

Testimonials

An article written for the local Comox BC paper and also the Dolphin, the CCGA Pacific magazine.

Thanks to the kind donations of the Comox Valley United Way and the Cape Lazo Squadron of the Canadian Power and Sail Squadrons, the Comox Valley Marine Rescue Society has been able to purchase a new Res-Q-Air HT 1000 warm/ moist air hypothermia machine. **The Comox Valley Marine Rescue Society is Canadian Coast Guard Auxiliary-Pacific Region Unit 60's (Comox) parent body. This machine was on board rescue vessel Bruce Brown II on Saturday 17th May 2008 when the crew was tasked out on a rescue mission. The Res-Q-Air HT1000 treats a hypothermic patient by gradually warming them up from the “inside out”. The patient breathes in warm moist air (or oxygen) into their lungs and so the warm air gradually raises their core body temperature and any incoming cold blood from the patient's arms and legs.**

Part of the standard procedure when you are on “duty crew” is to attend a two hour training session, normally some time over the weekend. This is in addition to monthly and annual training. The topic for last Saturday's session was training on the new Res-Q-Air hypothermia machine. Our crew member Mike Rutledge, who is an experienced paramedic, gave a very thorough briefing and demonstration on the machine. During this demonstration one of the crew members was used as a "victim" with the latter breathing the warmed, moistened air from the machine, while the trainees watched and checked the inhaled air temperature.

Four hours later the duty crew was called out (level 3 - Mayday - life in danger) to a small boat reported to be taking on water close to the rocks near the Kingfisher Hotel; this is about 3 miles South of Comox Marina. When we got to the scene of the incident the lady crew member of the small boat was in the water (wearing a life jacket) clinging to the side of the boat with the gentleman standing on the fore deck. We first got the lady out of the water and on board our vessel, the Bruce Brown II, and then assisted the gentleman on board. We then took their boat in tow back to the Comox Marina. It turned out that their boat's main motor and also the kicker motor had failed possibly due to fuel contamination or other mechanical failure; it was their first trip out this year. Their boat was close to the shore and had been taking on water due to wave action rather than a damaged hull but the crew had been forced to bail water out. The gentleman was hypothermic because he had spent an hour in the water prior to our arrival (and was still in his wet clothing). He had been swimming with the boat trying to keep it clear of the rocks. Just before we arrived he had changed places with his wife which is why she was in the water when we got there. She had been in the water for about half an hour at that time. What a way to spend their anniversary! Our paramedic crew member judged that they were both hypothermic but the gentleman was worse as he was visibly shaking and looked a bit blue and was cold to the touch. So they were both wrapped in blankets and the gentleman was treatment with the new Res-Q-Air hypothermia machine. **By the time that we had arrived back at the dock the he could feel his toes and was feeling and looking much better and declined an ambulance to the hospital.**

We are delighted to have the new Res-Q-Air hypothermia machine as part of our First Aid equipment and really surprised that we needed to use it so soon. Although the majority of call outs involve mechanical difficulties requiring a tow to safety the local waters remain cold throughout the year. This always creates the possibility of a life threatening situation so it is a great start to have practical experience with the new hypothermia machine and a successful outcome right at the beginning.

“Frankly I'm still amazed at how the Res-Q-Air treatment went last week” says Mike Rutledge in his report of the tasking. “I've seen a lot of cold people and never seen anyone recover so quickly. The patient mentioned at one point how he could feel the warmth circulating into the lower legs and feet that he initially couldn't even feel. I've never heard anyone describe this before. Based on previous experience with people like him, I had every expectation (despite his protests) that we would be transferring him to an ambulance for assessment at St. Joseph's in Comox. He was very pale and cold to the touch everywhere except the sides of his chest. His radial pulse was initially a bit irregular and that had me concerned, however it resolved early in the rewarming. In chatting with the paramedics at work, everyone one is impressed with how rapidly things turned around for the patient. My experience with hot packs and blankets alone is that the shivering might stop but the patient would still be very cold and would head off for a long hot soak in the tub to get warm again. These folks often say that they feel cold for a day or so after the event. To see this fellow regain his color, warm right up, walk off the Bruce Brown II and trailer the boat we towed was unexpected to say the least!”

