Safety rests on preparation

BY NORMAN GREGORY

While cruising near Valdez, Alaska, aboard our full-time home, Salish Aire, a 1996 Nordhavn 46, we had a chance to appreciate the advantages of emergency open-radio communications when we responded to a life-threatening emergency aboard a neighboring boat.

We had pulled into Sawmill Bay, about 12 nautical miles from Valdez, and put down our anchor in another of the gloriously beautiful places to stop in Prince William Sound. While we were choosing the exact spot to drop our hook, we joked that it was awfully crowded with one other boat at anchor about an eighth of a mile away. My wife, Clarice, was banging pots and pans in the galley as she started to make dinner, and I was up in the pilothouse doing final shutdown procedures when a very loud call came over channel 16 that quickly caught my attention.

The caller did not suggest the level of his concern by starting the call with “mayday” or “pan-pan,” which would have been very appropriate and ensured that other boats hearing the call and the Coast Guard would pay attention. In any case, I recognized that a boat very near to us (based on the clarity of the VHF signal) was calling the Coast Guard and that did catch my attention.

Grandson has seizure
The caller reported that he was concerned that his grandson and wife might be suffering from carbon monoxide poisoning, as the boy was acting like he might be having a seizure and had shrill vocalizations that could be heard in the background. He also reported that his wife was down below and throwing up. When the Coast Guard asked his location, he stated he was in Sawmill Bay. After confirming that there was exactly one other boat in the cove with us, I chose to break into the call since I knew that we were in a much better position than the Coast Guard to provide a rapid response, and I needed to let the Coast Guard know that as well as get specific information from the other boater.

In the way of background
information: Both Clarice and I had retired from long careers as registered nurses (RNs). We both have experience working with emergency medicine and have volunteered with rural EMS, so we are comfortable with our emergency skills. We are both qualified by PADI standards as rescue divers and commonly find ourselves diving in areas where we could not reasonably expect a rapid emergency response to a dive emergency, so we have tried to prepare for such a contingency in ways that are not common for cruisers.

With these considerations, before we left our home port of Everett, Wash., we put together a suitcase-sized first-aid kit and brought on board a comparatively large medical oxygen tank and automated external defibrillator (AED) for addressing heart issues. When we decided to carry these medical supplies in our precious storage space, we never envisioned that the oxygen would be used to save the life of a victim of carbon monoxide poisoning.

When the Coast Guard started to ask the many questions that are part of their normal response algorithm, I chose to break in to enable my wife and myself to respond quickly. The issue at hand was that Salish Aire is a displacement boat and was firmly at anchor with several hundred feet of chain paid out, so taking her to the other boat would take too much time. I normally would not break into an emergency call but felt the situation warranted the action, so I called: “Break, break; this is the vessel Salish Aire, we are one-eighth nautical miles from the distress vessel and have two registered nurses and medical supplies on board, including oxygen. We need to know if the distress vessel has a dinghy in the water or if we need to launch our dinghy.”

The distress vessel responded that his dinghy was tied up on the swim step and he was not in a position to come and pick us up. I explained to the Coast Guard that we would be moving to the portable VHF (which hindered communications greatly as we were some distance from their transmission tower) while we prepared to respond, including launching our dinghy.

Clarice normally has much

Above, Norman and Clarice Gregory and their dog, Jarvis.
Left, the Gregories’ Nordhavn 46, Salish Aire, at anchor in Alaska’s Sawmill Bay, the site of the carbon monoxide poisoning incident.
better hearing than I, so I assumed she was following the radio conversation in the pilothouse. It turned out this was a bad assumption, as she was making too much noise with dinner preparation, so it caught her off guard when I told her to grab supplies including the first-aid kit, oxygen and AED, and then to meet me on the upper deck where I would be preparing to launch the dinghy. As soon as she understood what was happening, she did remember to turn off the propane supply and to put the dog in his kennel in addition to the tasks I had thought of.

**Speedy launch**

We normally plan to take about 20 minutes to calmly launch the dingy using our trawler crane. In this instance, we believe that it was in the water in about a third to half that time, thanks to lots of practice lowering it many times since we moved aboard the boat in 2014. We each knew the tasks involved in getting it into the water safely, to the point that the process was automatic for us. Our emergency training also kicked in and we did one last inventory as we prepared to leave *Salish Aire*, including making sure that we had a fully charged portable VHF and we both were wearing PFDs.

On arrival at the distress boat, I wondered if I had made a terrible mistake as no person was waiting on deck for us and the boat was completely closed up. We knocked on the hull and an answering voice confirmed we were where we needed to be and should come aboard.

