



Canada's "Disasters-R-Us" medical platoon a hit in Honduras

Barbara Sibbald

In brief

The Canadian Forces Disaster Assistance Response Team did not take long to adapt to the medical needs of 90 000 survivors of Hurricane Mitch last November.

The first mission for Canada's Disaster Assistance Response Team (DART) may have been a "fly-by-the-seat of your pants" experience, but the team still managed to land on its feet — so much so that it completed its Honduran mission in 30 days instead of the anticipated 60.

Lieutenant (N) Ronald Goldstein, DART's medical commander, said military theories about what would be required in the Central American republic quickly went out the window because "we had to meet local needs." DART, designed to deliver emergency help quickly anywhere in the world, was based on the military's experience in Rwanda in 1994, where patients had come to a central treatment facility. Because washed-out roads and bridges made it impossible for most of the 90 000 residents in DART's designated part of the Aguan Valley to get to the treatment facility, the medical and engineering personnel responded by going to the residents. Thanks to their helicopters, they were able to set up 2 medical clinics each day, deliver water, food and other supplies, and establish safe water supplies. By the end of their tour the Canadians had treated an estimated 13 000 people at their clinics, but Goldstein says tens of thousands more were helped indirectly by the clean-water and mosquito-spraying programs. "The Canadians were the first in the valley to provide medical and engineering help," he says. "Our presence was a large symbol of hope for the Hondurans."

The need for help varied — one of the Canadian doctors said only 10% to 15% of the medical problems he encountered could be attributed to the hurricane.

Goldstein arrived Nov. 9 as part of an advance reconnaissance team, just 12 days after Hurricane Mitch had ravaged the area. Flood waters had swept through the heavily irrigated, 20-km by 60-km valley. Some villages had vanished and others were under 2 metres of mud. Roads and bridges were washed out.

The 165-member DART team began arriving Nov. 11.

"Our goal was not to supplant the existing medical structure but to act as a bridge from acute crisis until the country was running," says Goldstein, a flight surgeon and senior physician at the base hospital in Petawawa, Ont., who graduated from the University of Toronto in 1994.

Head camp was established at La Ceiba Airport, where supplies were delivered and moved by 4 Griffon helicopters

from 427 Squadron in Petawawa, Ont. The DART medical platoon was set up closer to the action, 75 km away at Sonaguera, a town with approximately 5000 residents at the lip of the valley. This 43-member platoon has 4 physicians, 4 nurses, a pharmacist and lab technician, 2 preventive medicine technicians and 31 medical assistants with specialized training. Within a week they had set up a treatment facility, which included a field laboratory and pharmacy, and rehydration, obstetrical, pediatric and preventive medicine sections. Although capable of providing



Lieut. (N) Ronald Goldstein, DART's medical commander, prepares for an air reconnaissance of Aguan Valley



Canadian personnel load food bound for an isolated village



A river runs through it: Dr. Ronald Goldstein's moist accommodations

care for 500 outpatients and 30 inpatients daily, it only served about 150 people a day.

The platoon soon realized that the medical crisis was out in the valley. Government-operated medical clinics, located at 10-km intervals, weren't operating, and many residents were crowded into temporary shelters. Their wood-fired cooking fires were causing a lot of respiratory infections, and about 100 patients with cholera had been identified. But the biggest problem was the water supplies, which had either been destroyed or contaminated, leading to conjunctivitis, dysentery and parasitic diarrhea. The hurricane, which killed about 3000 Hondurans, temporarily halted government insecticide-spraying programs and the standing water became a breeding ground for the mosquitoes that spread malaria and dengue fever.

The Aguan Valley has the highest endemic malaria rate in Honduras. Before the hurricane 8.3% of the population was infected, but after Mitch that climbed to about 25%. Dengue fever, also called break-bone fever because of the extreme bone pain it causes, was also a danger. "We did well in keeping the number of cases down," reports Goldstein. DART engineers worked to clean local water supplies, and in the meantime they purified water at Sonaguera, bagging up to 50 000 litres a day that were airlifted to villages.

On average, 2 medical teams visited 2 villages each day and saw between 200 and 300 people during each 4-hour clinic. DART personnel teamed up with local medical personnel from Standard Fruit Company, which markets Dole pineapples and bananas. Goldstein explained that the country has a 2-tier health system: a public, government-run system and the superior system that Standard Fruit provides for its employees. During the hurricane crisis, the government

ordered Standard Fruit to open its facilities to everyone.

A typical team dispatched on the Griffon helicopters comprised 6 Honduran medical personnel, a DART physician and nurse, 3 medics, 2 translators, an engineer and 2 soldiers to provide security — mostly to protect people from the helicopter rotor blades.

In addition to routine treatment, there were unexpected medical bonuses. For instance, the DART teams arranged surgery for an 8-month-old baby with a severe cleft palate, who otherwise would not have received treatment. Patients with more severe injuries, including 2 with gunshot wounds, were airlifted to the Standard Fruit hospital in La Ceiba.

DART also worked with the Honduran Ministry of Health to provide vaccines — the country already has an 80% vaccination rate. Luckily, the ministry keeps vaccination records, "which is more than Canada does," observes Goldstein.

Captain Karen Breeck, who was based at La Ceiba, looked after about 150 personnel there and made sure they didn't "play with hairy spiders or strange snakes." Most cases she dealt with involved diarrhea, minor injuries, headaches and dehydration. Breeck has been making the disaster rounds: the 1997 Winnipeg flood, the 1998 ice storm in Eastern Canada, and now Honduras. "We joke that our slogan is 'disasters are us,'" she says.

After only 30 days, the acute crisis was over: the valley's clinics had been re-established and the water was potable. "The bridge was built," says Goldstein, and there was no need to extend the DART mission for an additional 30 days. Operations were handed over to the Honduran government and nongovernmental organizations such as CARE and CIDA the week of Dec. 7. They will continue to monitor wells, spray mosquitoes and distribute supplies.

"Being on the first deployment of DART was very exciting," says Goldstein, who joined the military as a second-year medical student. This was his first mission, and one he had spent years preparing for. His voice breaks when he talks about the people he met. "They have very little but whatever they have they share. They were very grateful to us and there were emotional farewells."

Most of the DART personnel returned home Dec. 13. Next time, says Goldstein, they'll be better prepared. The field hospital components will be packed separately so that needed parts can be set up in isolation. They will also bring more medical supplies, particularly pediatric and tropical disease medications. "But overall, it went very well. I think DART will be used again."



Wolf spiders shared tents with medical personnel

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