Fair winds and safe boating.

On 25/05/2008 6:29 PM, Peter Bolton wrote:

Hi Christine

I'm attaching parts of a couple of emails re today's training on the Res-Q-Air hypothermia machine.

We had our training last week just before the call-out and today the Unit has had a couple more training sessions with our Mike Rutledge, pictures attached. So by now most of the regular members have had a very thorough training session with Mike.

As you can see we are all very impressed.

I'm preparing an article for the local paper and also the Dolphin, the CCGA_Pacific magazine. I will let you have a copy as soon as it is finished.

Dick Leach is our Training Officer and, in addition, was the coxswain on the rescue mission last Saturday.

Cheers

Peter

From Dick Leach:

Finally, for those who have not signed up at all, I urge you to consider coming down for one of the sessions. **The Res-Q-Air unit is a brand new addition to our arsenal of treatment options, and it works!** We had our first training session for the crew last Sat AM, and in a truly amazing coincidence, we were called out in the PM and used it on a case of moderate hypothermia. The victim was shivering uncontrollably when we started treatment, and **30 minutes later, when we arrived at Comox, he had stopped shivering and was able to take care of his boat that we had towed in.**

See you on Sunday
Dick

Dear Robert:

We used your RESQ-AIR unit on a severely hypothermic patient. My patient was a twenty-five year old male who had been treading water in Georgia Strait for three and a half to four hours before being recovered.

I am pleased to report that the RESQ-AIR unit was extremely effective in stabilizing this patient. The patient's colour, mental state and pulse all showed a marked improvement after twenty minutes of inhalation therapy.

Thank you for supplying us with this most valuable piece of equipment.

Sincerely,

J P. Rescue Specialist, Canadian Coast Guard.

Dear Robert:

Your "RESQ-AIR" re-warming system has now been field tested by myself on a patient suffering from severe hypothermia.

On July 26, 1993 Mr. (name withheld) was recovered from the Strait of Georgia after EIGHT hours of immersion. Rewarming of Mr.(X) was aggressive and very successful. Mr.(X) was brought from critical to stable within 40 minutes. For ambulance transport to hospital internal rewarming was continued using the RESQ-AIR portable unit (no internal rewarming unit was available on the ambulance).

In the final analysis, the RES-Q-AIR system proves to be the best all around internal rewarming system I have used to date.

I.K. Rescue Specialist, Canadian Coast Guard.

July 1999

The Effectiveness of the ResQ-Air Treatment Unit:

According to Bruce Paterson a Rescue Specialist with the Canadian Coast Guard, the following observations were made while using the ResQ Air System (model HT 1000) in a case of severe hypothermia.

The case involves a Chinese migrant who was rescued off the coast of British Columbia in 1999. After having jumped ship, he and others had hiked through dense bush for an unknown period of time, seeking some form of civilization.

The man was discovered exhausted and thoroughly disorientated. He was given a floater jacket and transported to the Coast Guard vessel, Tanu. On board were two doctors contracted by immigration Canada and Canadian Coast Guard Rescue Specialists Harold Slornan and Bruce Paterson. Due to fear of disease, the physicians chose to isolate the migrants from the rest of the ship and treat them on deck where a tarp had been rigged up to offer some protection.

The migrant had lost consciousness en route to the Tanu and was now in critical condition. The physicians concluded the man was suffering from life threatening severe hypothermia and possible dehydration. They recommended IV fluids but had none available. Another Coast Guard vessel in the area was radioed for help in getting IV fluids.

One of the doctors attempted to get a heartbeat reading by trying to find a radial pulse, not being successful, he suggested CPR. However, one of the Rescue Specialists, who from experience knew to take a carotid pulse reading when dealing with a hypothermic patient, detected a heartbeat.

