



National Department of Health



Ambulance Service Activity Report Quarter One

1 JANUARY – 31 MARCH 2024

Approved for Public 10 May 2024, Port Moresby

A service provider of the National Department of Health



OFFICIAL



OUR MISSION

Being the **First to Care** for
Papua New Guineans in times of
sickness, distress, crisis and danger,
and helping communities to improve
health and protect life.



Contents

Introduction.....	1
Summary of Quarter 1 2024.....	2
Emergency Incident Growth	6
Incidents by Clinical Presentation (Medical Problem)	7
Incidents by Province and Clinical Presentation	8
Peak Call Periods.....	9
Average Cases per Day.....	10
Median Response Performance by Priority	10
Distance Travelled and Fuel Consumption	14
National Capital District.....	16
Central Province	18
East New Britain	20
Lae City & Morobe Province	22
Air Ambulance Services.....	25
Public vs private patients	29
Private patient fees	29
Ambulance Operations Centre 111.....	31
Ambulance Service Key Performance Measures.....	31
Ambulance Service Staffing.....	32
National Ambulance Coordination Centre (111).....	32
Background and history.....	38
NStJA Station Locations	38
Terminology	39
Key Incident Time Intervals.....	39
Response priorities	40



Introduction

The National St John Ambulance's role as an ambulance service: the National St John Ambulance Service (NStJA) is a statutory organisation governed by its own Act of Parliament. NStJA reports to the Ministry for Health through the National Department of Health, which has long engaged NStJA for providing ambulance services.

NStJA provides primary emergency ambulance services in PNG. The service operates 24 hours from stations in Port Moresby, Central Province, Kokopo, Lae, and other areas listed on our website. As a Papua New Guinean statutory body, our mission is to provide timely and professional emergency medical services as a service agency of the National Department of Health.

Ambulance services are provided at no-cost to citizens needing care and transport to a public health facility in an emergency situation. There are service charges applicable for individuals requiring transport to private hospitals, for non-citizens or for non-emergency services. These charges ensure the service can continue to provide essential services across the community.

Funding: NStJA is subsidised by funding from the government and NStJA's own community fundraising. The national Treasury supports operating costs for the 111 National Ambulance Operations Centre, administration, and management functions. Provincial governments support the staffing and operating costs for ambulance services in their respective provinces. Other sources of revenue for NStJA include fees paid by private patients and non-citizens, memberships, and direct donations. NStJA raises around PGK 3.8m through teaching first aid to workplaces and from selling first aid kits – 100% of this revenue supplements the government funding for the ambulance service.

Reporting period: This document reports the activity of the ambulance service for the period of 2024 (1 January to 31 March 2024). Activities are described by their clinical, demographical, and geographical characteristics in all provinces that NStJA operates.



Summary of Quarter 1 2024

Ambulance Service Data

Table 1: Ambulance service summary data, Q1 2024 vs Q4 2023

Metric	Q4 2023	Q1 2024	% change
Emergency calls handled 📞	24,120	26,820	11%
Emergency incidents 🚒	8,421	9,607	14%
Patients helped * 🧑	6,351	7,071	11%
Patients transported 🚑	5,475	6,123	12%
Distance covered (km) 📏	323,798	260,583	-20%
Caller satisfaction 👍	91%	96.3%	6%
Patient satisfaction 😊	96.5%	93.7%	-3%

*Patients assisted by ambulance (treat at scene and/or transport to hospital) that are documented using an electronic medical report system

National Time-based Operational Performance Measures

Table 2 summarises national operational performance for this quarter. Response times greater than the target are attributable to the distance and geography between the station and the patient location, and whether an ambulance was available at the time of call.

Table 2: Time-based operational performance measures, national, Q1 2024

Category:	Priority 1A		Priority 1B & 1C		All other priorities P2, P3, P4, P5, P6	
Urgency:	Critical		Urgent		Non-urgent	
Timing:	Target	Q1	Target	Q1	Target	Q1
Dispatch time (median)	3 minutes	3 mins 32 secs	3 minutes	16 mins 55 secs	Case dependent	37 mins 12 secs
Response time (median)	12 minutes	14 mins 51 secs	15 minutes	46 mins 5 secs	Case dependent	75 mins 58 secs
Scene time (median)	30 minutes	17 mins 59 secs	30 minutes	18 mins 54 secs	Case dependent	20 mins 10 secs
Overall Case time (median)	1 hr 15 min	1 hr 11 mins	2 hours	1 hr 39 mins	Case dependent	2 hr 13 mins



Ambulance Staff Trained

Table 3: Number of ambulance staff trained Q1 2024 vs Q4 2023

Courses	Q4 2023	Q1 2024
First Responder 🚑	43	New course being developed
Ambulance Officer 🚑	-	Reaccreditation training delivered.
RAO/RAD 🚑	-	Nil
Total	43	-

Public Trained in First Aid

Table 4: Number of people trained in first aid, and student satisfaction, Q1 2024 vs Q4 2023

Metric	Number trained			Student satisfaction 😊	
	Q4 2023	Q1 2024	% change	Q1 2024	Q1 2024
Free First Aid in Schools 🏫	313	275	-12%	NA	NA
First Aid for Work* 🧑‍🏭	580	611	5%	93.72%	94.17%
Public Awareness 🧑‍🤝‍🧑	120	470	292%	NA	NA
Hosp Advanced Resus'n 🚑	134	-	-	100%	-
Total	1,147	1,356	18%		

* Workplace first aid includes L1 (BEFA), L2 (PSFA), L3 (AFA).

Resourcing

The table below indicates the number of crewed public ambulance available in each province at any one time:

Table 5: Public ambulances on duty available at any one time, by province, 31 March 2024

24-hour resources	NCD	Central	Morobe	ENB	Total
Advanced Life Support	1	-	-	-	1
Basic Life Support	5	-	2	1	8
Reservist	-	2	-	-	2
Paramedic / HEO standby	1	1	-	-	1
Total	7	3	2	1	13



Table 6: On-call resources, by province, 31 March 2024

On-call resources	NCD	Central	Morobe	ENB	Total
Reservist	-	2	-	-	2
Advanced Life Support	-	-	-	-	-
Paramedic	4	-	-	-	4
Doctor	2	-	-	-	2
Command	2	-	1	1	4
Total	8	2	1	1	12

The number of operational and corporate staff in each province is summarised below. The workforce figures represent staffing as at 31st March 2024:

Table 7: Staffing levels (headcount), by province, 31st March, 2024

Province	NCD	Central	Morobe	ENB	Total
Clinical staff					
RAO	8	-	2	5	15
RAD	-	9	10	-	19
AO2	4	-	1	-	5
TAO	-	-	-	-	-
QAO	36	-	6	3	45
EMT	1	-	-	-	1
Ambulance Nurse/ HEO	5	-	1	-	6
Paramedic (incl management)	4	-	-	-	4
RAMO (medical officer)	1	-	-	-	1
RN / HEO - clinical projects	4	2	2	2	10
Support Services Staff					
Fleet & Maintenance	8	-	-	-	8
Service Planning	4	-	-	-	4
All Other	26	-	-	-	26
HQ staff					
Finance	6	-	-	-	6
People Workforce & Culture	5	-	-	-	5
Office of CEO	10	-	-	-	10
Enterprise & Education	5	-	-	-	5
Clinical	16	-	-	-	16
Total	143	11	22	10	186
Ambulance staff with leadership qualifications	LEAP:	7	L&M:	8	

Response to Motor Vehicle Accidents Emergencies

27 March 2024

On 27 March, the ambulance service swiftly responded to three separate motor vehicle accident (MVA) incidents across Port Moresby, at ATS, 8-Mile, and Vadavada. These unfortunate events resulted in varying degrees of injuries to those involved.

A fleet of five ambulances, along with a paramedic response vehicle backup, rushed to the scenes to provide urgent medical assistance. At ATS, one patient was attended to, while three patients received aid at 8-Mile. However, upon arrival at Vadavada, the ambulance crew found no sign of any patients.

Earlier in the quarter, NSTJA attended a mass casualty MVA where the majority of patients were primary school children on their way home after school. At 3:30 pm on Tuesday 6 February, the St John Ambulance Operations Centre received a call about multiple casualties from a MVA at ATS, National Capital District. Eight resources (ambulances and command vehicles) responded to the scene, in addition to an ambulance mass casualty transport bus.

On arrival, the units found that the Public Motor Vehicle (PMV) collided with a light pole causing moderate deformity to the vehicle and exposing electrical wires. A total of 16 patients were attended to and NSTJA transported 14 patients to the hospital, including the driver. Most of the passengers injured were children under 13 years old. Five children had suspected limb fractures. At least three young children had head injuries. Amongst the injured was a young baby being nursed by the mother.

These four MVAs are part of the 64 MVAs that the ambulance service attended to in this quarter.

These recurring MVC incidents highlight the pressing threat to public safety within the communities that concern NSTJA. NSTJA reiterates the importance of adhering to road safety regulations, including responsible driving practices and the use of seat belts and appropriate safety gear. The ambulance service urged the public not to move injured persons and to await the arrival of professional medical assistance.

It's crucial to promptly contact the ambulance service for MVC emergencies, ensuring swift transportation of casualties to hospitals. NSTJA continues to urge all members of the community to remain vigilant on the roads, prioritise safety at all times, and promptly report any emergencies requiring medical assistance by calling 111 for the ambulance.



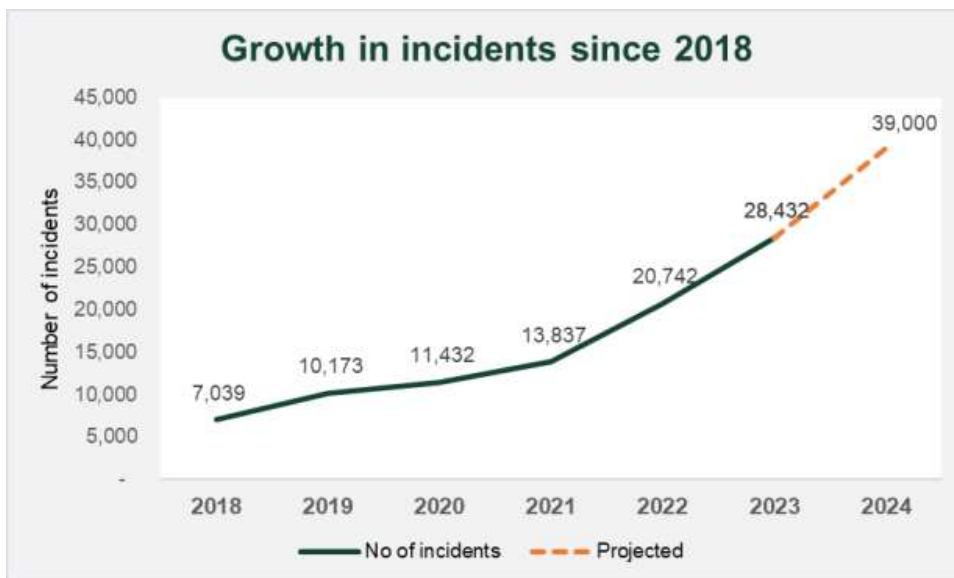


National Performance Reporting

Emergency Incident Growth

The graph above indicates the total incidents responded to since 2018. In Quarter 2 of 2020, NSTJA started opening new ambulance stations in regional centres, beginning with a station opening in East New Britain. This expansion is reflected in the increase in incidents and is expected to continue in 2024. We have revised upwards our 2024 incident estimate from 35,000 to 39,000 incidents, reflecting the pressure that NSTJA finds itself under.

