

Use of Air Ambulance in NL

Objective

To review the use of air ambulances in NL.

Practice Points

1. In a geographically large province like NL, comprising almost 500,000 people living on an island and 26,000 living in mainland Labrador, the air ambulance system is vital for emergency care.

Total land mass of NL is 405,720 km² — more than three times the total area of the Maritime Provinces (Nova Scotia, New Brunswick, and Prince Edward Island). It is almost one and three quarters times the size of Great Britain. Area of the Island of Newfoundland — 111,390 km². Area of Labrador — 294,330 km².

2. This system comprises two aircraft managed by Government Air Services (GAS), short-term contracts with two private airlines (Exploits Valley Air Services (EVAS) and Provincial Airlines (PAL)), and a rotary-wing helicopter contract with Canadian Helicopters is shared with other government departments. Use of this helicopter is limited as it can fly in daylight only (visual flight rules only).
3. Eastern Health (EH) employs medical flight teams to support all aircraft. Teams work 24/7 from St. John's and 14 hours per day/7 days per week from Happy Valley-Goose Bay (HVGB).
4. Labrador-Grenfell Health (LGH) has a contract for medevac and schedevac services in Labrador and the Department of National Defense (DND) Cormorant Helicopter supports emergencies on occasion, but there is no formal agreement with DND.

Data

Health and Community Services provided data on air ambulance use of GAS aircraft, PAL, and EVAS for 3,552 flights from Jan 2018 to Jun 2021.

Results

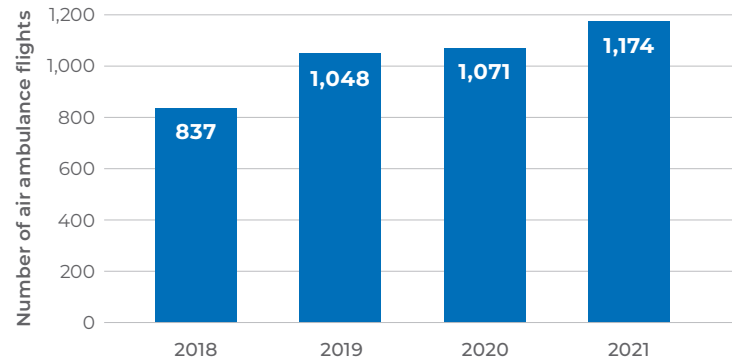


Figure 1. Annual Number of Air Ambulance Flights in NL, 2018–2021

- In the first 6 months of 2021, there were 587 flights giving a prorated annual projected number of 1,174.

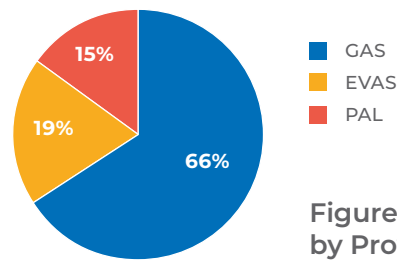


Figure 2. Percentage of Flights by Provider

- There are two air ambulance bases in NL (St. John's, and HVGB), and both have aircraft coverage 24 hours/day, 7 days/week, 365 days/year. The majority of the flights were undertaken by GAS (N=2,343), but GAS covers 12 hour days for both bases each day of the year. The demand for air transportation is greater in the day than overnight, as generally only emergency transport occurs overnight. EVAS provided 660 flights and PAL 544 flights.

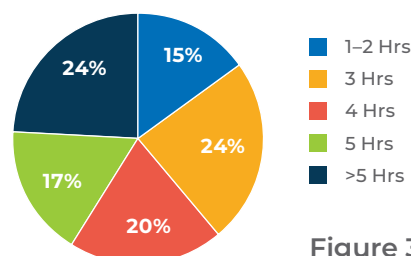


Figure 3. Percentage of Flights Analyzed by Flight Time

- The majority of flights were for a flight time of >3 hours.

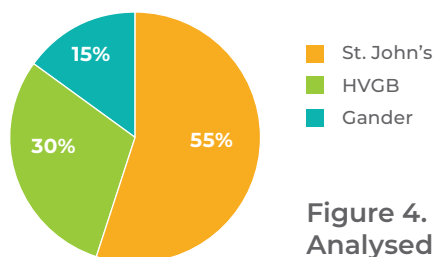


Figure 4. Percentage of Flights Analysed by Base of Origin

- Although there is no official base in Gander, EVAS is based out of Gander.

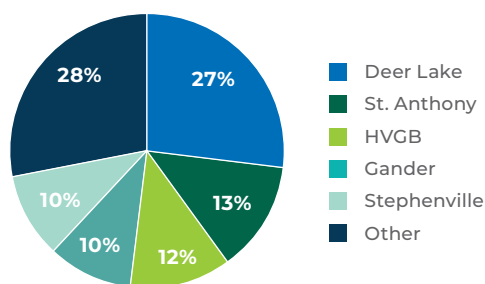


Figure 5A. Destination of Flights Originating from Base Location in St. John's

- Of 1939 flights from St. John's, half were to Western Newfoundland.

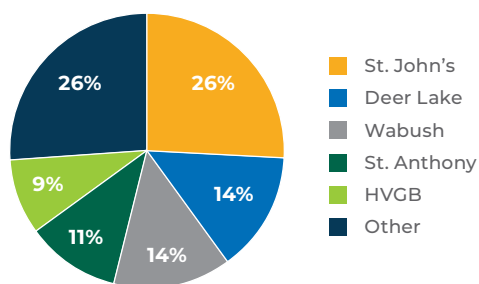


Figure 5B. Destination of Flights Originating from Base Location in HVGB

- Of 1,054 flights from HVGB, 26% were to St. John's (N=274)

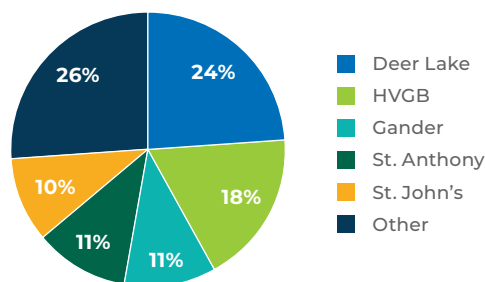


Figure 5C. Destination of Flights Originating from Base Location in Gander

- Of 543 flights originating in Gander, 24% were to Deer Lake.
- In 42 months, the total number of flights to Deer Lake was 802, to Stephenville 290, to St. Anthony 416.

Conclusions

1. During the 42 months of this report, the average number of flights/day was 2.8.
2. The number of flights originating from HVGB, plus going to HVGB from flights originating from St. John's or Gander was 1.1/day. Given its geographic isolation, 24-hour coverage 7 days a week is warranted by a medical flight team.
3. The air ambulance system is not integrated at the management or delivery level. Contract lengths are short-term with private companies, therefore they will not invest in improvements.
4. The question is whether the air ambulance needs can be met by GAS leasing a third airplane or whether private contractors should provide the service.
5. Decreasing the flying limitations of the helicopter service could potentially decrease the need for 24-hour emergency care service in geographically isolated places like Forteau, Bell Island, and Fogo Island, and improve the service in coastal Labrador. This warrants the exploration of a contract for a helicopter that can fly 24 hours per day, using Instrument Flight Rules (IFR).