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Up in the Air —
Hiking the Assiniboine

The journal for respiratory health professionals in Canada
La revue des professionnels de la santé respiratoire au Canada
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The CJRT acknowledges the financial support of the Government of Canada, through the Publications Assistance Program (PAP), toward our mailing costs.

Cover Photo
Thrasher’s Weekend
J. J. Hodgson rock climbing for her first time at Wasootch Slabs, Kananaskis, Alberta during the Alpine Club of Canada, Saskatchewan Section’s Annual Thrashers Weekend.
Photo: Emily Wallace (May 2006)

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About This Issue

Welcome again to another issue of the Canadian Journal of Respiratory Therapy. Once again we have contributions from a number of respiratory therapists highlighting research, activities, and even some personal accomplishments.

In this issue we have some preliminary information on the CSRT 2007 Annual Forum and Tradeshow, which will be held in Montreal, Quebec from May 31 – June 3, 2007. The program is already shaping up and will definitely provide an outstanding opportunity to enhance your knowledge of your profession.

We also have a number of announcements for deadlines that are fast approaching. Deadlines for submitting nominations for the Summit Technologies Award for Excellence in Respiratory Therapy, the Medigas Award, and for the CSRT’s Robert Merry Professional Achievement Award, are fast approaching. This is an excellent way to recognize one of your colleagues for their extraordinary contributions to our profession.

This issue of the Journal is also the last issue before RT Week (October 22 – 28). There are lots things that you can do to promote our profession, both during that week, and throughout the year. If you are at all interested in stepping up, and being a voice for your profession, be sure to read this issue, and contact the CSRT Head Office (1-800-267-3422) for ideas and other support that we may be able to provide.

I also must say welcome to all of the new RT students that have just started their programs, and welcome back to all of the returning students. We hope you have a productive start to the year!

Sincerely,

Doug Maynard, BSc, RRT, MBA
Executive Director, CSRT
dmaynard@csrt.com
Hiking the Assiniboine

Jeff Dmytrowich, RRT

It had been over six hours since we started this adventure. “How much farther to Og Lake?” had been a common question for the past couple of hours. I was reassuring everyone that it should be no more than an hour (couple kilometers) until camp. We should be there shortly. We were all exhausted from the heat and the weight of our packs. The less than forgiving trail sure didn’t help the group morale. But there was a glimmer of hope ahead — in the distance we saw a trail marker sign. With anticipation we hurried to see how close Og Lake really was. Our hope quickly turned to despair. We still had almost six kilometers to go. It wasn’t said out loud, but we were all wondering how we are going to make it another five days together if they were to be anything like the day we were having. I was hoping everyone wasn’t going to turn on me, as I had planned this whole trip. It wasn’t going too smoothly so far.

For the past few summers, my girlfriend J.J. and I have gone from the flat lands of Saskatchewan to spend a week backpacking in the backcountry of the Rocky Mountains. We find these adventures are a great way to get outside, enjoy nature, and leave the world behind for a little bit. All the stresses get left at the trailhead and so do all modern annoyances. No cell phones, no pagers, no television, no radio and no way for work to get in contact with me with the usual question of, “Can you work [insert date and time]?”. 

Porcupine Trail In the midday heat and at an elevation of over 6500 feet, Jeff Dmytrowich, J.J. Hodgson and Pam Niska (far to near) take a short break on the steep trails in Mount Assiniboine Provincial Park, British Columbia. Photo: Chad Popik (July 2006)
Hiking the Assiniboine

This year we headed to Mount Assiniboine Provincial Park in British Columbia with another couple from Calgary. I planned for us to spend six days in the backcountry, carrying all the food and gear we would need. We would hike into Mount Assiniboine Provincial Park from Sunshine Village in Banff National Park and camp the first night at Og Lake, 23 km from Sunshine Village. I knew the first day was going to be challenge but I didn't expect it to take such a toll on us. Luckily, day two involved only a short 6.5 km hike through open meadows to Lake Magog at the base of Mount Assiniboine where we would camp for the next few days. The short day combined with the beautiful scenery and wildlife made it easy for everyone to forget the first tough day.

We spent several days at Lake Magog with Mount Assiniboine, the ‘Matterhorn of the Rockies’, towering above us. Lake Magog became our base camp from which we embarked on a number of day trips. Our day trips included a trip up to Windy Ridge (elevation 2650 m/8700 ft) which divides Alberta and British Columbia and stands above North America’s largest non-volcanic landslide. The slide contains approximately 1.1 cubic kilometers of debris.

The highest point we reached was on our trip to Nub Peak where we scrambled to an elevation of 2750 m/9013 ft above sea level. That is a lot higher than the elevation of 504 m/1654 ft which I am used to. I always find during hikes at such an elevation that the RRT in me always has to wonder, “If I'm at an elevation 9013 feet and a barometric pressure of 540 mm Hg then my PAO2 would be around ...”, “I wonder what high altitude pulmonary edema feels like, I’m technically at a high enough elevation ...” and “hmm, my resting resp rate sure is up a bit...”. Thankfully though, the amazing scenery and peacefulness of the backcountry quickly chases these thoughts from my mind.

The hike out always seems easier then the hike in. Probably because our backpacks are a lot lighter, since we are carrying less food. Not to mention we are more conditioned by this time too. The hike out always brings up mixed feelings; we always look forward to being rid of the blisters and being able to eat food that hasn’t been dehydrated and rehydrated. We quickly begin to miss the tranquility and beauty of the mountains along with camaraderie of the other hikers that we meet from around the globe. For that time we spend in the backcountry we leave the world behind and just live with nature with all our worries left at home. No matter how bad the blisters, the weather or the food, once you leave the trail — it is only the good you remember.

Now back to reality and the everyday routines that life demands. It won’t be long before I start planning my next adventure and escape. Hmm, I hear that the 150 km hike around Mount Rainer is nice, or maybe canoeing Yellowstone’s Shoshone Geyser Basin ....

Jeff Dmytrowich, RRT, has been with the Royal University Hospital in Saskatoon since 1998. He works in all aspects of critical care medicine and is involved in Royal University Hospital’s Quality & Safety Team which is a part of the Canadian ICU Collaborative. He was a recipient for the Saskatoon Health Region’s 2006 Bravo Award for Performance Excellence.
On Air Nuggets

CSRT Awards

Do you know someone who deserves special recognition?

The CSRT is pleased to provide a series of awards in conjunction with some of our Corporate Members. Awards include financial grants or travel costs as well as recognition within the RRT community.

