What it's all about.

BC Association for Individualized Technology and Supports for People with Disabilities

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Try the Rocky Mountaineer to Whistler



BY BOB GORDON

For anyone interested in a railway trip, let me tell you about my experience with the Rocky Moutaineer

route from Vancouver to Whistler. I'm a ventilator-dependent quadriplegic, using an electric wheelchair, so travelling can pose some extra problems.

For the trip, I was transferred from my electric wheelchair into a manual wheelchair outside the train which allowed me to squeeze into the train car. I was tied down for the duration of the trip. An elevator raises you to the vestibule platform and then you turn 90 degrees to enter through a very narrow doorway.

If your manual wheelchair is too wide, a special chair is available to access the car, then transfer into a manual chair or regular seat. There's a bathroom near the wheelchair seating.

My electric wheelchair was shipped separately with my luggage to reach Whistler ahead of me. When we arrived. I was transferred back into the electric chair and then travelled via wheelchair taxi from the railway station to our final destination.

For the trip, I was transferred from my electric wheelchair into a manual wheelchair outside the train which allowed me to squeeze into the train car. I was tied down for the duration of the trip.

The train route offers a wonderfully scenic trip up Howe Sound, along the ocean, through valleys and canyons, over rivers and waterfalls. The train slows for the most scenic spots and a guide narrates about points of interest with some historic information. The service is excellent, and drinks and cold meals are served. Travellers with wheelchairs are welcome and care workers travel free. Please note that train personnel will not help with transferring.

The Mountaineer offers a same day trip to and from Whistler or packages with a night or two at hotels in Whistler. I stayed overnight and the highlight was a ride on the "peak to peak" gondola between Whistler and Blackcomb mountains. We explored the tourist spots and the atmosphere of the Whistler village.

For further information, and trip booking, contact Sherry Cooper at 604-606-6337. Or, if you'd like to know more about the trip, you can contact me at 604-538-1428 or bobgordon2001@hotmail.com.

Inside

- 1 Try the Rocky Mountaineer to
- 2 You're Wanted for a Cell Phone

- 6 BCITS Annual Show and Tell
- 7 Ask the BioMed
- 8 Inner Cannula Care
- 8 Bits & Pieces
- Email and web links in the PDF. can jump to listed sites or send

page 2 November 2010

balance

Balance is published three times a year by the BC Association for Individualized Technology and Supports for People with Disabilities (BCITS).

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You're Wanted for a Cell Phone Study

Researchers at the Neil Squire Society, in cooperation with other organizations, are conducting a study to look at how 911 emergency calls and emergency disaster alerts on cellular phones can be made more accessible.

The goal of this project is to have input from cell phone users on how the next generation of emergency services should be designed to ensure accessibility before they are released. Your feedback will be used to make industry and government aware of the needs of people with disabilities.

We are currently looking for people who have visual, hearing or mobility impairments. People with visual or hearing impairments who currently use a cell phone or have used a cell phone in the past are preferred. Also, we are looking for people with a mobility impairment that prevents them from using cell phones because of limited hand control. Anyone interested will have a choice of attending a focus group or completing a brief survey.

The focus groups of 6 to 8 people will be held at locations in Vancouver, Winnipeg and Ottawa, and will typically last 2 hours. There will be a brief presentation and an open question and answer session.

To learn more about this research and your eligibility, please contact the Neil Squire Society at research@neilsquire.ca or toll free 1-877-673-4636.

Here's a Toast to the Champagne Tipper!

The Disabled Sailing Association of BC was host to the Mobility Cup 2010, a sailing regatta for disabled sailors. For the Opening Ceremonies and Hall of Fame Launch, the association asked BCITS to construct a device that would enable Daniel LeBlanc, a sip/puff sailor and TIL client of 5 years, to rechristen a sailboat, The Iron Lady, donated by Margaret Thatcher.

Roger Desmarais, one of our Biomeds, designed and built this ingenious device now dubbed "The Champagne Tipper." A champagne



bottle is placed on the slanted platform and propped up by an Orca Tail. The Orca Tail is pulled down by a string attached to a spinning motor taken from an old VacuAide suction unit. No longer propped up, the bottle tips over! To prevent the bottle neck from breaking upon impact, the fall is cushioned by a couple Bipap filters!