Figure 1: Growth in clinical incidents since 2018





Incidents by Clinical Presentation (Medical Problem)

During the reporting period, NStJA attended to **9,607** incidents. This is an increase of 1,186 (14%) incidents compared to the previous quarter in 2023. Incidents, split by clinical presentation, are shown in Table 8 below.

Table 8: Incidents by clinical presentation Q1 2024 vs Q4 2023

Clinical Presentation	Q4 2023	Q1 2024	Change	
			Number	%
Bites/Stings	88	126	38	43%
Cardiovascular	242	296	54	22%
Gastrointestinal	719	894	175	24%
Medical general (other)	2,786	3,389	603	22%
Mental health	7	19	12	171%
Mortuary	57	59	2	4%
Motor vehicle collision	57	64	7	12%
Obstetric/ maternal	1,128	1,413	285	25%
Other trauma	1,399	1,353	-46	-3%
Respiratory	1,265	1,339	74	6%
Shooting	12	42	30	250%
Toxicology	64	66	2	3%
Transfer	597	547	-50	-8%
Total	8,421	9,607	1,186	14%

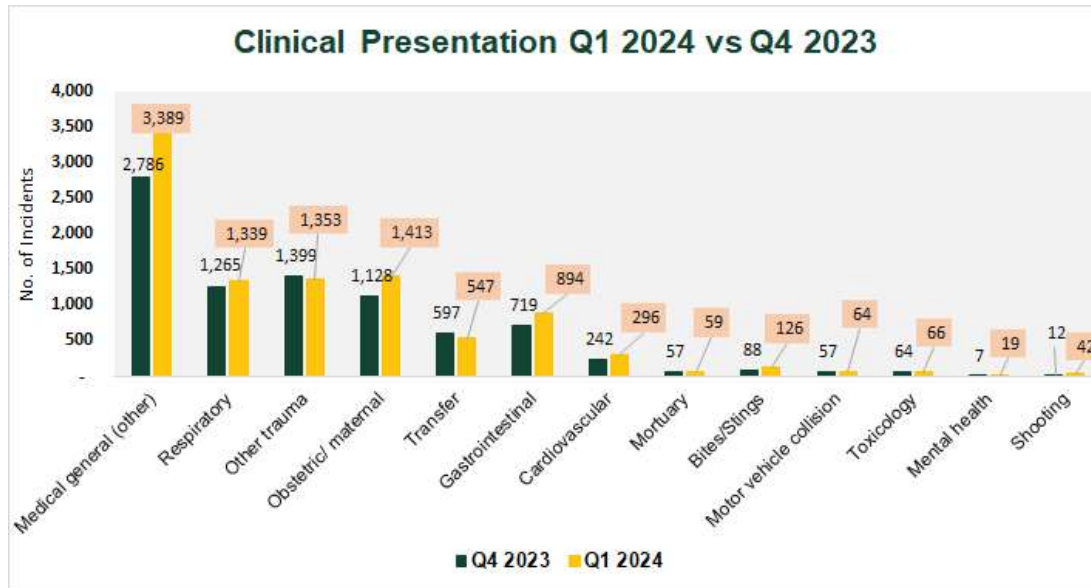
The majority of clinical cases during in quarter one fell under the category of general medical issues, constituting 35% of all incidents. These are cases such as catch-all 'sick person', diabetic, headache, seizure, stroke, unconscious and back pain. Compared to the previous quarter, there has been a 46% increase in cardiovascular and gastrointestinal incidents.

Trauma cases, including incidents involving motor vehicle collisions, toxicology, shootings, bites/ stings and other trauma, have witnessed a 2% increase since last quarter. Trauma constitutes 14% of the total incident workload. Obstetric/maternal cases account for 15% of all incidents, while respiratory cases make up 14% for this year to date.



Figure 2 shows the Q1 2024 incidents that NStJA attended nationally, by clinical presentation, in graphical format.

Figure 2: Clinical presentations Q1 2024 vs Q4 2023



Incidents by Province and Clinical Presentation

Table 9 indicates incidents by province and clinical presentation. We assisted a few patients in Simbu, even though we do not have an ambulance station there:

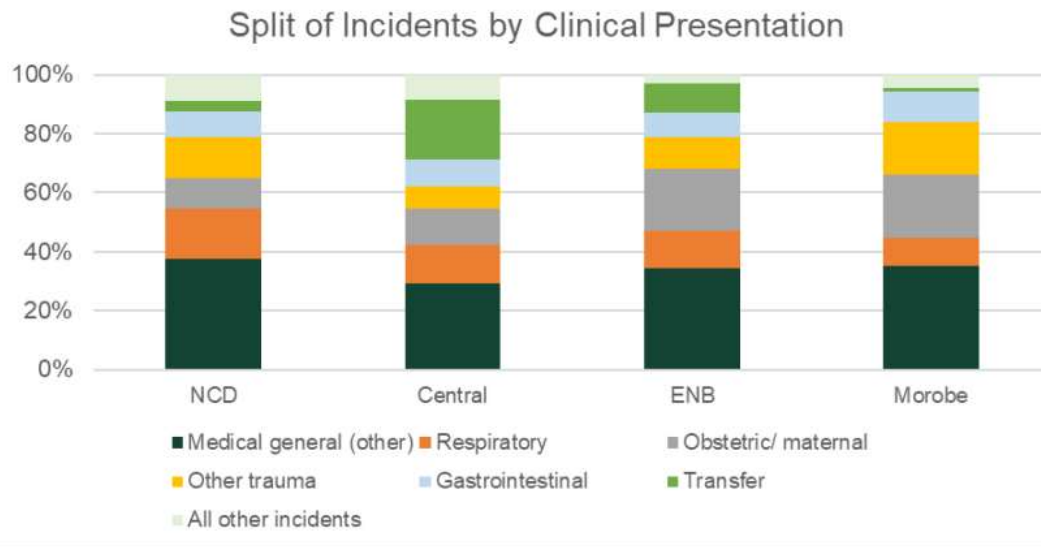
Table 9: Incidents by clinical presentation and province, Q1 2024.

Clinical Presentation	NCD	Central	ENB	Morobe	Total
Bites/Stings	43	67	-	16	126
Cardiovascular	182	36	7	71	296
Gastrointestinal	402	128	43	321	894
Medical gen'l (other)	1,731	407	175	1,076	3,389
Mental health	15	3	-	1	19
Mortuary	54	3	1	1	59
Motor vehicle collision	57	-	-	7	64
Obstetric/ maternal	484	170	107	652	1,413
Other trauma	637	108	55	553	1,353
Respiratory	797	182	66	294	1,339
Shooting	19	1	5	17	42
Toxicology	38	6	1	21	66
Transfer	177	284	52	34	547
Total	4,636	1,395	512	3,064	9,607



The split of clinical presentations varies by province. For example, obstetric/ maternal cases are 21% of the workload in Morobe (vs average 14% in other provinces). Transfers ranged between 4% of incidents (Morobe) and 20% of incidents (Central).

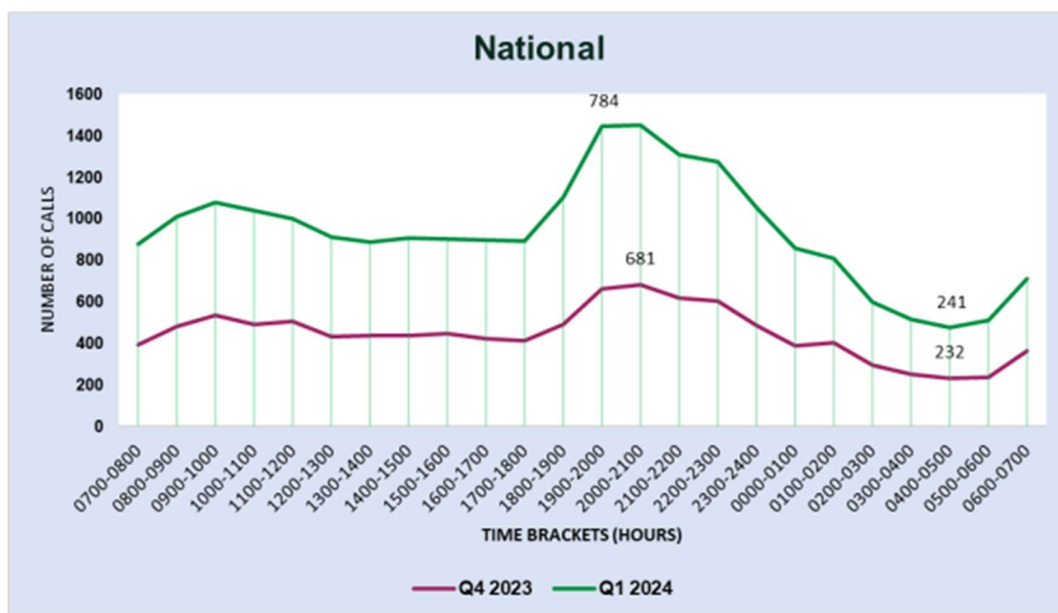
Figure 3: Split of incidents by clinical presentation, by province, Q1, 2024.



Peak Call Periods

We keep track of the times at which calls for help are received. For this quarter, the busiest time when calls for help are received is between **19:00 – 20:00** with a total of 784 calls, while the least number of calls received is between **04:00 – 05:00 AM** with a total of 241 calls.

Figure 4: Average calls per hour, national, Q1, 2024.