Summit Technologies invites you to nominate an individual for the Summit Technologies Award in Respiratory Excellence. This award focuses on the areas of respiratory care involving direct patient care, education or research. The deadline for applications is December 15, 2006.

Medigas, a Praxair company is accepting applications for the Medigas Award for Excellence for recognition of a group of RRT’s from any facet of the profession who further the profession of respiratory therapy through their activities in their community.

The Award recognizes the active practice of respiratory therapists. Nominations may come from the public, other RRT’s who work with the nominees, or members of the health care team.

The Robert Merry Professional Achievement Award honours a respiratory therapist from any area of the field, who has exhibited vision, leadership and innovation to further develop respiratory care in Canada. Out of pocket expenses, accommodations and airfare will be paid to the award recipient to aid in ensuring his/her presence at the award presentation at the annual educational forum. Deadline for nominations is January 31, 2007.

Please check the Foundations section of the CSRT website for eligibility details on all these awards.

Brent Kitchen

Former CSRT President, Brent Kitchen has been appointed as Director, Risk Management and Privacy Officer at Regina Qu’Appelle Health Region. As the Manager of Respiratory Services and as a Registered Respiratory Therapist, Brent demonstrated leadership and commitment to providing excellence in patient care. He has played a key role at the national level and within RQHR, resulting in many accomplishments and the development of the Respiratory Therapy program. His experience and passion for quality patient care will support the region’s long-standing commitment to providing safe, quality care.

Congratulations Brent!

Continuing Education

Want to participate in Continuing Education Activities for career development and specialization of your profession? The CSRT offers a variety of ways for you to achieve your professional development goals. Please check out our Upcoming Events Section and the “Education” section of our web site for on-line courses, conferences and workshops.

CSRT National Exam

January 2007

The next sitting of the CSRT National Examination is January 8, 2007. The Deadline for application for this exam is November 15, 2006. Details for writing this exam are available on the CBRC website (http://www.cbrc.ca/)
Message from the President

A little over a year and a half ago, the CSRT developed a new Mission Statement which became the guideline for our Strategic Plan. As you have no doubt by now seen, the words “advocacy, service and unity” appear on many of our documents and publications.

For some, these may appear to be just words thrown around to make people feel good, without really having any meaningful purpose. For others these words are the foci for our actions. If what we do is not directed towards one, or more, of these areas, we are getting off track and in danger of loosening ourselves. As President it is my task to ensure that we keep to our course so that we will be able to accomplish all of what you, the membership, have direct-ed us to do. The Strategic Plan set out a number of goals, guiding policies and principles for us to accomplish by 2008. I’d like to bring you up to date on how we are doing on some of these.

As the National Alliance of Respiratory Therapy Regulator Bodies — the Alliance — was formed, the CSRT began its move away from that as a quasi-regulator. The CSRT in now in a more appropriate position as an advocate for the profession of respiratory therapy in this country and a voice for those members not represented by a regulatory body. To date we have worked closely with the Alliance to create a more unified view of what respiratory therapy is in Canada.

The CSRT Occupational Profile, long the foundation for the curriculum taught in most of the schools, was redeveloped into the National Competency Profile (NCP). This document, agreed to by the members of the Alliance, replaced the different occupational profiles which contributed to the creation of barriers to mobility for therapists across provincial boundaries. As of this September, the Alliance and the CSRT’s Council on Accreditation for Respiratory Therapy Education (CoARTE) will begin requiring the schools to implement the profile for entry-level education. The NCP profile can be found on the CSRT website under RRT Credential.

Certainly one of the most important aspects of the CSRT, according to our membership surveys, is the exam process. Since the Occupational Profile has now been replaced by the NCP, an update to the examination process is needed. Up until now we have had two evaluation systems; one for Quebec and one for the rest of the country. Currently the Alliance, with the CSRT’s participation, is working towards a common evaluation process. A submission has been made to Human Resources and Skills Development Canada to assist in funding the development of this assessment tool. In time this will lead to the standardization of the regulatory process that will permit entry-level therapists to freely move across provincial boundaries. This will be the main topic of discussion at a fall meeting of the Alliance members in Calgary. In addition, this process should be able to be developed into an evaluation system for foreign trained individuals to be assessed for their suitability to the Canadian healthcare system.

In order to get to this point the CSRT has spent a considerable amount of time communicating with the schools through CoARTE and the Educator’s Congress which has preceded each of the last two National Education Forums in Edmonton and Saint John. We have recently begun to develop a new communication tool to connect the schools across Canada in order to share information and foster more collaboration on projects of national interest. The first teleconference will have taken place by the time that you read this issue of the Journal.

As your professional advocate, we not only speak on behalf of the many therapists who live and work in the non-regulated provinces, but we also speak on behalf of our members regardless of where they live and work in Canada. Where the regulatory bodies are entrusted with the job of protecting the public, they often have very little to promote the profession of respiratory therapy. The CSRT not only provides information to the public and publishes many documents which speak to the importance of standards in order to protect the public; the CSRT also speaks on behalf of its members to government agencies as well as many international organizations.

Very shortly we will be celebrating Respiratory Therapy Week in Canada. The CSRT can provide a number of promotional items for you to use in your local events. We will also be working hard to spread the word across the country about what an RT is and how they are an essential part of our healthcare system.

Advocacy, Service, Unity. These three words carry a big responsibility. Your CSRT has been working hard to keep to this vision. We have participated with the members of the Alliance in the development of common tools to which the profession can be unified. We continue to strive towards one country, one profession. The CSRT doesn’t just offer a selection of promotional items for its members, it also provides liability, auto and home insurance at competitive rates through its brokers. Educationally the CSRT accredits the schools across Canada and promotes their increased communication and collaboration.

Finally, the CSRT advocates on your behalf to ensure that your interests as a respiratory therapist are being met and that your voice is heard by the regulators and the government alike. Take the time to help us. Let us know how we are doing and how we can be of assistance to you in your practice. Call, write, email or fax us with your comments and suggestions.

Rob Leathley, B.Ed., RRT
CSRT President
Mot du président

Il y a un peu plus d’un an et demi, la SCTR a rédigé un nouvel Énoncé de mission, lequel a guidé l’élaboration de notre Plan stratégique. Comme vous avez pu le constater, les mots « défense des intérêts, service et unité » paraissent maintenant sur plusieurs de nos documents et publications.