We quickly triaged the situation and learned that the captain had taken his wife and grandson out on their first voyage of the season from Valdez. He had been unable to get his engine to start and in cranking it over had depleted the batteries. He had a portable generator on board and had been using it to recharge his main batteries.

We both noticed that all doors and windows on the cabin cruiser were closed; since the first action to take if there is any possibility of...
carbon monoxide poisoning is to get the victims into fresh air, we opened everything. I asked the captain if he had any fans to further ventilate the boat, but he replied that he did not. The captain’s initial report that the emergency was likely from carbon monoxide poisoning seemed like a good starting point based on the conditions we found.

We looked at the 10-year-old child and recognized that he was now fully unconscious and, based on our belief that carbon monoxide poisoning was a high probability, we administered oxygen by mask to him. Clarice continued the assessment of the child while I moved to the elderly woman who was in the head below deck. I found her conscious but barely able to help me as I worked to move her to a berth where she could be assessed more completely. At about this time, we attempted to radio the Coast Guard with our initial findings, as we were very much looking forward to extra help arriving at the scene and we wanted them to understand that the situation was life-threatening. They were able to copy most of our message after several tries, but with the weak batteries on the boat we were working on and the limitations of a portable VHF, getting the messages out was becoming a challenge.

Rapidly deteriorating

Meanwhile, Clarice reported that the child was rapidly deteriorating, and we were both concerned that he might continue into cardiac arrest if he didn’t respond to the oxygen treatment. In the back of our minds was the knowledge that if a child’s heart stops, it is most likely the result of something like oxygen starvation rather than a defect to the heart itself; therefore an AED is not likely to be helpful in resuscitation if the underlying issue is not addressed first. On top of that was the humanitarian issue we both felt at the prospect of trying to shock a child the same age as our grandson. Fortunately, his heart rate slowly increased and his pupils started responding again, and before the arrival of the Coast Guard he was responding verbally.

The Coast Guard arriving was a welcome development since they had the personnel and means to move the family to definitive care in the hospital at Valdez. They also appreciated our presence and willingness to ride with them as we had medical training that they did not. After moving the elderly woman and boy aboard their fast boat on stretchers and providing considerable assistance to the captain to help the boy aboard, we were on our way back to Valdez at about 35 knots. By the time we docked and reported off to the paramedics, the child was able to walk to the ambulance under his own power and the elderly woman and captain were both much more coherent in their conversation.

In emergency medicine, we are always taught to review an event and look for what went well and what could have gone better. Below are our afterthoughts on the incident.

I made the assumption that someone who was able to recognize carbon monoxide poisoning would also know to ventilate the space and ideally get the victims to open air. I didn’t recognize that the captain was also likely under considerable stress and perhaps not fully clear in his thinking, both from the stress and exposure to carbon monoxide. This should have occurred to me when he didn’t start the call with “mayday” or “pan-pan.” A fundamental when communicating with persons in distress is to state the obvious (which is why the Coast Guard’s first response whenever they get a mayday call is to ask if everyone has a PFD on). I
should have taken the initiative to make sure he opened the hatches.

Luckily, the distress vessel captain didn’t use a cellphone to call the Coast Guard. Too many boaters today depend on cellphones for emergency communication and don’t realize that they may only be communicating with a dispatcher miles away when a boat is nearby. A VHF distress call will be heard by that nearby boater and the response time can mean the difference between life and death.

A fortunate part of the event was that Clarice and I are very used to working as a team both in life and in emergencies. That teamwork and experience with many dinghy launchings saved critical minutes in getting oxygen to the child.

I made an assumption on the arrival of the Coast Guard about the level of training that their medical team member would have, and gave a report just as I had many times to paramedics, doctors and nurses. It wasn’t until later that I clarified their level of training and realized that Clarice and I needed to retain control of the medical response.

We chose to treat the symptoms as carbon monoxide poisoning based on the captain’s description of the events. We did not see the symptoms I recalled from my training but didn’t find any other reason that could explain what we did see. In emergency responses, it is easy to get “tunnel vision” when you hear a radio call stating, “I think they may have carbon monoxide poisoning.” I’m confident that we didn’t fall into the tunnel vision trap, and that carbon monoxide poisoning was the most likely diagnosis.

Finally, we’d like to express our appreciation for the team from Coast Guard Valdez, as we needed additional manpower and the ability to move the family fast. We also appreciate the named thanks to us from Coast Guard Valdez that was expressed in a press release.

Norman Gregory and his wife, Clarice, live aboard their 1996 Nordhavn 46, Salish Aire.