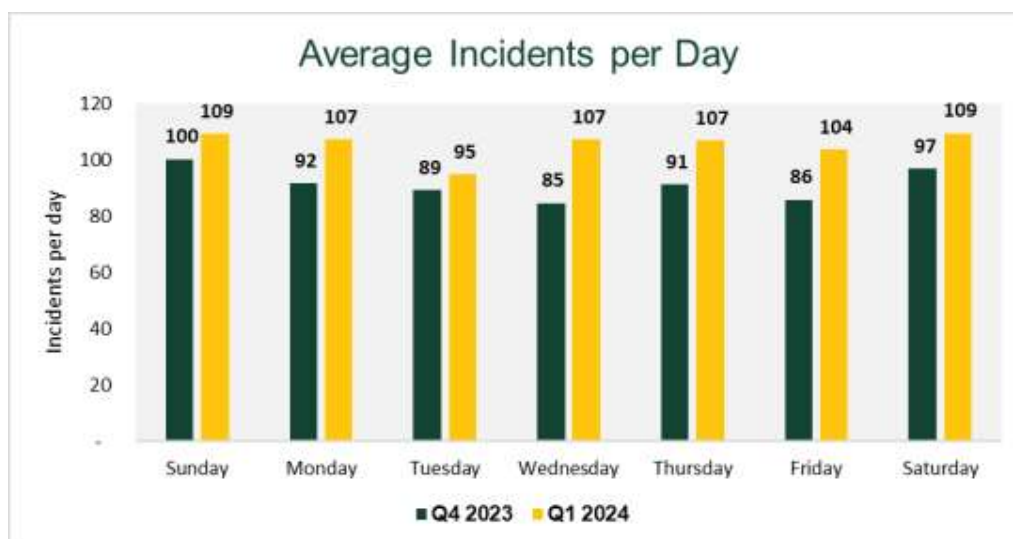




Average Cases per Day

The graph below indicates the average number of cases responded to per day in Q1 2024 in comparison to Q4 2023. The busiest days this year is **Saturday** and **Sunday** and the quietest day is **Tuesday** (although there is not much variation between week days).

Figure 5: Average cases per day, Q1 2024 vs Q4 2023



Median Response Performance by Priority

The response time of the ambulance services is an elemental factor for prehospital care to be successful and, therefore, must be targeted to increase the chances of survival.

Calls to 111 are assessed and triaged by NStJA call-takers. The call-taker uses a computer-aided dispatch system to ask scripted questions. The computer automatically determines the priority based on the answers the caller gives to the scripted questions. Higher priority is automatically given according to the patient's level of consciousness and respiratory status.

Incidents are responded to in order of priority and availability of ambulances. Category 1A is the highest priority. All category 1 calls receive a lights and sirens response. Other categories generally receive a response under normal driving conditions. The time to reach a patient can be affected by many factors. Some factors are relatively within NStJA's control, such as how long it takes to handle the call (call handling time) and how long it takes an ambulance crew to go from the station to their ambulance. Other times cannot easily be controlled by NStJA, such as the distance from the station to the patient's location, and the difficulty of the terrain.

Dispatch Time

'Dispatch time' is defined as the time between when the call-taker first receives the call about a case and the dispatcher tasks an ambulance crew to attend the case by sending a message to the crew (usually by radio or pager). The median dispatch time in each province is shown in the table below. Extended dispatch times indicate NStJA ambulances were not available at time of



call because they were attending to other incidents. The table demonstrates that NStJA triages calls and responds much faster to Priority 1A calls.

Table 10: Median dispatch times, by priority, quarter one, 2024.

Category	Priority 1A		Priority 1B & 1C		All other priorities P2, P3, P4, P5, P6	
Urgency	Critical		Urgent		Non-urgent	
Timing	Target	Q1	Target	Q1	Target	Q1
NCD	3 minutes	3 mins 29 secs	3 minutes	15 mins 59 secs	Case dependent	36 mins 37 sec
Central	3 minutes	3 mins 34 secs	3 minutes	29 mins 6 secs	Case dependent	66 mins 51 secs
Morobe	3 minutes	3 mins 32 secs	3 minutes	21 mins 36 secs	Case dependent	26 mins 29 secs
East New Britain	3 minutes	8 mins 53 secs	3 minutes	16 mins 26 secs	Case dependent	21 mins 5 secs
National Median	3 minutes	3 mins 32 secs	3 minutes	16 mins 55 secs	Case dependent	37 mins 12 secs

The graph below shows national median dispatch time by quarter for priority 1A, 1B, and 1C cases, from Q1 2021 to the current reporting period.

Figure 6: Dispatch times by priority, national, Q1 2021 onwards

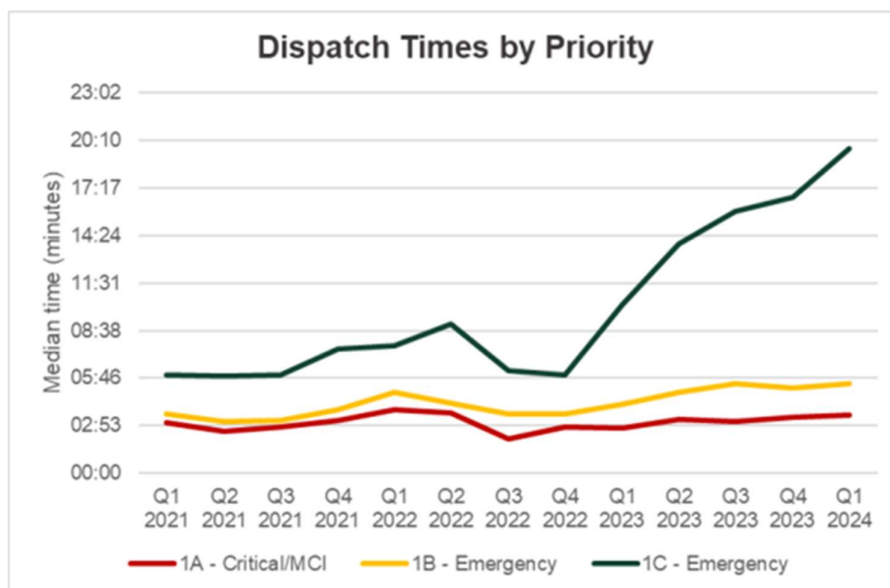


Figure 6 shows that as NStJA has responded to more incidents (without a corresponding increase in resources), 1C dispatch times have extended as NStJA has prioritised its response to the highest priority cases (1A).



Response Time

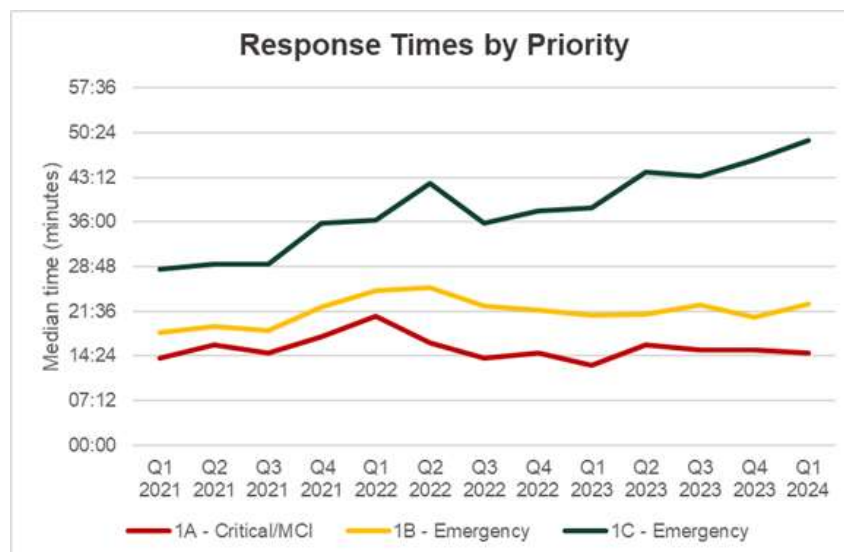
Response time is the time between notification of an occurrence and the ambulance's arrival at the scene. According to the WHO, an ideal response time for priority 1A critical cases is less than 8 minutes. NSTJA targets 12 minutes in urban areas. This **2023 median response time** in minutes and seconds is shown below for each province.

Table 11: Median response times, by priority, quarter one, 2024.

Category	Priority 1A		Priority 1B & 1C		All other priorities P2, P3, P4, P5, P6	
Urgency	Critical		Urgent		Non-urgent	
Timing	Target	Q1	Target	Q1	Target	Q1
NCD	12 minutes	13 mins 29 secs	15 minutes	40 mins 50 sec	Case dependent	59 mins 56 sec
Central	12 minutes	26 mins 47 secs	15 minutes	101 mins 12 sec	Case dependent	152 mins 56 secs
Morobe	12 minutes	14 mins 52 secs	15 minutes	46 mins 50 secs	Case dependent	50 mins 26 secs
East New Britain	12 minutes	24 mins 54 secs	15 minutes	57 mins 28 secs	Case dependent	72 mins 16 secs
National Median	12 minutes	14 mins 51 secs	15 minutes	46 mins 5 secs	Case dependent	75 mins 58 secs

The graph below shows national median response time by quarter for priority 1A, 1B, and 1C cases, from Q1 2021 to the current reporting period. As with dispatch time, response times for 1C cases have extended as NSTJA's resources have come under increasing pressure.

Figure 7: Response times by priority, national, Q1 2021 onwards





Scene Time

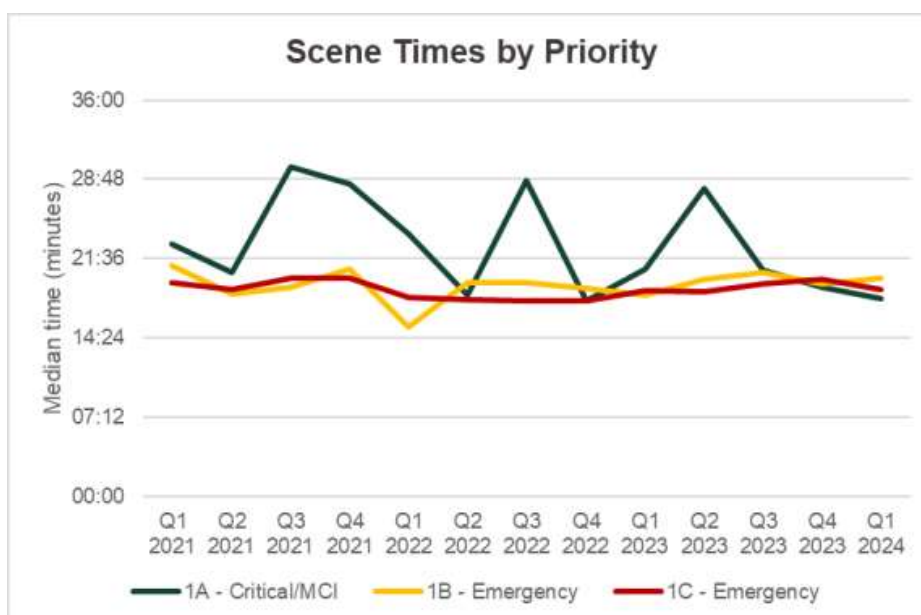
Scene time is the time between when the first ambulance arrives at the incident to when it departs the scene. The table below shows this quarter's scene time in minutes and seconds. In most provinces, scene times were below target, indicating that crews treat and transport patients to hospital efficiently.