The Opening Ceremony took place on Monday September 13th, 2010. Disabled sailing all started when UK Prime Minster Margaret Thatcher donated a Sunbird sailboat to Rick Hansen at the 1986 Expo. Rick Hansen gave the sailboat to Sam Sullivan and suggesting an organization be formed. Sam Sullivan then founded the Disabled Sailing Association of BC.

Photo by Samiko Guest •

November 2010 page 3

Do you need an assistive device?

Hearing | Communication | Seeing | Mobility | Learning | Breathing

The Equipment and Assistive Technology Initiative (EATI)—the first project of the BC Personal Supports Network (BCPSN)—is a community-based program that provides funding for assistive technology and devices for people with disabilities.

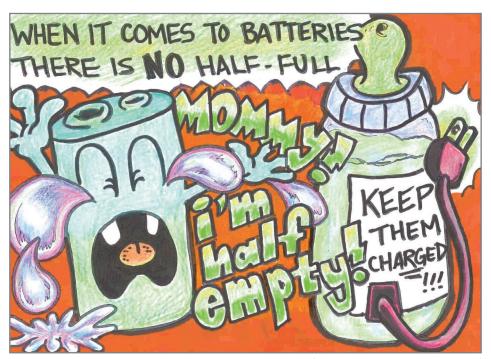
Get in touch with us

We will help you to brainstorm on your equipment needs and your goals, and will let you know if you're eligible for EATI funding. Even if you aren't, there are still ways we may be able to assist you, such as directing you to one of our Network Partners or other organizations who provide assistive technology. And, the more we know about you and your equipment needs, the more the BCPSN can focus on how we can help people with disabilities receive the supports they need, now and in the future.

Learn more about EATI at <u>www.bcpsn.org</u>, including downloading our Personal Strategy Tool Application Form (where you describe your goals, barriers and equipment needs).

See the box at the right for our contact information.

EATI is the first project of the BC Personal Supports Network (BCPSN) in partnership with the Ministry of Housing and Social Development. Funding for EATI is provided by the Province of British Columbia, through the Canada-British Columbia Labour Market Agreement.



Cartoon by Roger Desmarais, BCITS Biomed



What is EATI?

EATI has assisted people to acquire JAWS software, power wheelchairs, van conversions, Dragon Naturally Speaking software, electric door openers, hearing aids,Trekker Breezes and much more.

EATI provides funding for assessments, training, trialling, equipment and assistive technology for people with disabilities.

ways to apply for EATI

- Apply online at www.bcpsn.org.
- 2. Call the toll free line: 1 877 333 7554 or e-mail us at: eati@bcpsn.org.
- 3. Visit a Network
 Partner organization
 (find a list at
 www.bcpsn.org).

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Canada



page 4 November 2010

Learn to Fit Your Mask Like a Pro By Valerie Shaver, RRT

There are all kinds of CPAP/BiPAP masks for all kinds of noses and faces. Learn to fit your mask like a pro for the best night's sleep.

Since CPAP/BiPAP machines were first developed in the mid-80s, CPAP/BiPAP masks were only available in a few basic sizes. Over the years, masks have come a long way and are now available in many sizes, such as medium/small, petite, medium/wide, long/narrow, and so on. Headgears even come in different sizes of small, medium and large. Along with the new mask sizes, came a variety of mask manufacturers.

With so many choices in size and style of masks, careful attention is needed more than ever to achieve proper mask fitting.

Four Different Types of Masks and a Nasal Mouth Combination Mask There are four basic types of masks:

Nasal Masks are a mask that covers just the nose. The most common masks are some variation of the nasal mask.

Nasal Pillows are similar to plugs that deliver air directly into the nares. This mask is often chosen because it keeps the field of vision clear and has no air leaks around the eyes.

Full Face Masks are are an extension of the nasal mask. They go from the bridge of the nose to below the lip. Some models go below the chin and help keep the chin up and the mouth closed (F & P FlexiFit).

Total Face Masks fit the entire face from the forehead to the chin.

Combination Masks or Hybrids have a combination of nasal pillows and a mouth seal. They keep your field of vision clear, but are much harder to fit and wear.

Note: Not all manufacturers' masks line up the same when they are sized at small, medium and large.

The more surface area you have to cover, the more leaks you will have. So the nasal pillows will have fewer leaks than a nasal mask, a nasal mask will have fewer leaks than a full face mask, and so on.

All masks come with the manufacturer's suggested fitting guide that you should follow for best results. You can also visit the manufacturer's website for more tips.

