There's Remote EM, and then There's Unalaska

BY MURRAY BUTTNER, MD

There is rural. There is remote. And then there is the community health center in Unalaska, AK. Officially known as the Iliuliuk Family and Health Services, it is a federally qualified community health center on Unalaska Island in the Aleutians. Better known to most of the world as Dutch Harbor, famous from the "Deadliest Catch" reality TV show, Unalaska is arguably the most unique place to practice medicine in the United States.

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Dr. Buttner's clinic in Unalaska is the westernmost ED in the United States, located in the Aleutian Islands.

Dutch is almost 800 air miles from the nearest hospital in Anchorage. The airport has a very short runway and is surrounded by water on three sides, so there is no jet service and getting to and from Anchorage is a three-plus-hour flight. It is the longest regularly scheduled prop plane flight in North America, maybe in the world. That's when planes can fly at all. More than 10 percent of flights are cancelled because of the notorious Aleutian weather: wind, fog, snow, and our signature sideways rain.

The Aleutian Islands are at the confluence of the Bering Sea and the northern Pacific Ocean, where the warm Japanese current runs into the colder currents coming south from the Arctic and the cold weather systems from Russia. Low-pressure systems are constantly being created out in the western chain like monsters that keep popping up in a video game. The Aleutians are rightfully called the birthplace of the winds.

Flights are also cancelled because of volcanic ash clouds when one of the many volcanoes along the Aleutian chain wakes from its slumber. Whether the cause is wind, visibility, or volcanic ash, it is not at all uncommon for planes to fly nearly all the way out here only to determine that they are unable to land and have to go back to Anchorage, stopping to refuel in another remote town along the way. I should add that one can travel by ferry, but there are only a handful of trips each year, all in the summer months, and the trip takes three-and-a-half days. Each way.

But when you finally get here, all of the travel uncertainties and frustrations are forgotten in an instant. The Aleutians are one of the most spectacular places on our planet: majestic, steep, treeless volcanic islands thrusting up out of the sea, snow white in winter and brilliant emerald green in summer—a subarctic Tahiti! The best word to describe this place is ethereal—the weather, sky, sea, and light are all constantly changing in a magical way. It is like living in a kaleidoscope.

Strength in Diversity

The year-round population of Unalaska/Dutch Harbor is around 4500. It is one of the most diverse communities in the country; in fact, it was the most diverse census district in 2010. (*The Atlantic*. April 29, 2014; http://bit.ly/2lYuW0E.) But the population more than doubles during the busy fishing seasons when an additional 6000-8000 seasonal workers come to Dutch to work in the enormous shoreside processing plants or out on the water in one of the many fishing and processing boats. These workers are from all over the world. The diversity of the seasonal workers is even greater than that of the resident population. The clinic sees patients from South and Central America, the Caribbean, Eastern Europe and Russia, Eastern Africa, Southeast Asia, and the Pacific Islands.

There isn't another community of its size off the road system in Alaska that doesn't have a small hospital. Unfortunately, the hospital here was destroyed in 1942 when the Japanese bombed Dutch Harbor in World War II (as part of a side campaign in the North Pacific concurrent with the ill-fated attempt to capture Midway Island). The IFHS community health clinic provides 24/7 care, including all of the emergency care, for Unalaska/

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Dutch Harbor residents, the residents of a handful of "nearby" communities (who come by small plane or boat), the workers of the enormous shoreside fishing industry, and the vast fishing fleets of the Bering Sea and the Gulf of Alaska.

But because IFHS isn't a hospital, it can't technically have an emergency department (at this time, there are no freestanding emergency departments in Alaska), so the clinic provides all of this emergency care with the budget and staffing of a community health center. What keeps it all going is an incredibly dedicated team of physicians, nurse practitioners, physician assistants, nurses, paramedics, medical assistants, incredibly hard-working EMTs and firefighters, cross-trained laboratory/radiology technicians, and an amazing support staff.

The busiest fishing seasons are January to April and July to September. During those months, the clinic and its "ER" are hopping! At 8:30 when the doors open, van loads of workers get dropped off from the plants and the large boats. These patients are triaged to the half of the clinic where the non-ER ER is located, a large bay with three gurneys, a separate trauma room, and an overnight holding room. During A season and B season, this half of the clinic is run as an urgent care clinic. Some days more than 40 patients are seen. They present with a host of occupational-related illnesses and traumas. They can also present with previously undiagnosed and untreated chronic diseases. The fishing industry runs 24/7, so a lot of the care provided by the clinic comes after regular clinic hours.

Rural Sights and Sounds

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Many true emergencies occur day and night. Last year the clinic had more than 140 medivac flights to the hospitals in Anchorage. Usually these are with the commercial air ambulance companies that provide service throughout Alaska. But not infrequently the weather is so bad that only the U.S. Coast Guard with its C-130s and specialized helicopters can fly patients out. All of these medivac flights are expensive and potentially very dangerous.

Typical Cases

A passenger plane with 42 people on board crashed off the end of the runway in October, almost going into the bay, and the clinic faced a mass casualty event. Thirteen patients were transported to the clinic. One died from injuries sustained when the propeller of one of the engines entered the cabin during the crash. Another patient was medivaced to Anchorage with an open leg fracture. The airport was shut to commercial flights for almost a month after the accident.

Later that month, a cachectic elderly man came into the clinic in severe respiratory distress. He was found to have sepsis, bilateral pneumonia, and a pneumothorax. He was flown out on a U.S. Coast Guard C-130 in a horrific gale, intubated and on a portable ventilator, connected to a norepinephrine drip, a chest tube, NG tube, and a Foley, accompanied by the PA who was on call providing all of his care during the transport. He ended up having fulminant tuberculosis, and made a remarkable complete recovery!

Just before Christmas, a man nearly lost his hand when he accidentally put it into the fan blade of a large diesel engine. We stabilized him here, and then he was flown to Anchorage where he was operated on for four hours before being transferred to Seattle, where he underwent a second eight-hour microsurgery that saved his hand.

In January, a medivac flight heading out to Adak Island (further out the Aleutian chain) crashed into the bay on takeoff. In the dark, the pilot and flight crew made it out of the plane and into their life raft before the plane sank. After a stunningly quick response by the Harbor Master, they were brought to the clinic. Two of the three were then flown to Anchorage; fortunately, none of them suffered serious injuries. After this crash, there was no air ambulance based on the island for almost a month, further isolating the community.

Best Place to Work

In an era where hospitals are being closed throughout the rest of the United States, it is difficult to imagine one being built here. Yet if our hospital had not been destroyed in World War II, there would likely still be a hospital here, and our situation would be very different.

Because freestanding emergency departments are a fiscal threat to established hospitals, it is an uphill political battle to get state laws changed to allow communities like ours to have a real emergency department that could bill for the care we are doing at a rate that would allow us to have some financial stability. The clinic has operated at a loss for many years, and last year had to get a loan from the city.

Despite the many unique challenges—in fact, because of them—IFHS is an incredibly satisfying place to work. **EMN**

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