Pour certains, il peut sembler qu’il ne s’agit que de mots résolument optimistes, sans but précis. Pour d’autres, ces mots constituent le point de mire de nos actions. Si nos initiatives ne sont pas dirigées vers l’un ou l’autre de ces thèmes, nous risquons de faire fausse route et de nous perdre. À titre de président, j’ai la tâche de m’assurer que nous restons sur la bonne voie afin d’être en mesure d’accomplir tout ce que vous, les membres, nous avons demandé de faire. Le Plan stratégique renferme un certain nombre de buts, de politiques et de principes directeurs à viser d’ici 2008, et j’aimerais vous informer des progrès que nous avons réalisés.

Suite à la création de l’Alliance nationale des organismes de réglementation en thérapie respiratoire — l’Alliance — la SCTR a commencé à se distancer du rôle de quasi-organisme de réglementation. La SCTR est maintenant mieux positionnée pour défendre les intérêts de la profession de la thérapie respiratoire au Canada et servir de porte-parole pour les membres qui ne sont pas représentés par un organisme de réglementation. Jusqu’à maintenant, nous avons travaillé de près avec l’Alliance afin de créer une vision davantage unifiée de ce qu’est la thérapie respiratoire au Canada.

Le Profil de la profession de la SCTR qui a longtemps constitué la base du curriculum enseigné dans la majorité des écoles a été retravaillé pour devenir le Profil national des compétences (PNC). Ce document, accepté par tous les membres de l’Alliance, a remplacé les divers profils de fonctions qui créaient des obstacles à la mobilité des thérapeutes au-delà des frontières provinciales. À compter de septembre 2006, l’Alliance et le Conseil pour l’agrément de la formation en thérapie respiratoire (CAFTR) de la SCTR commenceront à exiger que les écoles mettent le profil en œuvre pour l’éducation des nouveaux étudiants. Le PNC est disponible dans le site Internet de la

De loin l’un des aspects les plus importants de la SCTR, selon les sondages effectués auprès de nos membres, est le processus d’examen. Étant donné que le Profil de la profession a été remplacé par le PNC, une mise à jour du processus d’examen s’impose. Jusqu’ici, nous avons eu deux systèmes d’évaluation : un pour le Québec et l’autre pour le reste du Canada. L’Alliance travaille présentement avec la participation de la SCTR, vers un processus d’évaluation commun. Une demande de financement a été adressée à Développement des ressources humaines Canada, en vue d’élaborer cet outil d’évaluation. Avec le temps, le processus de réglementation sera uniformisé, de sorte que les thérapeutes débutants pourront franchir les frontières provinciales librement. Il s’agit là du principal sujet de discussion prévu lors de la réunion d’automne, à Calgary, des membres de l’Alliance. De plus, ce processus devrait pouvoir être adapté aux besoins des thérapeutes diplômés à l’étranger, aux fins d’évaluation de leur aptitude à pratiquer au sein du système de soins de santé canadien.

Ces progrès sont le fruit du temps considérable qu’a consacré la SCTR à la communication avec les écoles par l’entremise du CAFTR et lors du Congrès des enseignants, qui a précédé les deux derniers Forums nationaux d’éducation à Edmonton et à Saint Jean. Récemment, nous avons commencé à élaborer un nouveau outil de communication visant à créer des liens entre les écoles partout au pays pour faciliter l’échange de renseignements et la collaboration aux projets d’intérêt national. La première télé-conférence aura déjà eu lieu au moment où vous lisez ce numéro de la Revue.

En qualité de défenseur de vos intérêts professionnels, nous représentons les nombreux thérapeutes qui habitent et travaillent au Canada. Bien que les organismes de réglementation aient la responsabilité de protéger le public, ils ne disposent que de très peu de ressources visant à promouvoir la profession de la thérapie respiratoire. La SCTR fournit des renseignements au public, elle publie une gamme de documents qui soulignent l’importance des normes visant à protéger le public, et elle représente ses membres auprès d’agences gouvernementales et de nombreux organismes internationaux.

Nous célébrerons bientôt la Semaine de la thérapie respiratoire au Canada. La SCTR peut vous fournir des items promotionnels à distribuer lors de vos activités locales. Nous entendons également travailler fortement à la diffusion, d’un bout à l’autre du pays, du rôle des TR et de leur importance au sein de notre système de soins de santé.


Enfin, la SCTR revendique en votre nom dans le but d’assurer que vos intérêts à titre de thérapeutes respiratoires sont défendus et que votre voix est entendue par les organismes de réglementation et par les gouvernements. Prenez le temps de nous aider : dites-nous si nous sommes sur la bonne voie et comment nous pouvons vous aider dans votre pratique. Faites-nous part de vos commentaires et suggestions par téléphone, par la poste, par courriel ou par télécopieur.

Rob Leathley, B.Ed., TRA
Président de la SCTR
CoARTE Announcement
Michelle Kowlessar, Accreditation and Education Manager

Professional Development Activities at the CSRT
The CSRT is currently developing Teleconference workshops for its continuing professional development activities. We are looking at developing teleconferences on Acute Respiratory Distress Syndrome, New Asthma Guidelines and/or Chronic Obstructive Pulmonary Disease.

If you are an expert in one of these fields or know someone that has expertise in one of the above areas and would be interested in participating, please contact Michelle Kowlessar, Accreditation and Education Manager, by e-mail at coarte@csrt.com or by phone 1-800-267-3422 ext. 26.

October 22 to 28, 2006 is Respiratory Therapy Week

What are you doing to celebrate our profession?

Over the past four decades, respiratory therapy has evolved to become a vital component of healthcare delivery in Canada. From teaching patients how to prevent and manage COPD symptoms to providing first response to patients in critical decline — respiratory therapists are essential to today's healthcare team.

To ensure our ability to realize our full professional potential, it is necessary that our place within the healthcare team be recognized.

The respiratory therapists' role within healthcare delivery must be acknowledged by the general public, healthcare providers, healthcare administrators and government policy makers.

The CSRT would like to extend support to members organizing RT Week initiatives aimed at raising awareness about the profession. Promotional materials such as brochures and pens can be obtained by contacting the CSRT Head Office at (800) 267-3422.

Would you like to participate in RT Week awareness-raising activities but do not have anything planned?

The CSRT is looking for volunteers to man display tables in various locations. To find out more, contact Danièle Filion, Public Relations and Marketing Coordinator, at dfilion@csrt.com or (800) 267-3422, ext. 29.

The CSRT will award the volunteers that run the most creative, exposure-generating display with the new CSRT #1 RT WEEK DISPLAY prize.

Complete contest details are available on the CSRT website. Click the RT WEEK DISPLAY CONTEST link on the website's homepage.

First prize is free registration to Rendez-vous Montréal, CSRT Forum 2007, May 31 to June 3, 2007.