Now with a correct cardiac reading, they decided to immediately hook the patient up to the ResQ Air hypothermia treatment Unit. As is frequently the case, the physicians were neither familiar with the unit nor its use. They had to be instructed in the use of this equipment and use of the tympanic thermometer for core temperature readings.

The patient's core temperature was 93.2 degrees F, pulse carotid 40 strong and regular, pupils were constricted but equal and reactive to light. Respirations were 8 and shallow. After diagnosing the patient, the heat packs were applied to the

body and the life saving warm moist air of the ResQ Air was administered. As the temperature of the ResQ Air Unit increased to operating temperature, so did the patient's core temperature and pulse.

A core temperature reading was taken every 5 minutes. During the first 10 minutes of treatment, the patient suffered back arching convulsions every 30 or 40 seconds. As his core temperature and pulse increased, he relaxed.

After about 35 minutes the IV fluid arrived. However, the physicians had great difficulty in getting the needle into the cold collapsed veins. The fluid was at ambient temperature (on a warm but misty day). After approximately one hour on the ResQ Air unit, the patient recovered consciousness.

The interpreter asked him if he was thirsty or hungry and he was given a few sips of water and vegetable broth. His temperature was around 95.5. Degrees F. About 5 minutes later, the patient lapsed into unconsciousness and it was thought that it was a result of "after-drop". However, the battery output to the ResQ Air unit was dropping and there was insufficient warm moist air to keep the patient stabilized.

His temperature had dropped to 94.2 degrees F and his pulse slowed to 52. The battery was quickly hooked up to the charger, after a few minutes the ResQ Air reached it's normal operating temperature, and the patients core temperature reacted accordingly and he regained consciousness.

(Note from ResQ Products Inc.:

When the patient did not receive effective inhalation rewarming treatment, his condition deteriorated correspondingly and rapidly improved once full treatment was restored. This case proves again, the effectiveness of the inhalation rewarming method to stabilize the core temperature in the field situation and the ResQ-Air equipment.)

After about two and a half hours of treatment, with a core temperature of 96.6 degrees F and pulse at 60, it was agreed to Medivac him. His pupils were equal and reactive and respiration's were at 12. We were told the next day, that the man was up and around and in good shape.

According to Canadian Rescue Specialist Bruce Paterson: "the ResQ Air unit was very effective in saving this man's life!"

to: Robert Douwens - Res Q Products Inc

fax #: (250) 285-2898

re: Use of Res Q Air

date: July 23, 1997

pages: page(s) total, including this cover sheet

Hello Robert, As per our conversation I have compiled some rough statistics, on Coast Guard Pacific Region hypothermia incidents for 1997. These are based on daily incident summaries from RCC, with specific details gathered from attending Rescue Specialists.

Hypothermia Incidents - 1997 to date CCG Pacific Region have responded to 11 separate incidents involving: the care of 20 hypothermic survivors! >. The majority of these were assessed as being mildly hypothermic.

Several of these incidents stand out and include the use of Res Q Air in patient care.

1. Feb. 97. Vancouver Area - Adult male recovered from overturned kayak after prolonged exposure. Reduced LOC. not shivering and measured core temp. at 31.0 C (tympanic thermometer). Res Q Air used during transport. Patient improvement observable by increased LOC, passage through shivering stage and increased temperature.

2. March 97. West Coast Vancouver Island - Adult male recovered after 90 minutes trapped in water under overturned small vessel. Initial measured core temp. of 31.2D C. Patient medivaced by helicopter to Victoria. Res Q Air used during over 3 hours of treatment and transport. Observed general improvement and rise in core temperature to 36.7 by time of arrival in hospital. Comment from Rescue Specialist that "It is my opinion that had we not had the Res Q Air to preheat the O2 and the ability to rewarm the patient he would not have survived."

3. May 97, Georgia Straight - 3 persons recovered from water clinging to boat for probably 2-4 hours, with minimal clothing. Casualty assessed as in the worst shape, near unconscious was provided with Res-Q- Air treatment during transport. Improved en route and all made full recovery.

From the desk of ...

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The ResQ-Air is used extensively by Canadian Coast Guard and other rescue professionals and has saved many lives.



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