So, how do you find not only the best mask, but also the most proper and comfortable fit? Regarding which style of mask to choose, there are a few factors you should consider. First, is whether or not you're able to breath through your nose. Also because of some disease processes with muscle weakness, you may not be able to keep your mouth closed. This will result in a massive leak and you won't receive your prescribed pressure. If you're strictly a mouth breather during sleep, and cannot alter your breathing, then a full-face mask is the only option.

With **all** masks, put it on your face first, then while holding your mask on your face, slip the headgear over your head and adjust as suggested. Use a mirror the first few times to

With so many choices in size and style of masks, careful attention is needed more than ever to achieve proper mask fitting.



avoid frustration! Always readjust your mask when you are lying down. The fit you have sitting up is not the same when you lie down.

Nasal Pillows

Nasal pillows are popular for people who want the least amount on their face and do not want their view obstructed. Nasal pillows need to occlude the entire nasal opening with the pillow fitting into the area. If they fall out, they are too small.

The headgear should fit snugly, but not push up on the nose. The nose should actually rest on the pillows.

Nasal Mask

In fitting the nasal mask, the mask should fit just above the lip and come up to the bridge of the nose, without occluding the nasal passage.

- 1. The headgear should be snug, but not tight. You should be able to fit two fingers under the straps of the headgear.
- 2. Correct any leaks by your eyes; this can cause your cornea to dry and affect your vision.
- 3. If your mask is still leaking, pull it forward about an inch then let it go back in place slowly letting the outside of the cushion fill with air. If you

November 2010 page 5

overtighten your mask and don't allow the cushion to fill with air, it will leak more. Do **not** overtighten.

Full-Face Mask

The full-face mask is a challenge to seal because it covers more area. The corners of the mouth need to be covered with the seal and, like the nasal mask, come up to the bridge of the nose. If you have a full-face Mask that also keeps your chin up (F & P Flexifit), put your chin in first then put the mask to thebridge of your nose.

Then, follow steps 1 to 3 above.

Make sure the side straps are parallel to each other. If they pull up or down, they will cause pressure sores.

Total Face Mask

This mask encompasses the forehead to the chin and the eyes are also behind the mask. The design of this mask equalizes pressure and minimizes eye irritation.

Hold the top of the mask between the brow and hairline. The bottom of the mask should fit just below your lip with the mouth slightly open.

Tighten the side straps (it should sit above the ears) and then the bottom straps. The top strap should fit on top of the head and the cross straps across the back of the head, keeping the headgear secure.

The mask should feel snug and comfortable, **not** tight.

A comfortable mask means you'll be more comfortable using it and you'll have many more restful nights' sleep.

Mask wearers need to be more diligent than ever to find the proper, best-fitting mask for themselves. A comfortable mask means you'll be more comfortable using it and you'll have many more restful nights' sleep.

Cleaning

Make sure to follow the manufacturer's washing instructions. All masks, hoses and headgear should be cleaned at least once a week. Clean them with soap and water, with a water rinse. Do **not** use antibacterial soap; it dries out the silicone. Headgear can be laundered in the washing machine, but **do not** throw it in the dryer.

Scalp and facial oils will break down the silicone in your mask and the elastic in your headgear. Only a clean mask will last 6 months to a year and still fit properly.

Skin Breakdowns

If you develop a pressure sore, you're wearing your mask too tight. Treat it with Polysporin or something similar, keep it clean and avoid direct pressure on it. We now carry a gel pad that will help the pressure sore heal and prevent future sores: Sleep Comfort Gel Pads, in small and large sizes.

They are reusable and fit on the skin under the mask to distribute the pressure from the mask to prevent pressure sores. •



At our latest "Show and Tell," a couple of peers told me about their experiences "backing up" their wheelchairs, without knowing for sure what was behind them. I did some research and found two products that could be helpful. Both are meant to be installed in vehicles (cars and trucks).

The first is pretty straightforward. It's a tiny camera with a 3.5" LCD display. So, you can see what you're about to



"bang" into. The unit is available from Canadian Tire for \$150.

The second unit is more of a sensing device. It beeps when you're close to an object behind you and shows the distance on a small visual display. You can turn the beep off if you like. We'll modify the unit slightly and test it out. Let us know if you'd like to know the results.

The unit's available from Lordco (the automotive parts store) for around \$100.

If you have any ideas for assistive devices that you've seen or want to know if there is such an device, send me an email. I'd love to check it out for you.