Keep in mind — opportunities to raise awareness about our profession arise every day. It is important to take the time to let people know what you do and how crucial our profession is to the health of Canadians.
2006 CSRT Leadership Survey

Over the course of the summer, the CSRT has promoted and disseminated the 2006 CSRT Leadership Survey with the aim of establishing a database of contact information for Canadian respiratory therapists holding a leadership position.

Your Society is proud to report that response has been overwhelming! The CSRT extends a heartfelt thank you to all who have submitted their contact information.

The success of this initiative will allow your Society to contact respiratory therapists in a leadership position in order to:

- Disseminate respiratory therapy-related information
- Put out calls for information (to address various issues, to conduct research, etc.)
- Put out calls for participation (for advocacy campaigns, for awareness campaigns, etc.)

The CSRT has made tremendous efforts to disseminate the Leadership Survey to as many sites as possible, it is impossible for the Society to reach every Canadian RT in a leadership position. Should you be a respiratory therapist in a leadership position and have not yet heard about the survey please take a minute to complete the 2006 CSRT Leadership Survey. A link to the electronic version of the survey can be accessed via the CSRT Web Site at www.csrt.com. Simply click on the CSRT Leadership Survey link on the website’s homepage. To obtain a paper copy of the survey, contact the CSRT Head Office at (800) 267-3422 or csrt@csrt.com.

CSRT Call for Nominations for Board Positions

Make A Difference!
The CSRT invites its members to become pro-active in their profession. Nominations are now open for volunteer positions on the CSRT Board of Directors.

President-Elect
(to become President and Past-President)
2007 – 2008 (three-year appointment)

Director of National/Provincial Relations
2007 – 2008 (two-year appointment)

Check our website under About/Board of Directors for job descriptions and nomination forms. Forms can also be obtained through the CSRT Head Office 800-267-3422.

Each nominee must be a Registered Member of the Society. Individuals may be nominated by forwarding the nomination papers, duly signed by five (5) Registered Members in good standing, to the Executive Director of the Society.

Completed forms should be sent to:
Douglas Maynard
Executive Director CSRT
102-1785 Alta Vista Drive
Ottawa ON K1G 3Y6
Fax: (613) 521-4314
Deadline for nominations is Dec. 1, 2006.
CSRT Educational Forum Montréal 2007

A Word from the National Forum Chair — Darcy Andres

The 2007 CSRT Annual Forum and Trade Show is fast approaching. Planning for this year’s conference started many months ago and a significant amount of progress has been made. Some of the highlights of the 2007 conference include:

- Keynote speaker presentations will be available in French and English through simultaneous translation
- Education sessions presented in French and English
- Confirmed speakers include: Justin Trudeau, Dr. Stavros Prineas, a healthcare safety expert, Dr. Samantha Nutt from War Child Canada and Len Geiger, a double lung transplant survivor
- Annual President’s Banquet and Awards
- Complimentary Fun Night at the Mondiale de la Bière, the annual Montreal beer festival

Check out the CSRT website for further information and updates.

On behalf of the CSRT Board of Director’s and myself, I would like to thank the organizing committee for all the hard work each of them has done and continues to do.

Members of the 2007 Organizing Committee include:
Dallas Schroeder — Education Symposium Chair
Maggie Quirion — Social Events Coordinator
Jeff Dmytrowich — Speakers
Josée Prud’homme — OPIQ Liaison
Line Prévost — OPIQ Representative (French Language Program)

Special thanks to Rita Hansen from the CSRT Head Office. Rita is the driving force behind this event and works tirelessly to ensure a successful forum!

The 2007 Forum promises to be the largest national forum ever — we expect 800 delegates and 80 exhibitor booths. Mark May 31 — June 3, 2007 on your calendar and plan to attend this exiting event! Looking forward to seeing you in Montreal!

KEYNOTE SPEAKERS
- Len Geiger
  Double lung transplant
- Dr. Samantha Nutt
  War Child Canada
- Dr. Serge Marquis
  Work, Meaning and Pleasure
- Dr. Stavros Prineas
  Communication & Teamwork in the OR
- Justin Trudeau
  Environment and Empowerment

CSRT Forum 2007
Call for Abstracts

The 2007 CSRT Annual Educational Forum will be held in Montreal, Quebec. We expect over 800 delegates at this event and invite interested parties to showcase their latest abstracts or poster presentations to the Planning Committee for consideration.

Abstracts may pertain to any area of respiratory therapy including clinical practice, evaluation and respiratory healthcare delivery. Abstracts of no more than 250 words must be submitted according to guidelines (found on the CSRT website under About/Annual Meetings). All submissions will be reviewed by a panel using a blind peer review mechanism.

The deadline for submissions is March 16, 2007. Detailed information can be found on the CSRT website under About/Annual Meetings.
The CSRT is pleased to host its 43rd Annual Educational Forum and Trade Show in Montreal at the Hilton Montréal Bonaventure Hotel. In collaboration with OPIQ, the CSRT will have morning plenary sessions simultaneously translated. As well, many of the educational sessions will be in French.

There will be a series of social events including a complimentary wine and cheese reception, a free fun night at Le Mondial de la bière and the Exhibitor’s Breakfast. Registration includes admission to the exhibit hall with 80 booths and all breakfast, lunch and coffee breaks. The President’s Banquet and Awards will take place on Saturday night with a live band.

The CSRT has blocks of discounted rooms booked at the Hilton Bonaventure and the Marriott Chateau Champlain. WestJet is our official carrier. Details will be posted as they become available on the CSRT website (www.csrt.com) under About/Annual Meeting.

Confirmed speakers include:
- Justin Trudeau
- Dr. Jean Bourbeau: Diagnostics
- Dr. Peter Brindley: Crisis Resource Management/Team Resource Management/Severe Sepsis — Its about Time
- Craig Campbell: Biphasic NCPAP
- Dr. Robert Crapo: Spirometry/Improving Lab Performance
- Mark Daly: Leadership
- Dr. Allan de Caen: PALS requirements and Rationale/Management of Pediatric ARDS
- Stéphane Delisle: HFO/Effect of Tidal Volume on Work of Breathing, etc During ALI and ARDS
- Dr. Alain Deschamps: Anaesthetic and Neuromuscular Diseases
- Dr. Niall Ferguson: HFO/Exubation Failure and Delay in Brain Injury
- Brigitte Fillion: Home Ventilator Therapy, Equipment and Medical Supplies
- Len Geiger: Double Lung Transplant
- Dean Hess: Critical Care
- Dr. Josée Lavoie: Anesthésie pour l’adulte avec cardiopathie congénitale
- Dr. Serge Marquis: Work, Meaning and Pleasure
- Dr. Pierre Mayer: Le Kilimandjaro comme terrain d’étude
- Dr. Samantha Nutt: War Child Canada
- Dr. Michel-Antoine Perrault: Échographie transoesophagienne
- Dr. Stavros Prineas: Communication/Teamwork in the OR
- Rita Troini: Televisit

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**Pre-registration deadline April 27, 2007**

**Must be currently enrolled in a CSRT approved program to qualify for the student rate**

Registration includes Exhibitors Breakfast, Sunday Continental Breakfast, two lunches and breaks, Wine and Cheese Reception, Fun Night all lectures and workshops, entry to Exhibit Hall.