Table 12: Median scene times, by priority, quarter one, 2024.

Category	Priority 1A		Priority 1B & 1C		All other priorities P2, P3, P4, P5, P6	
Urgency:	Critical		Urgent		Non-urgent	
Timing:	Target	Q1	Target	Q1	Target	Q1
NCD	30 minutes	19 mins 28 secs	30 minutes	18 mins 26 secs	Case dependent	17 mins 24 secs
Central	30 minutes	30 mins 57 secs	30 minutes	20 mins 59 secs	Case dependent	17 mins 24 secs
Morobe	30 minutes	15 mins 45 secs	30 minutes	18 mins 41 secs	Case dependent	18 mins 58 secs
East New Britain	30 minutes	-	30 minutes	17 mins 49 secs	Case dependent	19 mins 9 secs
National Median	30 minutes	17 mins 59 secs	30 minutes	18 mins 54 secs	Case dependent	20 mins 10 secs

The graph below shows national median scene time by quarter for 1A, 1B, and 1C, from Q1 2021 to the current reporting period.

Figure 8: Scene times by priority, national, Q1 2021 onwards





Overall Case Time

Overall case time is the time between when the emergency call is received by NStJA to when the ambulance arrives back at the station, (or is tasked to another emergency). The table below shows this **2023 median case time** in minutes and seconds.

Table 13: Median case times, by priority, quarter one, 2024.

Category	Priority 1A		Priority 1B & 1C		All other priorities P2, P3, P4, P5, P6	
Urgency:	Critical		Urgent		Non-urgent	
Timing:	Target	Q1	Target	Q1	Target	Q1
NCD	1 hour 15 min	1 hr 12 mins	2 hours	1 hr 35 mins	Case dependent	1 hr 58 mins
Central	1 hour 15 min	2 hrs 21 mins	2 hours	3 hrs 10 mins	Case dependent	5 hrs 53 mins
Morobe	1 hour 15 min	1 hr 1 min	2 hours	1 hr 31 mins	Case dependent	1 hr 34 mins
East New Britain	1 hour 15 min	-	2 hours	2 hrs 2 mins	Case dependent	2 hrs 37 mins
National Median	1 hour 15 min	1 hr 11 mins	2 hours	1 hr 39 mins	Case dependent	2 hrs 37 mins

Distance Travelled and Fuel Consumption

In Q1 2024, there was a 30% decrease in fuel consumption (with an accompanying a fall in distance travelled) for two main reasons: difficulties securing fuel after the January 10 civil unrest, and a higher-than-usual number of vehicles being grounded for mechanical repairs.

Distance Travelled

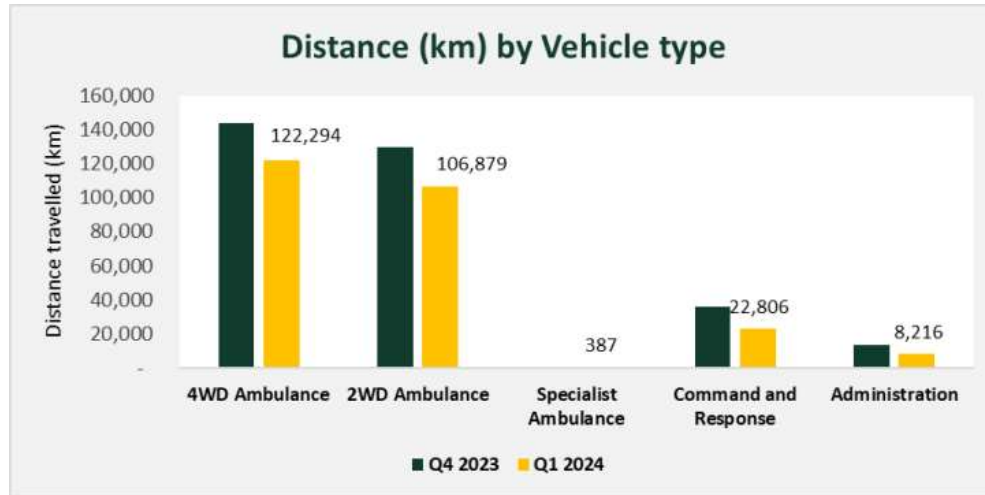
Nationally, a total distance of 323,798 kilometres was travelled last quarter. For this quarter, a total distance of **260,583 km** was travelled (63,215 km or less than last quarter). This is illustrated in the following graph and table.

Table 14: Distance travelled by vehicle type (km), Q1 2024 vs Q4 2023

Vehicle Class	Q4 2023	Q1 2024	Change
4WD Ambulance	143,793	122,681	-21,112
2WD Ambulance	130,041	109,791	-20,250
Specialist Ambulance	610	387	-223
Command and Response	35,813	22,806	-13,007
Administration	13,541	8,216	-5,325
Total distance travelled	323,798	263,882	-59,916



Figure 9: Distance travelled by vehicle type (km), Q1 2024 vs Q4 2023



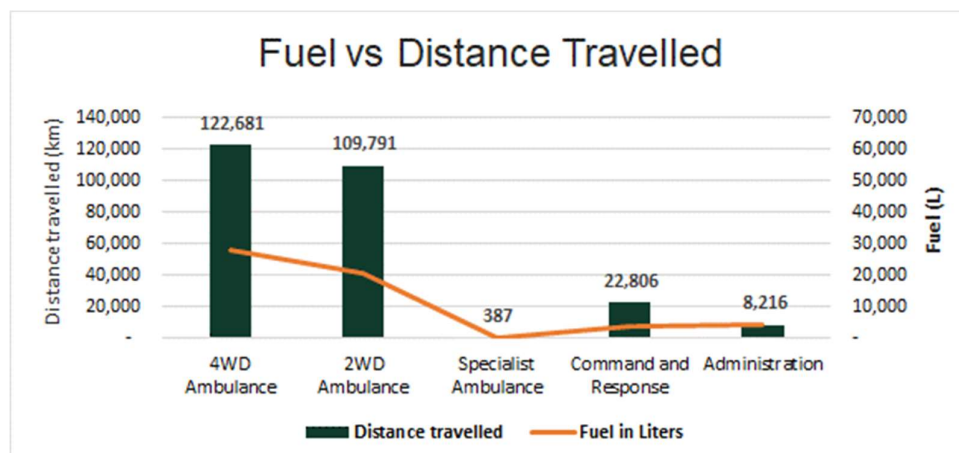
Fuel consumption

The table and chart below show fuel consumption in litres for Q1 2024 compared with Q4 2023, and fuel versus distance travelled, by quarter, for quarter one.

Table 15: Amount of fuel in litres consumed by quarter, Q1 2024 vs Q4 2023

Vehicle Class	Q4 2023	Q1 2024	Change
4WD Ambulance	44,982	28,079	-16,903
2WD Ambulance	18,356	20,977	2,622
Specialist Ambulance	250	168	-82
Command and Response	4,043	3,995	-47
Administration	5,509	4,306	-1,203
Total distance travelled	73,139	57,526	-15,613

Figure 10: Fuel vs distance travelled, by quarter one, 2024





Reporting by Province

National Capital District



Incidents by Electorate

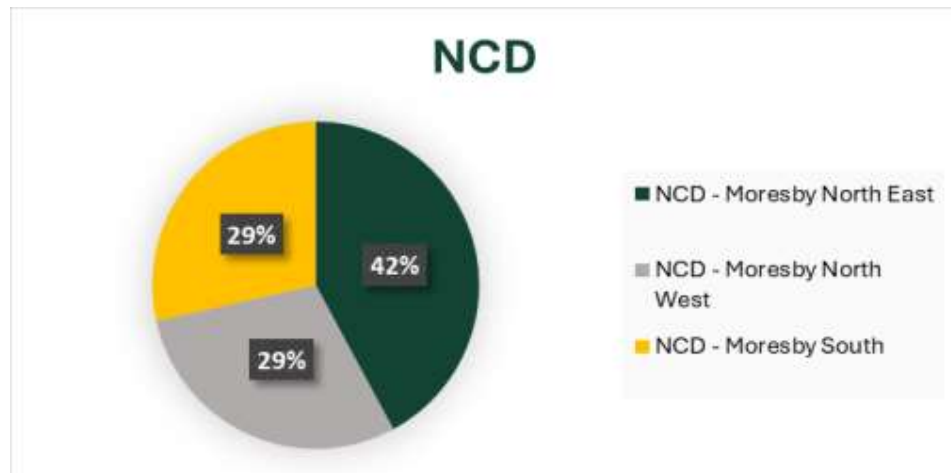
There has been an overall increase in NCD incidents of 4%, with the largest growth (10%) in Moresby North-East.

Table 16: Incidents by electorate, NCD, quarter one, 2024.

Electorate	Q4 2023	Q1 2024	% of total	Change	
				Number	%
NCD - Moresby North East	1,780	1,953	42%	173	10%
NCD - Moresby North West	1,330	1,362	29%	32	2%
NCD - Moresby South	1,345	1,322	29%	-23	-2%
Total incidents	4,455	4,636	100%	181	4%

Figure 11 shows the split of incidents by electorate.

Figure 11: Share of incidents by electorate, NCD, quarter one, 2024.

