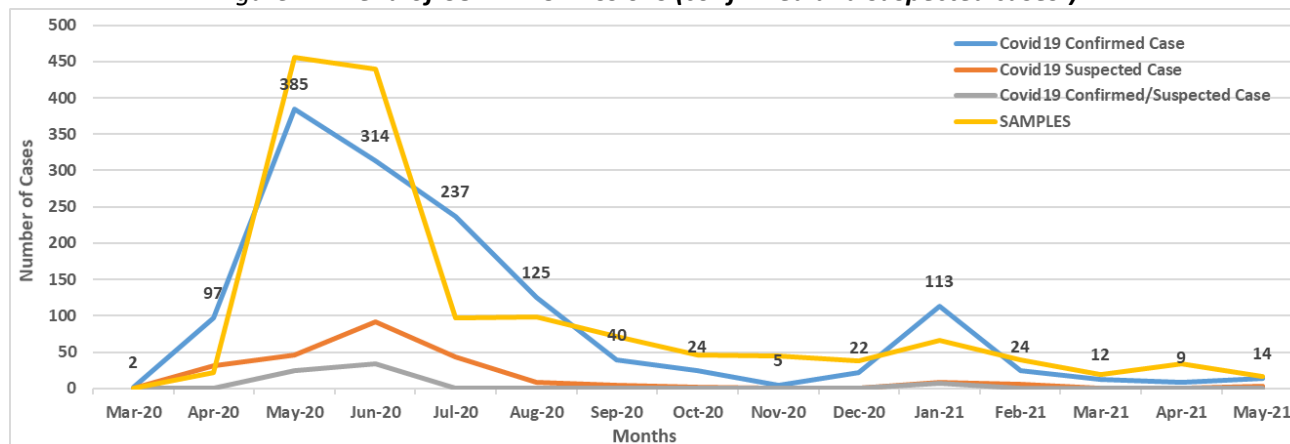
Typology of Complain	May-21	Apr-21	Mar-21	Feb-21	Jan-21	TOTAL ⁸ Dec 2020-May 2021
Covid19 Confirmed Case	14	9	12	24	113	1251
Covid19 Suspected Case	3	-	-	6	8	232
Covid19 Confirmed/Suspected Case	-	-	-	-	7	59
SAMPLES	17	34	19	40	66	1314

³ The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

⁴ Missions refers to the emergency movement of NEMS ambulances from target (patient's location) to the referral health facility

TOTAL	34	43	31	70	194	2856
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Figure 14 Trend of COVID-19 missions (confirmed and suspected cases)*



* April 2020: including the 2 suspected cases on March

** January 2021: in the total cases are included the 7 missions COVID without a classification in term of COVID typology case.

Figure 14 is a line graph that illustrates the trend at which COVID-19 cases are reported to NEMS and supported by NEMS. Vividly from the chart above, there has been constant drop in the number of confirmed cases from January 2021 to April 2021. While in May 2021, the figure 14th registered 5 more confirmed cases to that of the previous month. The number of samples transported plunged, when put in contrast to April 2021.

c. COVID-19 Confirmed Cases

A detail analysis of the number of coronavirus (COVID-19) cases is done here. 14 cases were recorded in the month of May 2021 and these were all transported by NEMS to the respective treatment centres and holding homes.

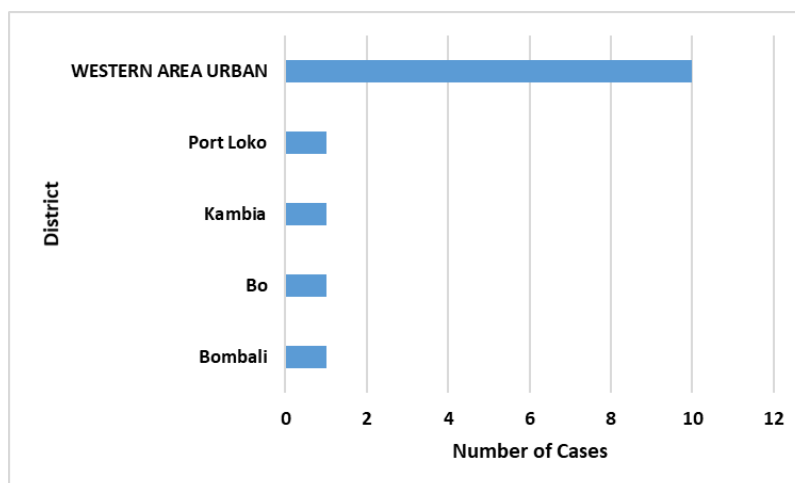
District of Origin of the Patients

The figure 15 depicts a clustered bar chart, which displayed the origin of all transported COVID-19 cases. It is evidently clear that Western Area Urban record the majority of the cases transported, which is a total of 10. The other confirmed cases were from Port Loko, Kambia, Bo and Bombali and each of them reported one cases each.