GST is included in the total #119220010 RT

**Refunds:** Refunds are subject to a $50.00 administration fee.

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**METHOD OF PAYMENT**

**TOTAL PAYMENT $**

- [ ] Visa
- [ ] MasterCard

**CARD NUMBER**

**EXPIRY DATE**

**SIGNATURE**

**PRINT NAME**
Altersation of the Pulmonary Surfactant System in Full-Term Infants with Hereditary ABCA3 Deficiency

Frank Brach*, Sven Schimanski*, Christian Mühlfeld, Stefan Barlage, Thomas Langmann, Charalampos Aslanidis, Alfred Boettcher, Ashraf Dada, Horst Schroten, Eva Mildenberger, Eric Prueter, Manfred Ballmann, Matthias Ochs, Georg Johnen, Matthias Griese and Gerd Schmitz

Institute of Pathology, and Institute of Occupational Medicine (BGFA), University of Bochum, Bochum; Division of Electron Microscopy, Department of Anatomy, University of Göttingen, Göttingen; Institute of Clinical Chemistry and Laboratory Medicine, University of Regensburg, Regensburg; Department of General Pediatrics, University of Düsseldorf, Düsseldorf; Department of Pediatrics, Charité, Campus Benjamin Franklin, and Klinikum Neukölln, Berlin; Department of Pediatrics, Bethesda Hospital, Wuppertal; Department of Pediatrics, Hannover Medical School, Hannover; Pediatric Pneumology, Children’s Hospital of the Ludwig-Maximilians-University, Munich, Germany; and Institute of Anatomy, Experimental Morphology Unit, University of Bern, Bern, Switzerland.

Correspondence and requests for reprints should be addressed to Prof. Dr. G. Schmitz, M.D., Institute for Clinical Chemistry and Laboratory Medicine, University of Regensburg, Franz-Josef-Strauss-Allee 11, D-93053 Regensburg, Germany. E-mail: gerd.schmitz@klinik.uni-regensburg.de

Rationale: ABCA3 mutations are known to cause fatal surfactant deficiency. ABCA3 protein expression in full-term newborns with unexplained respiratory distress syndrome (URDS) as well as the relevance of ABCA3 mutations for surfactant homeostasis.

Objective: We studied ABCA3 protein expression in full-term newborns with URDS as well as the relevance of ABCA3 mutations for surfactant homeostasis. Coding exons of the ABCA3 gene were sequenced. Surfactant protein expression was studied by immunohistochemistry, immunoelectron microscopy, and Western blotting.

Results: ABCA3 protein expression was found to be greatly reduced or absent in 10 of 14 infants with URDS. Direct sequencing revealed distinct ABCA3 mutations clustering within vulnerable domains of the ABCA3 protein. A strong expression of precursors of surfactant protein B (pro-SP-B) but only low levels and aggregates of mature surfactant protein B (SP-B) within electron-dense bodies in type II pneumocytes were found. Within the matrix of electron-dense bodies, we detected precursors of SP-C (pro-SP-C) and cathepsin D. SP-A was localized in small intracellular vesicles, but not in electron-dense bodies. SP-A and pro-SP-B were shown to accumulate in the intraalveolar space, whereas mature SP-B and SP-C were reduced or absent, respectively.

Conclusion: Our data provide evidence that ABCA3 mutations are associated not only with a deficiency of ABCA3 but also with an abnormal processing and routing of SP-B and SP-C, leading to severe alterations of surfactant homeostasis and respiratory distress syndrome. To identify infants with hereditary ABCA3 deficiency, we suggest a combined diagnostic approach including immunohistochemical, ultrastructural, and mutation analysis.

Key Words: ABCA3 • cathepsin D • immunoelectron microscopy • immunohistochemistry • surfactant

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Intrapulmonary Bronchogenic Cyst and Cerebral Gas Embolism in an Aircraft Flight Passenger*

Francisco Aécio Almeida, MD; Bryan X. DeSouza, MD; Thomas Meyer, MD, FCCP; Susan Gregory, MD, FCCP and Lee Greenspon, MD, FCCP

* From the Division of Critical Care, Pulmonary, Allergic, and Immunologic Diseases (Dr. Almeida), Thomas Jefferson University Hospital, Philadelphia; and the Divisions of Neurology (Dr. DeSouza), and Pulmonary Diseases and Critical Care (Drs. Meyer, Gregory, and Greenspon), Lankenau Hospital, Wynnewood, PA.

Although it is estimated that > 1 billion passengers travel by air worldwide each year, the incidence of in-flight emergencies is low. However, due to non-standardized reporting requirements for in-flight medical emergencies, the true incidence of pulmonary barotrauma in airplane passengers is unknown. We describe the case of a passenger with an asymptomatic intrapulmonary cyst in whom a severe case of cerebral gas embolism developed during an aircraft flight. The decrease in ambient pressure during the aircraft climb resulted in expansion of the cyst volume based on Boyle’s law (pressure x volume = constant). Due to the cyst expansion, we believe tears in the wall led to the leakage of air into the surrounding vessels followed by brain gas emboli. Adult patients with intrapulmonary cysts should be strongly considered for cyst resection or should at least be advised to abstain from activities leading to considerable changes in ambient pressure.

Key Words: air embolism • bronchogenic cyst • gas embolism • pulmonary cyst (Chest. 2006;130:575-577.)

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Air/Oxygen Misconnections
Wrae Hill, BSc RRT, Interior Health B.C..
Chuan Yong, BSc RRT and Carmella Duchscherer, RRT BHS(RT), Calgary Health Region, AB.