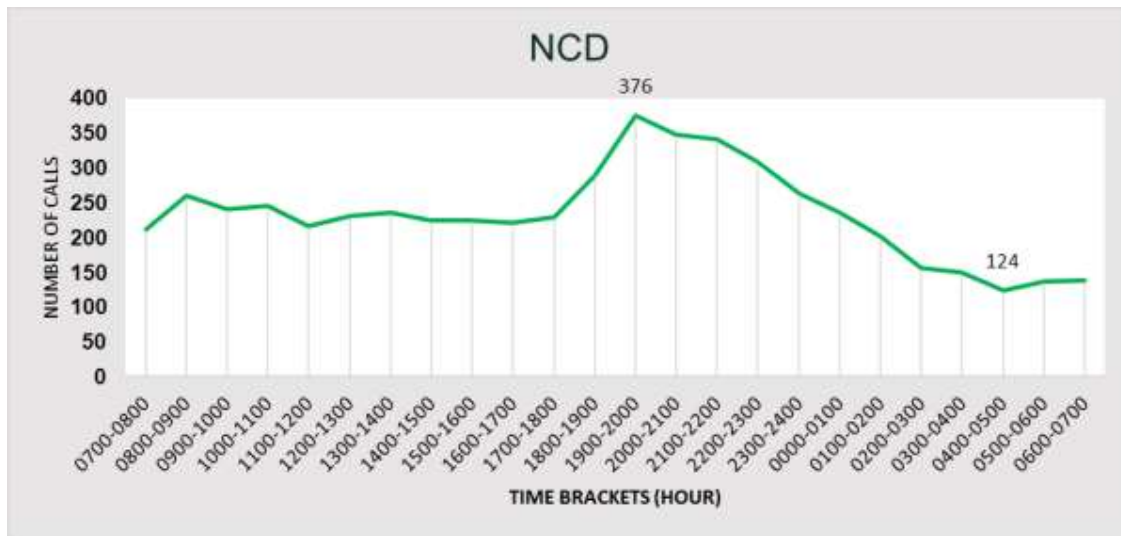




Peak Call Periods

We keep track of the times at which calls for help are received. For NCD, the highest number of calls occurred between **16:00 -17:00** hours, while the least number of calls occurred between **02:00 – 03:00** hours.

Figure 12: Average calls per hour, NCD, first quarter, 2024



Distance Travelled

Table 17: Distance travelled by vehicle type (km), NCD, Q1 2024 vs Q4 2023

Vehicle Class	Q4 2023	Q1 2024	Change
4WD ambulance	50,485	30,598	-19,887
2WD ambulance	124,314	109,087	-15,227
Specialist Ambulance	610	387	-223
Command And Response	21,717	15,279	-6,438
Administration	13,541	8,216	-5,325
Total km travelled	210,666	163,567	-47,099





Central Province



Incidents by Electorate

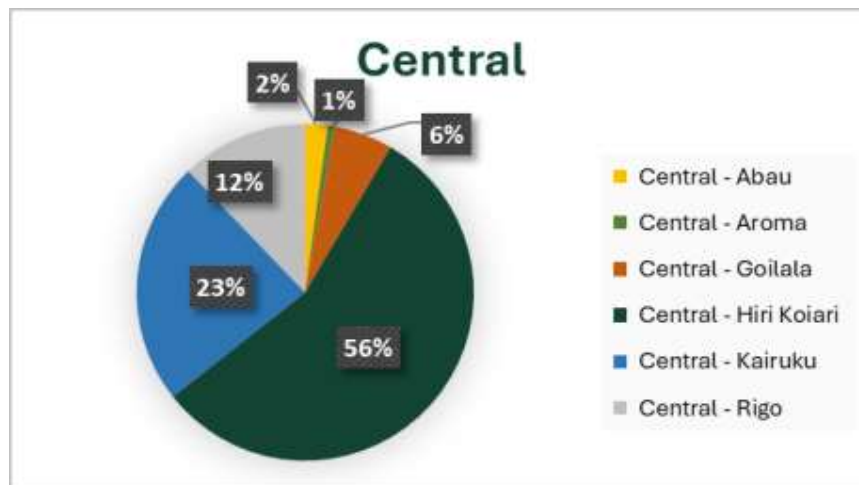
In Central, Hiri-Koiari, the largest district accounted for the most incidents attended with 56% this quarter. Incidents in Central Province increased by 15% over the previous quarter.

Table 18: Incidents by electorate, Central, first quarter, 2024

Electorate	Q4 2023	Q1 2024	% of total	Change	
				Number	%
Central - Abau	18	30	2%	12	67%
Central - Aroma	9	9	1%	-	0%
Central - Goilala	75	79	6%	4	5%
Central - Hiri Koiari	707	780	56%	73	10%
Central - Kairuku	287	327	23%	40	14%
Central - Rigo	113	170	12%	57	50%
Total incidents	1,209	1,395		186	15%

Figure 13 shows the split of incidents by electorate.

Figure 13: Share of incidents by electorate, Central, first quarter, 2024

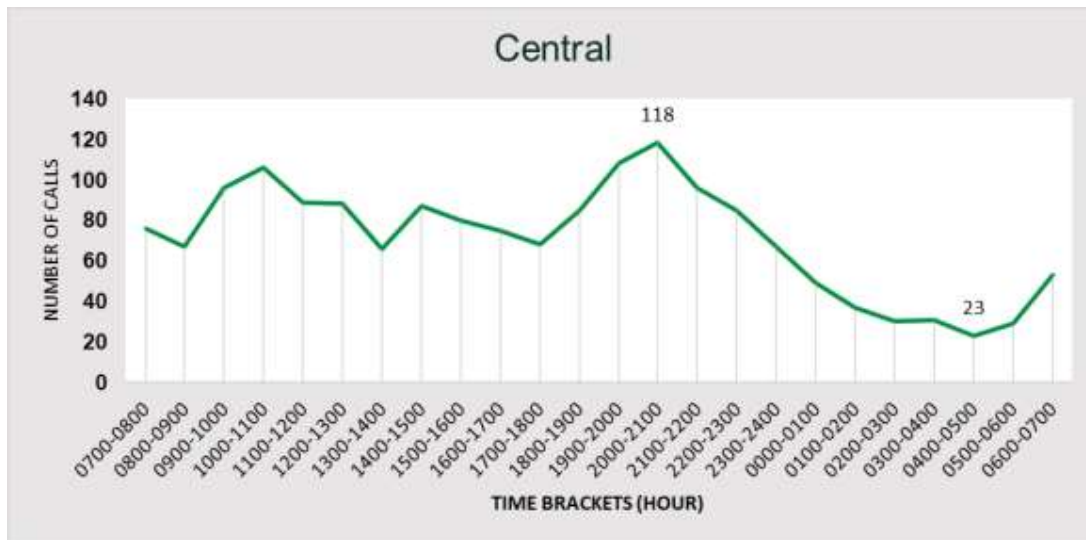




Peak Call Periods

We keep track of the times at which calls for help are received. For Central Province, the highest number of calls are received between **20:00 – 21:00** hours, and the least number of calls are received between **04:00 – 05:00** hours during the year.

Figure 14: Average calls per hour, Central, first quarter, 2024



Distance Travelled

Table 19: Distance travelled by vehicle type (km), Central, 2023 vs 2022

Vehicle Class	Q4 2023	Q1 2024	Change
4WD ambulance	40,347	39,312	-1,035
Total km travelled	40,347	39,312	-1,035





East New Britain



Incidents by Electorate

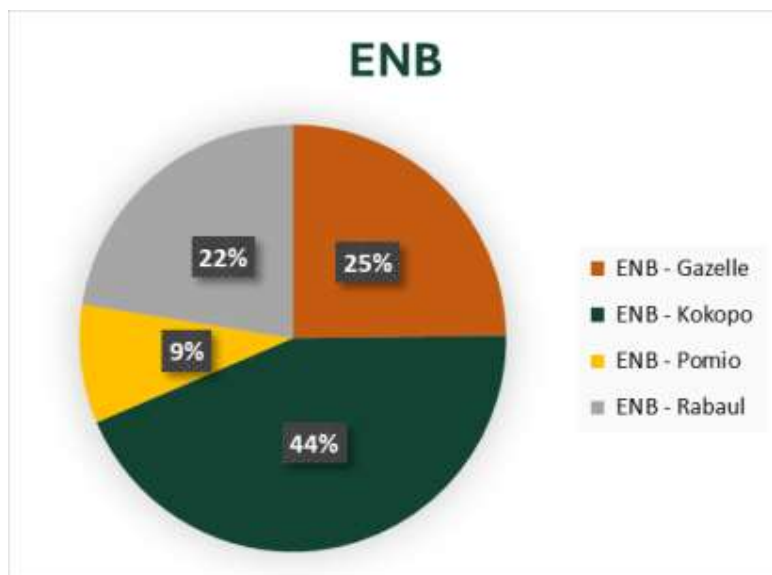
During this quarter, Kokopo and Gazelle, the districts located in East New Britain, collectively constituted 69% of all incidents reported. Kokopo alone contributed to 44% of the overall increase in incidents this quarter, exceeding Gazelle. This disparity may signify an enhancement in reporting accuracy, enabling a more precise allocation of incidents.

Table 20: Incidents by electorate, ENB, first quarter, 2024

Electorate	Q4 2023	Q1 2024	% of total	Change	
				Number	%
ENB - Gazelle	165	127	25%	-38	-23%
ENB - Kokopo	165	224	44%	59	36%
ENB - Pomio	8	46	9%	38	-475%
ENB - Rabaul	121	115	22%	-6	-5%
Total incidents	458	512		54	12%

Figure 15 shows the split of incidents by electorate.