In the meantime, here's a great assistive device site for people that have a lack of dexterity in their hand function. I particularly like the "touchless trash can" and the "speed laces. www.disabledhands.com/gadgets/.

page 6 November 2010



Contributions to Your RDSP

The Vancouver Foundation is offering a one-time gift of \$150 to people with Registered Disability Savings Plans (RDSP). Residents of BC with a disability who have received provincial income assistance any time after January 1, 2008 can apply. Children with a disability who are residents of BC and whose parent or guardian has received income assistance any time after Jan. 1, 2008 can also apply.

To receive the Endowment 150, you must eligible for the Disability Tax Credit (DTC), provide an RDSP number and verify a minimum deposit.

Visit www.endowment150.ca to download an application or contact the Foundation at info@endowment150.ca or1-888-707-9777. For lots of free information and resources on the RDSP, go to www.bccpd.bc.ca/rdsp.

Secretion Management

BY JENELLE RUTHERFORD RRT

Secretion management is a common concern for many of our clients. A weak cough, thick secretions and decreased mobility may all cause difficulties with managing secretions. Here are some methods to help.

Humidification

Appropriate humidification is especially important in helping mobilize secretions by providing moist air. This prevents mucus membranes from drying out and keeps secretions moving more easily. Humidification can be provided by a heat moisture exchanger (HME) or a reservoir-style unit that directly connects to your ventilator or bilevel unit.

Adequate fluid intake will also help, as well as nebulizing saline. This is done through an aerosol compressor which turns the saline into a mist form which is then inhaled through a mask. Using this method can help thin secretions and loosen them up.

Mobilization

Using an ambu-bag as a manual cough assist can help create a stron-

ger cough to expel stubborn secretions. A PROP RT in your area can teach you or a family member how to do this.



Suction

Some clients need a little extra help which they can find through their suction equipment. Suction devices create a negative pressure which helps to draw up your secretions. You can use suction for oral secretions you're having difficulty clearing or you can have a family member or care worker suction through your tracheostomy tube.

Chest physiotherapy

Some clients find that chest physiotherapy helps loosen secretions, making it easier for removal.

Pharmacology

At some point, your physician may also suggest the use of certain pharmaceuticals as part of your secretion management plan.

If you have any questions, please contact us at PROP.

BCITS Annual Show and Tell



We had a good turnout for BCITS' annual "Show and Tell" on September 15th. BCITS' Executive Director, Simon Cox, welcomed everyone and spoke about the upcoming anniversary of Technology for Independent Living (TIL). TIL has made such a tremendous difference in our lives, enabling us to live out in the community, in our own homes.

Biomed Technologist Stephen told us about some new technologies and telephones. Respiratory Therapists Gillian and Elaina introduced us to a new ventilator, Trilogy. For more information, please call Gillian.

There was a demonstration of a new, small Devilbiss suction machine. The quieter and more compact respiratory equipment makes it so much easier for us to get around. There's no word yet about when it will be available.

Paul Gauthier, Network Coordinator of the BC Personal Supports Network spoke about EATI. Please see the article about EATI in this Balance.

One of the clients told us about a foam pad that can be used to stop air from escaping from between the stoma and the trach. PROP will look into it

After the presentations, Simon handed out the door prizes! Many thanks to the donors of the gifts.

The event ended with a light supper and we had the chance to mingle, and share ideas and solutions.

Please check out BCITS' website and visit the Client Café to ask questions or leave comments.

HEATHER AND JEANETTE, PEER GROUP

November 2010 page 7



Q: Can BCITS help me set up my Bluetooth cellphone?

A: Cell phones are a vital item in many people's lives, but historically they have been largely inaccessible to people with disabilities. The ability to keep in touch with family and friends with ease is convenient and gives us a sense of security. With technological advances and new applications for people with disabilities, we now see cell phones transformed into excellent tools for independent living.

Many of our TIL clients are unable to operate a cell phone without assistance. In the past couple of years, we've been adapting Bluetooth headsets so our clients can turn them on with a switch (sip and puff or a push button). With their cell phones equipped with adapted Bluetooth headsets, our clients are able use the voice dialing function to call up anybody in their contact list!

BY SAMIKO GUEST

We're glad to continue adapting Bluetooth headsets and if you would like us to adapt one for you, please make sure you meet the following criteria:

1. You have your own cell phone.

TIL is not able to provide you with a cell phone. But, we will be giving you an adapted Bluetooth headset with a switch to turn it on/off.