In April of 2005, a 71 year old lady receiving palliative care for severe COPD died in hospital in the Interior Health Authority (IH) of British Columbia. Her autopsy identified two major contributing factors for her death: atherosclerotic disease and a reduced blood oxygen level (hypoxemia). A thorough root cause analysis (RCA) of the circumstances of this death was conducted by the local Quality Improvement (QI) Department. The primary contributing factor of her hypoxemia was that she was inadvertently attached to medical air instead of oxygen, as a result of staff confusion with identical looking air and oxygen flowmeters. The RCA also identified several system issues including: gaps in nursing education, ward orientation, and shift to shift communication. The hospital and Interior Health Authority (IH) treated this case as a systems level adverse event (AE) and began to look for ways to prevent it’s recurrence across IH. This report summarizes collaboration between provinces, system changes within IH over a year, and changes planned within the Calgary Health Region. Permission of those involved in this patient’s care has been received.

Scope of the Problem
Very little is documented on misconnection of medical gases in the literature and no data existed within IH on these types of AEs. A survey of selected Registered Respiratory Therapy (RRT) leaders across Canada revealed that these AEs occur and are often not reported. Discussions with the Calgary Health Region (CHR) revealed that their incident reporting system identified 44 incidents in 15 months. It is recognized that reporting is not a true indicator of actual events or close calls, and thus it is impossible to accurately quantify the magnitude of the problem.

A core issue is a hazard that exists in the design of air and oxygen delivery devices. Air and oxygen flowmeters have common threaded fittings at the flow meter outlet. While Federal regulations for medical gas piping and fittings ensure gas specific connections, these safeguards have not prevented misconnections between air and oxygen flowmeters.

In September 2005, Interior Health initiated conversations with the Canadian Standards Association (CSA) 12 on the topic of air and oxygen flowmeter misconnections, which led to discussions among CSA members of two Technical Committees (TC) — the Anaesthesia and Drug-Related Standards TCs. The CSA Technical Committees indicated that CAN/CSA 15002-02 specifies gas-specific distal fittings on air and oxygen flowmeters but that in practice, these voluntary standards are ignored by the medical community. Unfortunately these (voluntary) safeguards have not been universally applied to prevent misconnections between air flowmeters and common oxygen tubing.

Implementing System Changes to Reduce Adverse Events
In a Safety Alert, the ISMP10 discussed a hierarchy of fixes for medication safety, from the least effective to most effective. We believe this hierarchy can be used as a guideline for mitigating all safety hazards. Below, is an example of a hierarchy of interventions adapted to reduce the risk of medical gas misconnections:

1. Education alone (Least effective)
2. Policy clarification
3. Improved signage
4. Reconfigure devices to better differentiate between air and oxygen (Medical Air Valve)
5. Restricted access to air flowmeters (ie. only accessible through a respiratory therapist)
6. Complete removal of air flowmeters (Most effective)

Interior Health Region
The results of Interior Health’s RCA were applied across the Health Authority. The Quality and Patient Safety office coordinated a task force of respiratory therapy leaders to 1) Update nursing education and orientation materials and 2) Design and source a Medical Air Valve (MAV) device to prevent this recurrent problem. This approach took

Continued on the next page
Air/Oxygen Misconnections continued from previous page

into consideration the comments and recommendations from respiratory therapy leaders within Interior Health (listed below), the principles of Quality Improvement, Human Factors engineering, as well as technical factors such as wear and tear on bayonet type wall outlets.

Why a Medical Air Valve?

Across an entire health region, we could not simply remove all air flowmeters as is done in some tertiary care centers with full time RRT staffing. The compromise in this case was to replace the Thorpe tube Air flowmeter with a different looking, well labelled device designed solely for aerosol medication delivery. The Medical Air Valve (MAV) (West Care Medical, British Columbia) simply looks different than a thorpe tube flowmeter and has a different on/off design, horizontal vs. vertical configuration and a preset flow of 7–8 Lpm. It is recognize that this device will not completely eliminate the potential for a misconnection because the outlet barb still fits normal oxygen tubing.

The Calgary Health Region

The Calgary Health Region is trialing restricted access of air flowmeters. Particular patient care units are being targetted, specifically those that have a Safety Action Team functioning that has already identified air-oxygen misconnections as a safety concern for their unit. In the trial, air flow meters will be removed from these nursing units and will only be accessible through a

Both medical air and oxygen flow meters look almost identical and have a common thread pattern at their outlet, and making misconnection possible. In June 2006, all Medical air flowmeters within Interior Health have been replaced by a Medical air Valve (MAV) which is designed specifically for Aerosol medication administration with a preset flow of 7–8 Lpm. While medical gas misconnections are less likely, they are still possible. Reference — Policy AH 0500.

Figure 1: Thorpe tube Flowmeters (Oxygen, left, Medical Air, right)

Figure 2: Oxygen flowmeter and MAV

Reference — Policy AH 0500
Air/Oxygen Misconnections

respiratory therapist. Nebulized medications will be administered via oxygen, unless otherwise indicated by a physician. Based on the results of this trial, a decision to either implement this across the Calgary Health Region or to try another fix will be made.

Summary
Air/oxygen misconnections are a well-recognized hazardous situation, with contributing factors that exist at the system and design levels. Rather than accept air-oxygen misconnections as inevitable or offer solutions applicable to only a few acute care sites, we presented two different changes chosen by two different health regions. Both solutions are relatively simple system fixes aimed at reducing mis-selections of medical air instead of oxygen. Next steps include evaluating the effectiveness of these changes by monitoring near misses and adverse events.

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8. Oxygen or Air? Anaesthesia 2001; 56: 1205 Arepalli N, Jones N.

Acknowledgement
The authors would like to acknowledge the contributions of Interior Health’s Respiratory Therapy Patient Safety Task Group for both the update of orientation guidelines and the design and implementation of the Medical Air Valve (MAV) solution.
Critical Care Outreach:
Who Knows Their ABC’s?
Stephane Labrosse RRT, Margaret Clark RRT

More than a year has passed since the initiation of the Critical Care Outreach team at the Ottawa Hospital. Now called RACE (Rapid Assessment of Critical Events), it was created to bring the practice of “ICU without walls” to our hospital. We have successfully established this team as a major contributor in the treatment of critically ill patients within our hospital. Consisting of an ICU intensivist, a critical care nurse and a respiratory therapist the outreach team has impacted management of critical care patients improving outcomes, decreasing length stay, ICU admissions and readmissions and reducing cardiac arrests (ref.1).