Figure 15: Share of incidents by electorate, ENB, first quarter, 2024

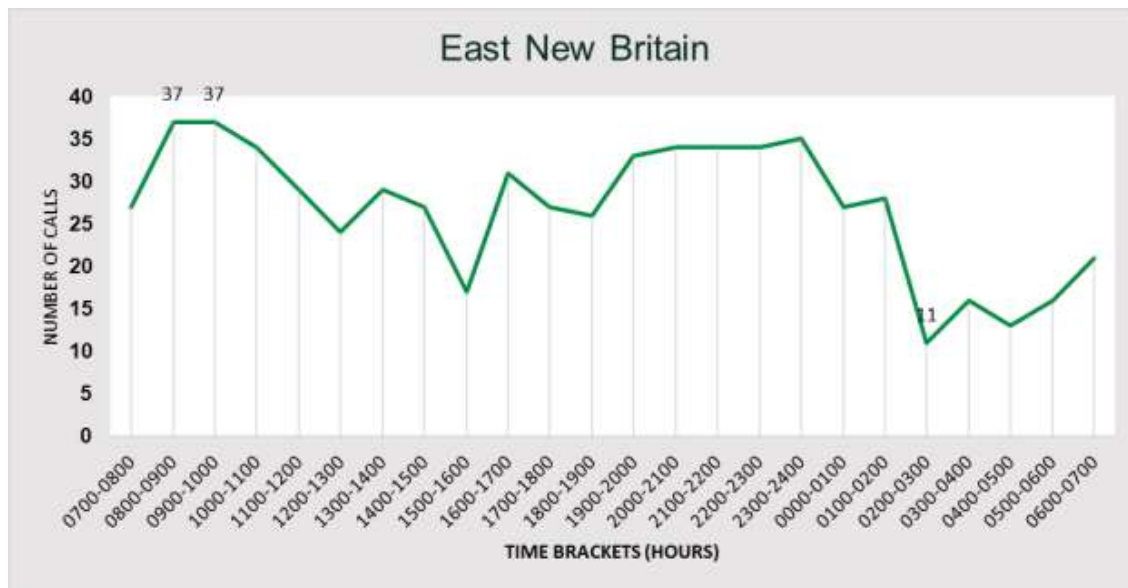




Peak Call Periods

We keep track of the times at which calls for help are received. For East New Britain Province, the highest number of calls are received between **08:00 – 10:00** hours while the least number of calls for this quarter were between **02:00 – 03:00** hours. East New Britain has a different pattern of calls to other provinces, with a higher proportion of calls late at night than other areas.

Figure 16: Average calls per hour, ENB, quarter one, 2024



Distance Travelled

Table 21: Distance travelled by vehicle type (km), ENB, Q1 2024 vs Q4 2023

Vehicle Class	Q4 2023	Q1 2024	Change
4WD ambulance	17,506	11,733	-5,773
2WD ambulance	3,364	704	-2,660
Total km travelled	20,870	12,437	-8,433



Lae City & Morobe Province



Incidents by Electorate

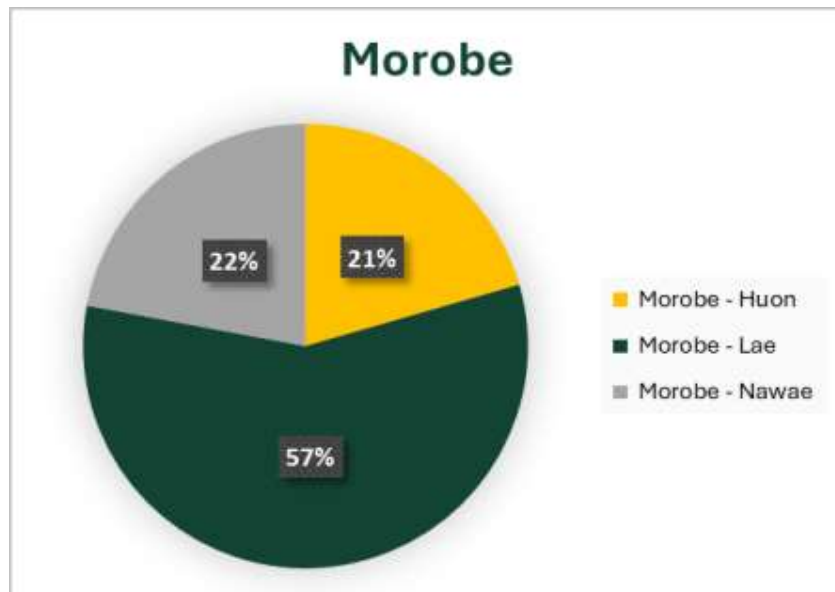
In Morobe, Lae city accounted for most of the incidents with 57% compared to other electorates. Incidents in Huon increased by 40% between Q4 last year and this quarter; total incidents in the province increased by 34% year on year.

Table 22: Incidents by electorate, Morobe, quarter one, 2024

Electorate	Q4 2023	Q1 2024	% of total	Change	
				Number	%
Morobe - Huon	448	627	20%	179	40%
Morobe - Lae	1,304	1,752	57%	448	34%
Morobe - Nawae	534	674	22%	140	26%
Morobe - Bulolo	-	12	0.4%	12	-
Total incidents	2,286	3,064		778	34%

Figure 17 shows the split of incidents by electorate.

Figure 17: Share of incidents by electorate, Morobe, quarter one, 2024

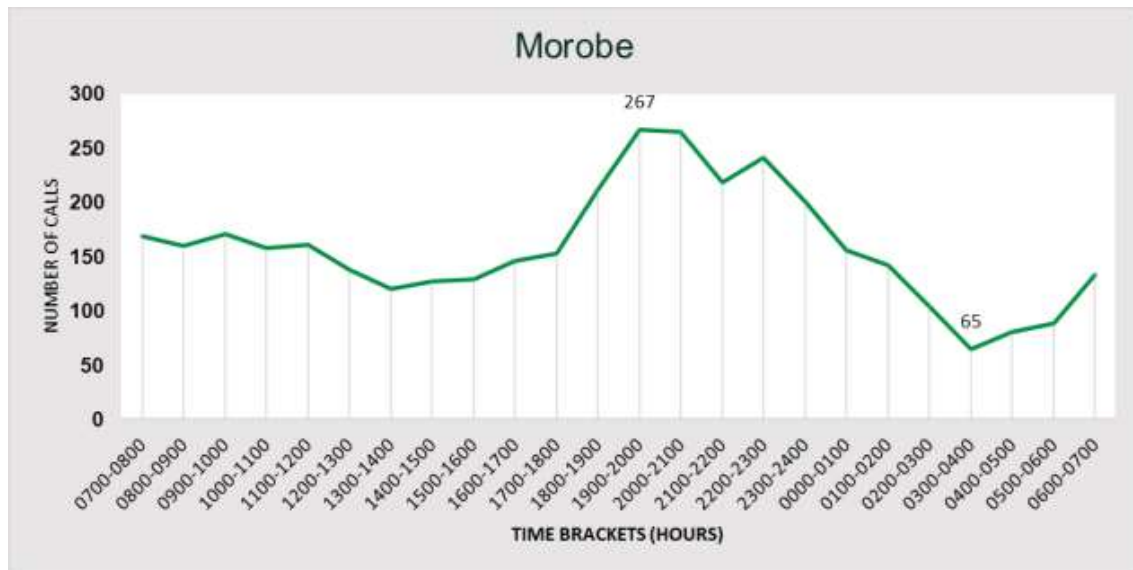




Peak Call Periods

We keep track of the times at which calls for help are received. For Morobe Province, the highest number of calls received are between **19:00 – 20:00** hours during the night and the least number of calls were received between **03:00 – 04:00** hours.

Figure 18: Average calls per hour, NCD, quarter one, 2024



Distance Travelled

There is a 16% increase in distance travelled for 4WD in Morobe Province.

Table 23: Distance travelled by vehicle type (km), Morobe, Q1 2024 vs Q4 2023

Vehicle Class	Q4 2023	Q1 2024	Change
4WD ambulance	35,455	41,038	5,583
2WD ambulance	2,364	-	-2,364
Command And Response	14,096	7,527	-6,569
Total km travelled	51,916	48,566	-3,350



Air Ambulance Services

NStJA provides aeromedical services for patients across Papua New Guinea. NStJA has flight trained doctors, nurses and paramedics who work on chartered helicopters and planes to retrieve patients from remote areas and bring them to the safety of PNG's leading hospitals.

This service caters for both planned patient transfers and swift responses to emergent situations, reflecting the NStJA's commitment to providing comprehensive and timely healthcare.





Air Ambulance Services

Fixed wing missions and flight hours

NStJA coordinated five (5) fixed wing missions this quarter, a decrease from the 7 missions conducted in the previous quarter.

Table 24: Fixed wing missions, Q1 2024 vs Q4 2023

Fixed-wing	Q4 2023	Q1 2024	YTD Total (missions)
Southern	2	2	2
Momase	1	1	1
NGI	2	0	0
Highlands	1	1	1
Australia	0	1	0
International (other)	1	0	0
Total missions	7	5	5

The chart below shows quarterly fixed wing missions over the last three years.

Figure 19: Fixed wing missions by quarter, Q1 2021 onwards





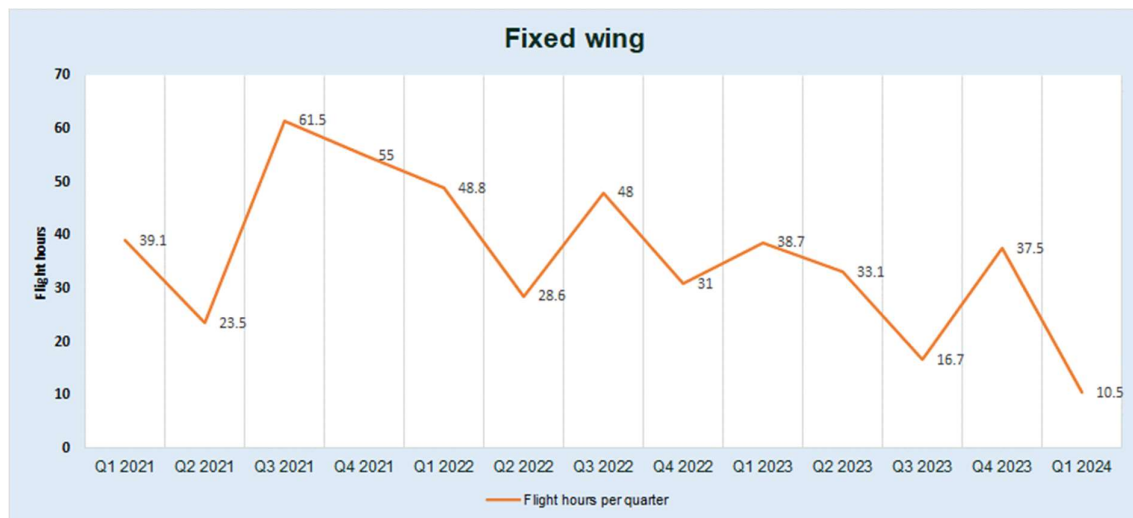
The total hours flown by fixed wing aircraft to provide care during this year are shown below.

Table 25: Fixed wing flight hours, Q1 2024 vs Q4 2023

Fixed wing	Q4 2023	Q1 2024	YTD total (hours)
Southern	4.2	3.1	4.2
Momase	2.9	2.9	2.9
NGI	5.2	0	5.2
Highlands	1.6	1.5	1.6
Australia	0	3	0
International (other)	16	0	16
Total hours	29.9	10.5	29.9

The chart below shows quarterly fixed wing flight hours over the last three years.