2. Your cell phone has:

- Bluetooth technology
- Voice Command Function

Most current cell phones have these, however, we must have these functions to adapt the phone for you. Check the manufacturer's manual, if you're not sure.

3. You're able to operate the cell phone's Voice Command Function.

You know the appropriate voice commands for your cell phone and it can recognize your voice. If you have a speech difficulty, you may

want to test out different cell phones. Unfortunately, speech recognition software on cell



phones is not perfected to the point where it can recognize all speech types yet. If your cell phone is unable to recognize your voice commands, the Bluetooth headset won't work for you.

4. Your phone's contact list is ready.

You will want all your friends and family members' names and phone numbers in your contact list. You will need to know the names exactly as they are entered into the list so that voice dialing works. If the contact list is empty, voice dialing won't work!

When you and your phone are ready, contact us and a TIL technologist will set up an adapted Bluetooth headset with an access switch for you!

Yes, I Accept Your Invitation To Join BCITS









The BC Association for Ind	lividualized Technology	and Supports for Peop	le with Disabilities (BCI	TS)
Home of Provincial Respir	atory Outreach Program	n (PROP) & Technology	for Independent Living	(TIL)

Name:	
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City/Flov.	Postal Code:
Telephone:	Fmail [.]

Please Check One

Membership for registered BCITS clients

Please mail completed form to BCITS (the cost of postage constitutes your membership fee)

□ Non-client membership fee Please mail completed form along with \$20.00 annual membership fee payable to BCITS.

Please mail this form along with your membership fees to: #103 - 366 East Kent Avenue South, Vancouver BC V5X 4N6

page 8 November 2010

Bits & Pieces



Help us Make Balance Great

Your feedback on Balance or questions for our RTs or BioMed Technologists are all welcome. Contact us at info@bcits.org or at 1-866-326-1245.

See this Website

Inclusive Emergency Preparedness Canada at http://inclusionresearch.org/IEPCwebsite/EnAblingChange. html.

You Can Support Us

Did you know that BCITS is a charitable organization and can accept donations toward the expansion of our services and equipment? If you would like to support us, you can contribute by sending a donation to: BCITS, 103-366 E. Kent Ave S., Vancouver, BC V5X 4N6. We will be pleased to send you a tax receipt. •

Inner Cannula Care

BY ELAINA ZEBROFF It is important to regularly clean your inner cannula. This will reduce mucous build up that can lead to a blocked inner cannula that can cause you respiratory distress.

Please note: For Jackson Tracheostomy Tubes, **do not use** hydrogen peroxide for cleaning the inner cannula. Use saline only.

What You Will Need

- Gloves
- Hydrogen peroxide
- Saline
- Inner cannula brush/ trach brush
- 2 small wash basins
- Spare inner cannula
- Clean dry storage container
- First prepare your working area, by placing the supplies on a tabletop or stand.
- 2. Fill one bowl with full strength hydrogen peroxide and another bowl with saline.

- 3. Wash your hands and gloves.
- 4. Remove the inner cannula from the tracheostomy tube and replace it with a clean inner cannula. Make sure the inner cannula is locked in place.
- Place the soiled inner cannula in the bowl of full strength hydrogen peroxide and let it soak for 10 to 15 minutes.
- Using an inner cannula brush or trach brush, gently remove any mucous from the inner cannula.
- After cleaning, rinse the inner cannula with saline making sure all the hyrdrogen peroxide is removed.
- 8. Gently shake off any saline.
- 9. Let the inner cannula air dry.
- **10.** Store the inner cannula in a clean dry container. ●



A team of researchers from the University of Toronto is looking for people who want to tell their stories of living with polio. They would like to hear from you, if you:

- 1. came down with polio between 1927-1957 and before your 19th birthday,
- 2. lived in Ontario, Manitoba, Alberta, BC, Nova Scotia or New Brunswick during that time, and
- 3. used any assistive devices during that time.

They are interested in knowing about your experiences of growing up with the effects of polio and any of your stories that challenged accepted thinking and practices at that time. The project is documenting the ways that people have experienced the effects of polio and how it may have influenced your participation in the disability rights movement in Canada.

Interviews across Canada are happening in the spring and summer of 2010. A small honourarium will be provided to research participants.

For more information or to participate, contact Susan Ferguson (Research Coordinator) at fergusonsusan@qmail.com or Dr. Karen Yoshida (Professor, Principal Investigator) at 416-978-6589.