<table>
<thead>
<tr>
<th></th>
<th>General Campus</th>
<th>Civic Campus</th>
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</thead>
<tbody>
<tr>
<td>Total number calls / patient consults</td>
<td>288</td>
<td>178</td>
</tr>
<tr>
<td>Total follow-ups</td>
<td>800</td>
<td>781</td>
</tr>
<tr>
<td>ICU Admissions from consults or follow up</td>
<td>74</td>
<td>48</td>
</tr>
<tr>
<td>Transfer to higher level of care (CCU, N-Obs):</td>
<td>17</td>
<td>NA</td>
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<tr>
<td>Average number of calls per day</td>
<td>1.35</td>
<td>0.84</td>
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<tr>
<td>Code blue call reduction since January 1, 2005</td>
<td>29%</td>
<td>33%</td>
</tr>
<tr>
<td>ICU admissions — non-outreach —</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of patients -mortality</td>
<td>109</td>
<td>NA</td>
</tr>
<tr>
<td>-length of stay</td>
<td>6.51</td>
<td>48</td>
</tr>
<tr>
<td>ICU admissions — outreach —</td>
<td></td>
<td></td>
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<tr>
<td># of patients -mortality</td>
<td>74</td>
<td>NA</td>
</tr>
<tr>
<td>-length of stay</td>
<td>5.73</td>
<td>NA</td>
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</tbody>
</table>

Reference 1: Race data first six months at the Ottawa Hospital

Other sites across Canada have also been very successful. Data generated from centers such as The University of Alberta Hospital (UH) and the Trillium Health Centre in Mississauga clearly show just how valuable a MET can become. The idea of Critical Care Outreach originated in Australia and was developed for two reasons. Firstly, the health care system was financially strained, bed space was limited, and patient acuity was increasing. The need to extend ICU support to the ward patient and personnel was becoming clear. By establishing this mobile ICU team, this service could be offered, and patient care improved. Secondly, in a study of 64 patients admitted to ICU from the ward with cardiac arrest, 84% had documented observations of clinical deterioration or new complaints within eight hours prior to arrest. Seventy percent had either deterioration of respiratory or mental function observed during this time. It was recognized that early identification of these patients could prevent ICU admissions and improve outcomes. This program was also established in the UK and has had varying degrees of success when looking at the evidence. Overall the response has been positive with some recent studies showing a reduction in cardiac arrests, a reduction in unanticipated ICU admissions and non-DNR deaths, and improved survival before hospital discharge and reduction in ICU readmission.

In North America an initiative from the American Institute for Healthcare Improvement (IHI) and the Canadian Safer Healthcare Now (SHN) identified a MET Team as one of six strategies to reduce hospital mortality. The Ministry of Health supported these strategies and funding was provided to help hospitals across Canada start their own MET. This project was introduced as a goal for the Canadian Collaborative for Critical Care and we now have many established MET across Canada. The course taken was based on the UK and Australian models relying on the evidence they have generated.

A “calling criteria” (figure 1) was developed where by a ward healthcare professional recognizing any patient deterioration could activate the emergency medical team, to help manage a patient in possible crisis.
Critical Care Outreach: Who Knows Their ABC’s?

This team included an ICU physician, a critical care nurse and other ICU personnel sometimes a physiotherapist, (all experts in managing the critically ill) to respond to critical events happening outside ICU walls. The glaring question to the Respiratory Therapy profession is: where is the RT? It may be obvious to our profession that respiratory therapists do not exist in the UK and Australia. Nurse specialists, physiotherapists and other healthcare professionals perform their role. This is not obvious to administrators who hold the purse strings, and they are relying on the published evidence to support funding.

In our own experience many interventions are respiratory in nature. (table 3). Some evidence suggests as much as 78% (ref. 1) of the calls have a respiratory element.11 Recent data from the University of Alberta Hospital supports this statement. In their first year of service, more than 50% of the calls were strictly respiratory in nature and more than 90% of the calls had a respiratory element. This is strong evidence to support the respiratory expert to be included in the funding, and in North America that expert is the Respiratory Therapist.

This was recognized in our hospital, and with the support of our administration and our ICU management, it was possible for RT’s to be involved in this program. The positive outcomes noted in table 1 are a reflection of the efficiency of care this team can provide. The cohesion of knowledge and skill between the physician, the nurse and the respiratory therapist play a major role in this success. It just made sense that an RT was included, since the goal of RACE is to bring the people with the right skills at the bedside to face any critical situations, assess them and manage them in the most efficient way possible.

Setting up oxygen therapy, performing an ABG, initiating non-invasive ventilation, or protecting an airway are skills where RTs excel. This expertise and our presence on the RACE call ensures that there will be no delay in providing this care. This certainly improves the outcome in most RACE situations. We also help with any tasks we can, from looking up blood work, charting in the progress notes, to talking with family. Education is also a priority as raising awareness about this team is an ongoing task and providing guidance and support to any staff, patient or family goes a long way in reducing those critical events. This
Critical Care Outreach: Who Knows Their ABC’s?

Table 3:

<table>
<thead>
<tr>
<th>Therapeutic interventions — respiratory</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No action taken</td>
<td>162</td>
<td>40.10</td>
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<tr>
<td>Oxygen therapy</td>
<td>52</td>
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<td>CPAP / BiPAP</td>
<td>144</td>
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<td>Intubation</td>
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<td>Trach suctioning</td>
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<tr>
<td>Trach change</td>
<td>18</td>
<td>4.44</td>
</tr>
<tr>
<td>Ventolin / atrovent</td>
<td>1</td>
<td>0.25</td>
</tr>
<tr>
<td>Assessment only</td>
<td>53</td>
<td>13.09</td>
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</table>

responsibility, of course, is shared amongst all team members.

The opportunity to be part of this team has not come without a few challenges. As previously noted, the concern is that there is practically no defined Ministry of Health funding for our involvement in this team. We are managing to cover 50% of the day by stretching our resources, but we cannot handle the uninterrupted attention this team needs. Our presence on RACE is required seven days a week, 24 hours a day. We are fortunate here in Ottawa to be partially covered, as it is understood that patient care is greatly improved by the addition of an RT in the team. In the long run, we believe that the improvement of patient care throughout the hospital, the decrease in ICU admissions and readmissions, the decrease in cardiac arrests, the decrease in lengths of stay and the continuing education this team provides to all staff, will financially benefit our hospital, as well as greatly improve patient care. We are still in the process of assessing those financial benefits as the team is in its early stages and only time will assure this to be factual. It is well established that better patient care leads to a decrease in the use of resources, such as crash carts, drugs, and labor cost (i.e., cardiac arrests). This allows better use of ICU beds and resources.

The benefits of having such a team in our hospital are numerous. In addition, it is important to realize that working closely as a team all across the hospital greatly improves relationships and trust between team members and with other staff throughout our hospital. The end result is better and more efficient patient care. We would urge other Respiratory Departments across Canada to get involved funding or no funding. We are an integral part of total patient care and must be involved. It is our hope that in the future, funding and support will be adequate for us to continue to move forward with this team, as we enter our second year of service.