Figure 15 Origin district of the COVID-19 patient (frequencies)

3 The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

4 Missions refers to the emergency movement of NEMS ambulances from target (patient's location) to the referral health facility



Ambulance Station

Since the first case of COVID-19 reported in March 2020, NEMS allocated an ambulance to each district nationwide for the movement of COVID-19 related cases. In the month of May 2021, the ambulance attached to 34 Military Hospital, which has station code WU 04 recorded 57.1% of the total proportion of cases, while St. Joseph with WU 08 reported the second highest -14.3%.

Table 10 **COVID-19 Missions by Ambulance Station (confirmed cases)**

DISTRICT	STATION	CODE	% OF MISSIONS
Bombali	COVID19/BINKOLO	B M 07	7.1%
Bo	BO GOVT.-COVID19	BO05	7.1%
Kambia	Kambia - COVID19	K A 01	7.1%
Port Loko	Port Loko-COVID19	PL03	7.1%
WESTERN AREA URBAN	34 MH - COVID19	WU04	57.1%
WESTERN AREA URBAN	St. Joseph - COVID19	WU08	14.3%

COVID-19 Treatment Centres Destination

The tabular diagram below illustrates dissemination of COVID-19 related cases to the various holding centres (Isolation centres, CCC and CTC) nationwide. 34 Military Hospital, which has two centres and reported 29% of the total number of COVID-19 cases confirmed.

The Indian community care centre (CCC) registered 36% of the confirmed cases transported to them by NEMS for care. Lakka, Adra, Jui and Makeni all recorded 7% each as the percentage of cases managed in the month of May 2021.

Table 11 **COVID-19 Missions by Treatment Centre (confirmed cases)**

District	Treatment Centre	%
WA. Urban	34 Military CTC 1/2	29%
WA. Rural	LAKKA/JUI/34MIL/ BOMBALI	7%
WA. Rural	ADRA CTC	7%
WA. Urban	JUI CTC	7%

3 The district represents the location of the ambulance station that carried out the mission and not the district of origin of the patient.

4 Missions refers to the emergency movement of NEMS ambulances from target (patient's location) to the referral health facility



WA. Urban	INDIAN CCC	36%
Makeni	MAKENI CTC	7%
Kenema	KENEMA LAB	7%

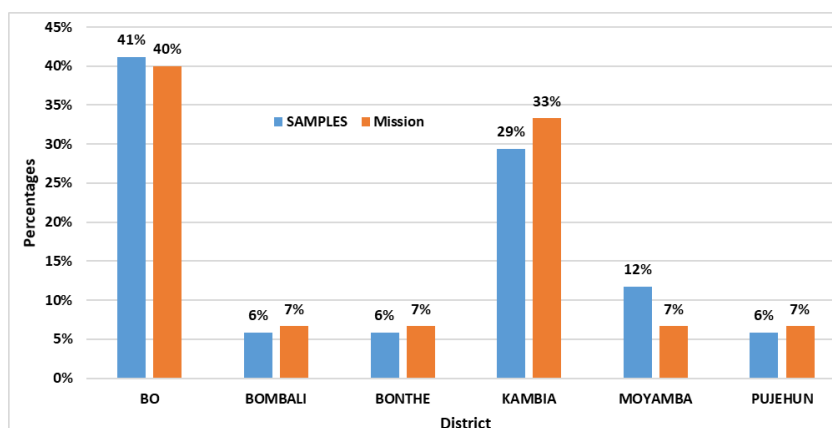
11. Samples' Referrals

In the month of May 2021, NEMS ambulances transported seventeen (17) samples. Bo remain to be the district with the highest number of samples transported (7), Kambia emerging in second place.

Moyamba reported two samples, but only one was classified as a mission, while the other one was aborted.

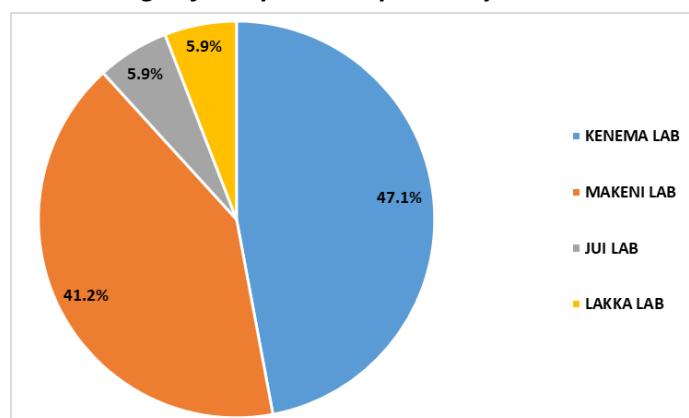
Bombali, Bonthe and Pujehun recorded one sample each, and all of which were missions.

Figure 16 Transportation of Specimen by District: Missions and Samples



The pie chart below demonstrates the movement of specimens to viral laboratories in Sierra Leone. More than 85% of the specimen transported by NEMS were taken to Kenema and Makeni laboratories in the eastern and northern of the nation respectively. What is most intriguing is that specimen from the southern part of the Sierra Leone were also moved to Kenema, which is believed to be the leading centre for viral diseases detection. Jui and Lakka shared the same percentage of cases sent to them.

Figure 17 Percentage of Samples transported by destination laboratories



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