Figure 20: Fixed wing flight hours by quarter, Q1 2021 onwards





Helicopter missions and flight hours

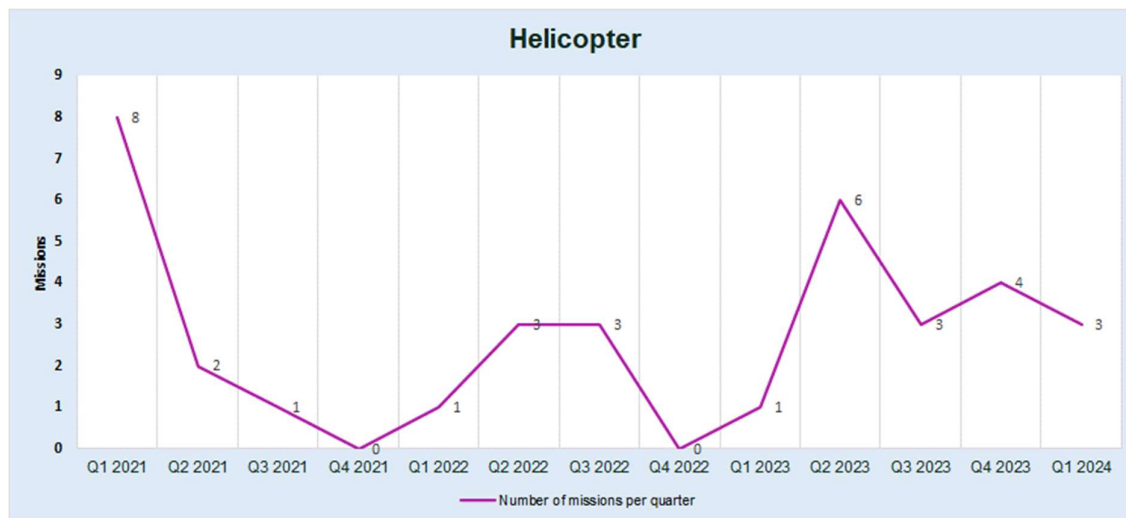
NStJA oversaw 3 helicopter missions this year, all in Southern Region.

Table 26: Helicopter missions, Q1 2024 vs Q4 2023

Helicopter	Q4 2023	Q1 2024	YTD Total (missions)
Southern	4	3	3
Momase	-	-	-
NGI	-	-	-
Highlands	-	-	-
International	-	-	-
Total hours	4	3	3

The chart below shows quarterly helicopter missions over the last three years.

Figure 21: Helicopter missions by quarter, Q1 2021 onwards





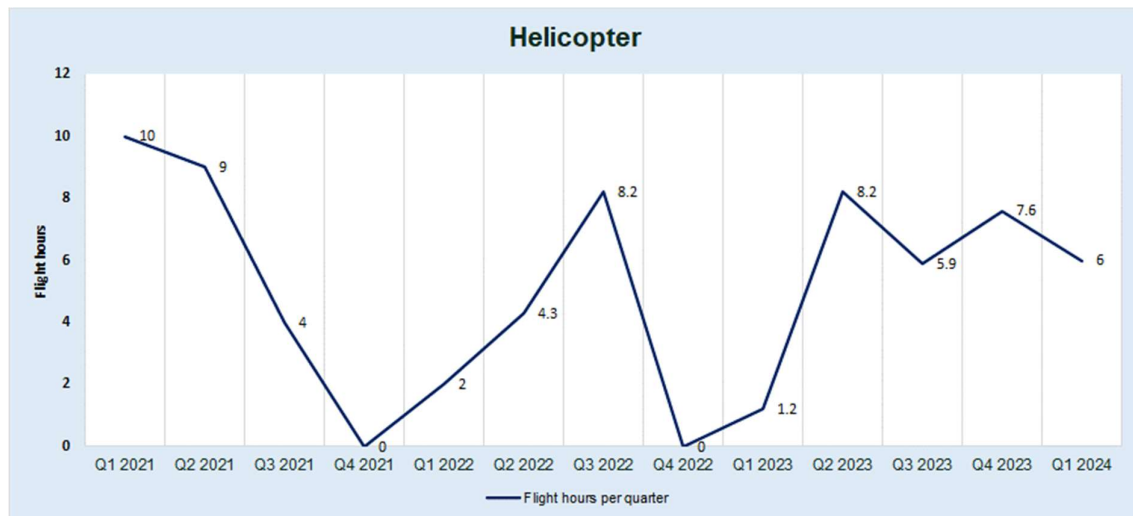
The total hours flown by helicopter to provide care during this year are shown below.

Table 27: Helicopter flight hours, Q1 2024 vs Q4 2023

Helicopter	Q4 2023	Q1 2024	YTD Total (hours)
Southern	7.6	6	6
Momase	0	0	0
NGI	0	0	0
Highlands	0	0	0
International	0	0	0
Total hours	7.6	6	6

The chart below shows quarterly helicopter flight hours over the last three years.

Figure 22: Helicopter flight hours by quarter, Q1 2021 onwards



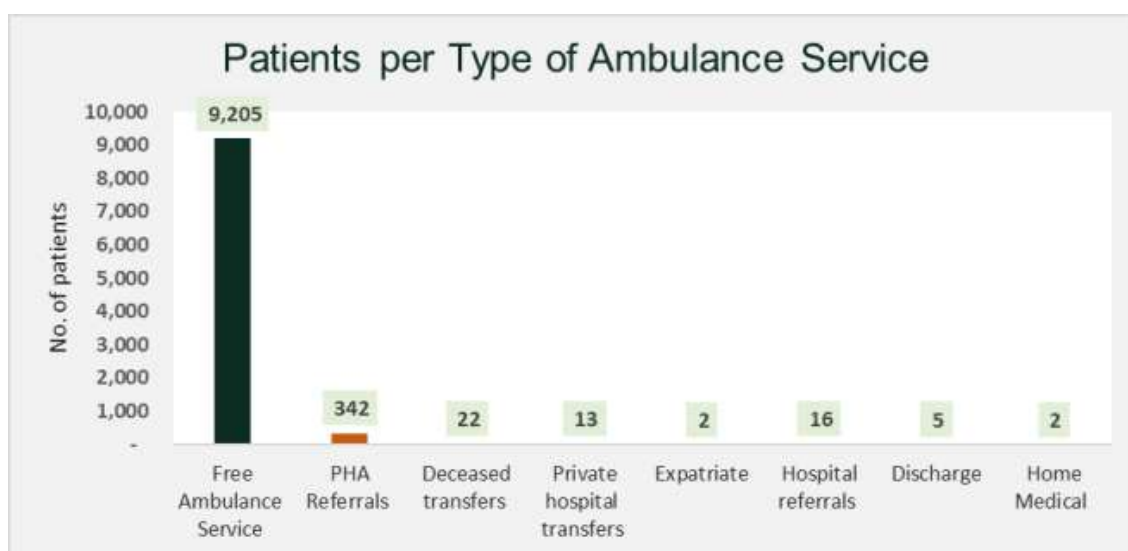


Patient Transport Fees

Public vs private patients

All emergency services provided to Papua New Guineans and permanent Residents are free if the patient is seeking emergency transport to a public hospital. The average ‘real’ expense incurred by NStJA helping one patient is estimated at PGK 800. However, over 96% of patients are public patients and NStJA provides services to them entirely free. The graph below demonstrates that the overwhelming majority of patients are public patients.

Figure 23: Number of patients treated, by billing category, quarter one, 2024.



Private patient fees

Sometimes patients request NStJA to transport them to a private hospital or request services that are not for an emergency, such as transport from a hospital to home (patient discharge), to an airport for overseas treatment, or where a family requests mortuary transport. NStJA charges a fee for these services on a cost recovery basis, and to ensure sufficient operating revenue.

NStJA has a “no cash policy”, so all payments were received through EFTPOS or bank transfer from quarter two of 2022 onwards. Total private patient fees collected this quarter amounted to **PGK 30,645.00**. These fees helped subsidise the free public ambulance service.



Figure 24: Ambulance service fees by category, quarter one, 2024



The table below shows ambulance service fees for Q1 2024 compared to the previous quarter.

Table 28: Ambulance fees, PGK, Q1 2024 vs Q4 2023

Form of Payment	Q4 2023	Q1 2024
Cash	-	-
EFTPOS	35,007.23	30,645.00
Cheque/Internet transfer	-	-
Total (PGK)	35,007.23	30,645.00



Key Performance Indicators

Ambulance Operations Centre 111

Area	Target	Indicator source	Qtr 1 indicator
Call Answering Time	Calls to 111 are answered by the call-taker within 10 seconds on average	PABX call-logs	13.3 seconds
Dispatch Time (NCD)	An ambulance is dispatched to life-threatening (1A and 1B) medical emergencies within 3 minutes on average of the call being received by NSTJA in Port Moresby and Lae.	CAD Dispatch logs	4 minutes 10 seconds
Dispatch Time (Regional)	An ambulance is dispatched to life-threatening medical emergencies within 7 minutes on average of the call being received by NSTJA in rural areas	CAD Dispatch logs	6 minutes 15 seconds
Caller Satisfaction	≥ 90% of the callers' report that the 111 call-taker was helpful	Weekly Patient Experience Survey	96.3% caller satisfaction

Ambulance Service Key Performance Measures

Area	Target	Indicator source	Qtr 1 indicator
Response Time (NCD)	An ambulance arrives on scene within 12 minutes from time of call for 1A cases, ≥ 50% of the time	CAD Dispatch logs	Median 13 minutes 29 seconds
Response Time (Regional)	An ambulance arrives on scene within 20 minutes from time of call for 1A and 1B cases, ≥ 50% of the time	CAD Dispatch logs	Median 28 minutes 25 seconds
Patient Satisfaction	≥ 90% of patients report being satisfied or very satisfied with NSTJA's service	Patient Experience Survey	93.7 % Satisfaction



Ambulance Service Staffing

Area	Target	Qtr4 2023	Qtr 1 indicator
Minimum ambulance crewing	The number of ambulances on duty meets that required in Annexe A 90% of the time.	97%	96%
Referrals (Reservist Stations)	80% of Central Province referral incidents to PMGH are met midway by NCD ambulance. Measured through CAD.	31%	49%
Submission of electronic medical report (eMR)	An eMR is completed for all instances that an ambulance officer assesses a patient.	65%	77%

National Ambulance Coordination Centre (111)

The National Ambulance Coordination Centre (NAAC) is the hub for the 111-emergency call centre and ambulance dispatching systems. It facilitates communication with, and coordination of, the ambulance service across NCD, Central, Morobe, Kundiawa, and East New Britain provinces and tracks Air Ambulance missions.