References
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10. Carol Ball, Margaret Kirkby, Susan Williams, Effect of the critical care outreach team on patient survival to discharge from hospital and readmission to critical care: non-randomised population based study
12. Baxter A, Critical Care Outreach comes to Canada, CMAJ, 2006;175:613-614
The study comes on the heels of the U.S. Surgeon General’s June 27 declaration that second-hand smoke is a serious health hazard, triggering many cancers, including bladder cancer. So how does cigarette smoke affect the bladder?

“Smoke contributes to bladder cancer because carcinogens in cigarette smoke are absorbed from the lungs into the bloodstream,” said Viviana Simon, Ph.D., director of scientific programs for the Society for Women’s Health Research, a Washington, D.C.-based non-profit research, education, and advocacy organization. “The carcinogens are then filtered by the kidneys, concentrated in the urine, and can then damage the cells that line the bladder.”

The incidence of bladder cancer has been steadily increasing, according to statistics from the American Urological Association. Cigarettes top the list of risk factors. Risk increases with the duration of smoking, and decreases when smokers quit. Increasing age is also a risk factor.

The influence of tobacco on bladder cancer susceptibility is not the only way that the disease differs between women and men. For example, bladder cancer is more common in men, but women are more likely to die from the disease. One explanation for the difference is that women are more likely than men to suffer from rarer types of bladder cancer, according to the National Cancer Institute.

Another explanation for the higher mortality rate in women is because a greater number of women experience a delay in diagnosis. Women with bladder cancer are diagnosed six to nine months later than men with the disease, and women’s cancers are detected at a more advanced stage.

“The warning signs of bladder cancer typically include blood in the urine or a change in urinary habits such as urinary frequency, urgency or dysuria, which is pain while urinating,” according Waleed Hassen, M.D., director of urological oncology at the Mount Sinai School of Medicine in New York, N.Y. “These symptoms can be sometimes confused with urinary tract infections, especially in women, which can sometimes delay diagnosis.”

If the diagnosis is delayed and the disease progresses, the patient usually has different symptoms. “Later warning signs of the bladder cancer include weight loss, pain and fatigue,” Hassen said.

A timely diagnosis is crucial to survival. For patients with non-invasive bladder cancer, the five-year survival rate is over 90 percent. The rate drops below 50 percent, if the cancer spreads over the pelvic region. If it progresses to other organs, the five-year survival rate falls to just six percent.

That’s why it is so important to see your doctor right away if you have any symptoms or problems related to urination. Treatment of the disease varies by case, but surgery is usually involved and yields the best outcome. Depending on the extent of the disease, chemotherapy, radiation and biological therapies, which stimulate the body’s immune system, may be involved.

Because smoking is the largest known risk factor for bladder cancer, it is vital for tobacco smokers to be aware of their risk. Relatives and people who spend time with a smoker are also at risk, given the established dangers of second-hand smoke. The growing number of ways we know smoke harms health is a good reason to stop smoking or help those around you stop.

Beyond smoking, occupational exposures to chemicals found in some dyes, paints, solvents, leather dust, inks, combustion products, rubber, and textiles can increase the risk of bladder cancer. As a result, hairdressers, machinists, painters, printers, truck drivers, and those who work with the drugs used in chemotherapy need to be aware of their risk and the cancer’s symptoms.

References
3. CancerMail from the National Cancer Institute Information from PDQ -- for Health Professionals Screening for bladder cancer 208/10681 http://medhelp.netusa.net/ib/cancer-net/310681.htm
Disposable Sleep Apnea Screener

Sleep apnea is a serious medical disorder, affecting 4% of men and 2% of women.

It is characterized by repetitive reductions of airflow during sleep due to the collapse of the pharyngeal airway, causing loud snoring, brief awakenings, hypoxemia and elevated blood pressure. Millions of apnea patients suffer from excessive daytime sleepiness, headaches and hypertension. There is growing evidence that chronic sleep apnea runs in families, and is associated with increased morbidity and mortality. Sleep apnea is relatively unknown, with only about 15% diagnosed so far.

Until now, sleep apnea could only be diagnosed by waiting six months for an overnight sleep study, at the hospital, or paying anywhere from $600 to $1,500 for an overnight study at a private lab.

The Sleep Strip is a novel, low-cost device designed to help physicians screen patients for sleep apnea reliably and conveniently. To fully exploit the advantages this innovative device offers, it is helpful to know and understand its inner workings and technology.

A “one-channel sleep lab”

The SleepStrip is, in fact, a “one-channel sleep lab” comprising signal detection, acquisition, analysis and display in one easy-to-use disposable package. The flow signals are derived from three thermistors (respiration airflow temperature sensors) similar to those used in standard sleep-lab sensors. These sensors are located under the three blue dots on the nose and mouth prongs. The signal is processed ten times each second by SleepStrip’s internal microprocessor (CPU). The CPU tracks the signal continuously, calculating average amplitude of normal respiration cycles, peak-to-peak amplitude for each consecutive breath cycle, and other parameters of the respiration pattern.

An apnea event is counted when respiration amplitude drops to under 12% of the average for more than 10 seconds. A hypopnea event is counted if respiration amplitude drops to less than 50%, but more than 12% of the average for more than 10 seconds. Respiratory events (apneas and hypopneas) are counted for the duration of the study. These values were selected for maximum correlation with polysomnographic results. After a study is complete, the apnea and hypopnea counts are used to calculate the final test score, which is readable on the display 30 minutes after the study has ended.

The SleepStrip’s intended use is for screening purposes only. It should be used on patients who are considered high risk for SAS and require additional information for diagnosis. If the indication of the SleepStrip is positive and the patient exhibits additional indications and risk factors such as obesity, hypertension, heavy snoring, and/or a family history of SAS, he or she can then be referred for further evaluation.

For more information about SleepStrip, contact:

Roxon Medi-Tech at 1-800-361-6991 or visit: www.sleepstripcanada.ca
### Calendar of Events

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<td>October 1 – 3, 2007</td>
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<td>October 20 – 23, 2006 20th Anniversary of AACVPR</td>
<td>October 20 – 23, 2006</td>
<td>AACVPR, Milwaukee, Wisconsin</td>
<td><a href="http://www.aacvpr.org/meeting/">www.aacvpr.org/meeting/</a></td>
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</table>
The Canadian Society of Respiratory Therapists is committed to act as an advocate, nationally and internationally, for respiratory therapists as leaders in the promotion of health and the delivery of quality respiratory care. We provide national leadership through advocacy, service and unity for Respiratory Therapists in Canada. Visit www.csrt.com for more information.