The NACC also provides clinical advice to communities and health workers in other provinces. The NACC enables interagency cooperation with other emergency service providers during times of mass casualty or complex incidents such as earthquakes.



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Name	Target	Qtr 4 2023	Qtr 1 2024 indicator
Dispatch time	The median time that an ambulance is dispatched to a 1A case is less than 90 seconds from the time the first call about the incident is received.	3 minutes 9 seconds	3 minutes and 32 seconds
Skill Maintenance	Skills Maintenance and reaccréditation program implemented for all NACC roles	<ul style="list-style-type: none"> • 47%. First Aid Training (17/36). • 44%. First Responder (17/36). • 100%. Call-takers went through 3 weeks of on-job training with Phil Proust, Paramedic/Trainer. 	<ul style="list-style-type: none"> • First Aid Reaccréditation completed for 39/40 (98%) of NACO staff. • Preliminary information gathered to build a framework for professional call-taking training. Information gathered from the Australian Government HLT31020 Certificate III in Ambulance Communication (Call-taking) training.
Use of call-taking script	The call-taker completes the call-taker script for 100% of genuine calls	99% . Scripts are not usually followed for 1A motor vehicle mass casualty cases.	99% . Random selection of 6 cases per shift reviewed for use of scripts. Scripts not usually followed for 1A motor vehicle mass casualty cases.
Feedback to call-takers	2 calls are randomly selected each week with feedback given to the call-taker by registered paramedics	1x case reviews done every shift by Dispatch Supervisors.	100% of targeted cases reviews done either by DiSup and NAOC Manager or escalated to Paramedics.



Education & Training

For the reporting period 1 Jan – 31 March 2024, the tables below show the number of students who had **completed** training as at the last day of the reporting period. If students are still completing (studying) the course at the end of the reporting period, the course completion is shown in the next reporting period.

First Aid in Schools

Free first aid training conducted by the SBBF-NStJA First Aid in Schools Team to high school students is shown below.

Province	School Name	Days of training	Students educated	Student satisfaction score (average)
NCD	Mary Helper of Christian FODE Centre	1	86	NA
NCD	Tengei Christian Academy	1	32	NA
NCD	Tatana BbP Library Learning Centre	1	73	NA
NCD	Hagara BbP library learning centre	1	22	NA
NCD	Koki BbP Library learning centre	1	31	NA
NCD	Vabukori BbP Library Learning Centre	1	31	NA
Total		6	275	



Community Ambulance Awareness

Free community first aid training conducted by NSTJA in communities.

Province	Location	No. of people made aware of ambulance service	Comments
NCD	Southbridges International	200	Disaster Preparedness day
NCD	Air Niugini Head office, 7mile	200	Air Niugini Safety Day
NCD	Good Shepherd, Koki	70	Ambulance Awareness
Total		470	





INTERNAL REPORTING ONLY

Workplace First Aid Training

Training conducted by St John Ambulance during the quarter.

Trainer	Number courses	Number students	Student satisfaction score (average)
1. Nelson Mare	4 courses	177	93.9%
2. Elvis Saitere	4 courses	145	89.85%
3. Sharon Wabiyawi	2 courses	96	96.1%
4. Robert Kamara	1 course	19	96.84%
		437 students	

Province: NCD

Course	Students Completed	Student satisfaction score (average)
CPR	8	97.5%
Essential First Aid	196	95.96%
Senior First Aid	24	96.67%
Advanced First Aid	15	92%
Advanced CPR / BLS	-	
Low Voltage Rescue	-	
Remote Area First Aid	-	
Mental Health First Aid	-	
Caring for Kids	-	
Total	243	

Province: Morobe-Lae

Course	Students Completed	Student satisfaction score (average)
CPR	-	
Essential First Aid	7	82.86%
Senior First Aid	-	
Advanced First Aid	-	
Advanced CPR / BLS	-	
Low Voltage Rescue	15	90.67%
Remote Area First Aid	-	
Mental Health First Aid	-	
Caring for Kids	-	
Total	12	

Province: New Ireland

Course	Students Completed	Student satisfaction score (average)



CPR	-	
Essential First Aid	98	94.02%
Senior First Aid	-	
Advanced First Aid	-	
Advanced CPR / BLS	-	
Low Voltage Rescue	53	81.13%
Remote Area First Aid	-	
Mental Health First Aid	-	
Caring for Kids	-	
Total	151	

Province: Tari-Komo

Course	Students Completed	Student satisfaction score (average)
CPR	-	
Essential First Aid	12	100%
Senior First Aid	-	
Advanced First Aid	9	93.33%
Advanced CPR / BLS	-	
Low Voltage Rescue	-	
Remote Area First Aid	-	
Mental Health First Aid	-	
Caring for Kids	-	
Total	31	

Affiliated Training Partners

Training conducted by St John Ambulance Accredited Affiliated Training Partners

Partner: OK TEDI MINE

Course	Students Completed	Student satisfaction score (average)
CPR	23	96%
Essential First Aid	20	91.67%
Senior First Aid	54	95.38%
Low Voltage Rescue	77	96.92%
	174 students	

- **Note:** A total of 437 students trained by NStJA Trainer(s) and 174 students trained by OK Tedi. For Q1- there were **611 students** trained First Aiders.



General Information

Background and history

NStJA is a Papua New Guinean charity and statutory emergency service organisation that provides emergency medical services, first aid training, and humanitarian assistance to the people of Papua New Guinea. NStJA has been serving Papua New Guinea for over 65 years and has a strong presence in many provinces across the nation.

NStJA is committed to making a difference in Papua New Guinea by providing quality health and ambulance services and responding to emergencies and disasters. In addition to emergency services, NStJA offers a range of health and safety courses, including first aid, CPR, and AED training. NStJA is also involved in various community projects, including health clinics, educational programs, and youth development initiatives. The organisation relies on the support of volunteers and donors to continue their important work and make a positive impact in the lives of the people they serve.

Since 1983, NStJA has been engaged by the National Department of Health (NDOH) under a Memorandum of Agreement (MOA) to provide PNG's primary emergency ambulance services. As the responsibility for health services transferred to Provincial Health Authorities, NStJA now works closely with Provincial Health Authorities under similar MOAs to provide their provincial emergency ambulance services.

NStJA Station Locations

NStJA currently provides PNG's primary emergency ambulance service, serving a combined population of about 3 million people by road, and the entire population by air. NStJA has stations in each the following towns:

- Port Moresby (NCD)
- Baruni (NCD)
- Bereina (Central)
- Kupiano (Central)
- Kuriva (Central)
- Lae (Morobe)
- Kokopo (East New Britain)



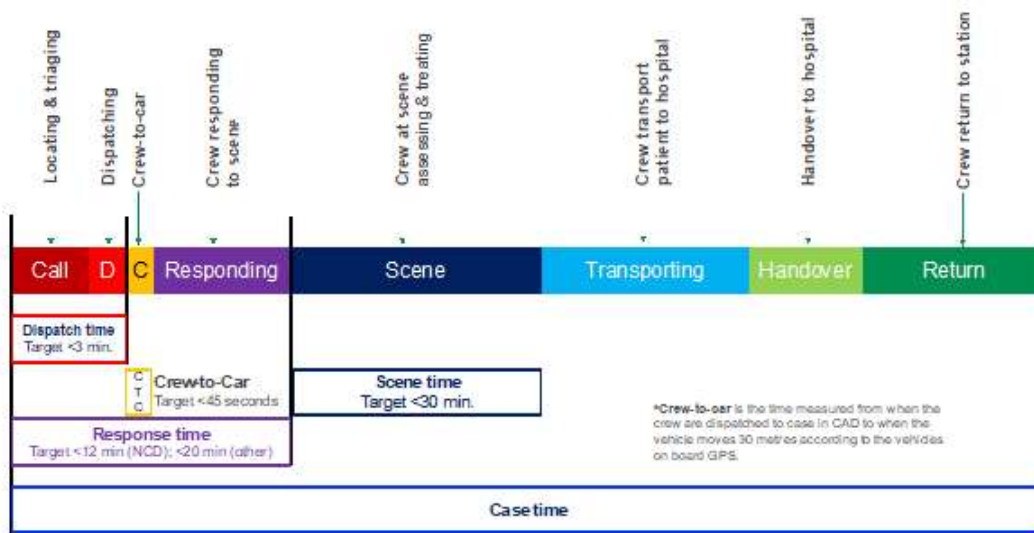
Definitions & Terminology

Terminology

These definitions match that of the Council of Ambulance Authorities Australasia's Report on Government Services.

Term	Definition	Comment
Incident	An event that results in a demand for ambulance resources to respond.	Incidents are logged in CAD as a case. Incidents are measured using CAD data.
Response	An ambulance response is a vehicle sent to an incident.	There may be multiple responses to one incident if several units are dispatched to a single incident
Patient	A patient is someone assessed, treated, or transported by the ambulance service.	Patients are counted by the number of episodes. Patients may be the subject of more than one (1) episode per year. The ambulance worker completes an individual 'patient care report' for each patient. The patient care report is documented either on a paper sheet or using NStJA's eMR system.

Key Incident Time Intervals





Response priorities

Response Code	Problem	Urgency	Lights & Sirens	Recommended resources to send	Target response time (median)
1A	Immediately life-threatening problem <i>e.g., cardiac arrest, ineffective breathing</i>	Immediate Highest priority response. Closest ambulances to respond.	Yes	Minimum 3, preferably 4	Within 12 minutes (Ideally < 8 minutes)
1B	Potentially life-threatening problem <i>e.g., unconscious</i>	Immediate High priority	Yes	1 – 2	Within 15 minutes
1C	Possible life-threatening emergency <i>e.g., breathing problem or chest injury, or serious bleeding</i>	Priority	Yes	1 - 2	Within 15 minutes
2A	Unlikely threat to life. <i>e.g., abdominal pain</i>	Urgent	No	1	Within 30 minutes
2B	No threat to life <i>e.g., unwell for days, limb injury</i>	Mobilise when sufficient resources available	No	1	Within 60 minutes
3	Medical response requested by a doctor or nurse. often referral case	Within requested timeframe	No	1	Usually within 90 minutes
4-9	Non-emergency	Routine transport	No	1	-



Papua New Guinea Since 1957

NStJA is a statutory organisation operating in accordance with the
St John Council Incorporation Act of 1976.

For more information about this report contact enquiries@stjohn.org.pg
www.stjohn.org.pg