The Long Hot Summer

Features
- BC Fires
- Sleep Hygiene

On Air
- CSRT National Exam Graduates
- Membership Survey

CSRT Educational Forum 2004
Celebrating 40 Years of Inspiration

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
Twenty-three-year-old wildland fire-fighter Kyle Sanguin, from Kelowna, British Columbia, has spent the last five seasons fighting forest fires in western Canada and the northwestern U.S. A self-confessed “fire junkie” Kyle found himself on the front lines of one of the biggest wild fires in BC history — the Okanagan Mountain Park fire. He was on site from day one and spent 70 days working an average of 15 hours a day, 19 days at a time. The firestorm was sparked by a lighting strike in extremely dry conditions.

“I watched it roar through 26,000 hectares. It was an incredible fire!”

See article on page 30.

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About this Issue

As I look outside at drifts of snow, all I can do is look forward to spring!
To help keep you cozy until that time, I know that you will enjoy our latest edition of the CJRT. So, grab a warm blanket and a hot cup of cocoa, and get ready for some good reading!

The summer fires in the British Columbia interior have once again put RTs on the front line of a health emergency. We have some first-person experiences from RTs in BC, along with some outstanding photos of the smoke and fires. Thanks to all who contributed.

We congratulate all the successful graduates of the CSRT Registry and CARTA Registration Exams! The names of all those who now call themselves Registered Respiratory Therapists are printed in this journal. By choosing this profession, you have made one of the best choices of your lives! Welcome to this wonderful profession.

As the seasons change, so does the structure of the CSRT Board of Directors. Mr. Brent Kitchen, CSRT President-Elect, has written an article outlining the changes to the nomination process for the new Board of Directors. There has been much work completed in this regard, and we appreciate the efforts of all those who were involved in the redesign!

Spring isn’t that far away and that also means that the CSRT Annual Educational Forum 2004 is near! For early birds we have enclosed a Registration form for “Celebrating 40 Years of Inspiration”. Along with the Forum in Toronto, the CSRT will be celebrating it’s 40th anniversary. Plan to attend — it promises to be a great event. Please check the website for details as they unfold.

We hope you enjoy this edition of the Canadian Journal of Respiratory Therapy!

Respectfully submitted,

Allan Shemanko, R.R.T.
President, CJRT
Fanshawe RRT Graduates 2003

Front row:
Natalie Forgues, Allison Hudzieczko, Carol Stallaert, Anabela Ferreira (standing), Carolyn Kreski, Tara Sutch, Leck Dobkowski

Second row:
Rachel Mikhaila, Katie Robarts, Ingrid Bygden, Karen McKinley, Jada Close, Heather Naylor, Megan Close, Shevaun Clark, Christine Bichai

Third row:
Barbara Antkowiak, Yaunna Jensen

Fourth row:
Yvonne Drasovean, Kevin Middleton, Shawn Lamarche, Tara Rivest, Kelly Wallis, Lisa Dickinson, Jamie Kent, Lara Koury, Gino Depinto, Geoff Flannagan, Tom Piraino

Fifth row:
Satu Pilbacka, Christina Brydges, Amy Reid
Congratulations! Successful Writers of the CSRT National Exam 2003

Honours
Abdulqadir Abdulrahman
Christina L. Brydges
Nancy M. Chan
Sarah Denbigh
Sheri L. Dmitrowicz
Valerie A. Folz

Jinyu Guo
Wendy Hiltz
Ryan J. Hughes
Tanya J. Jakubovski
Stacey Jones
Aya Kubotani
Shawn P. Lamarche

Karen L. McKinley
Kevin Middleton
Anis Qureshi
Salvatore Salamone
Jasdeep Sanghara
Russell J. Sawyer
Ian S. Syme

Ana B. Anthony
Barbara Antkowiak
Sheena C. Bennison
Heather Besso
Starla D. Bohnet
Caroline E. Bolduc
Ekaterina Bondartchouk
Renee L.D. Boudreau
Curtis G. Bourdois
Rick Burton
Angela L. Chan
Netty L. Chen
M. Philip J. Chen
Carl S. Christie
Megan H. Close
Jada Close
Pamela J.A. Cogan
Kendra Cookman
Troy Copley
Leah C. Crawford
Luigi G. De Pinto
Gerry M. Desilets
Lisa M. Dickinson
Leck Dobkowski
Sharon L. Farley
Jennifer M. Finlay
Geoffrey G. Flannagan
Tara N. Fowler
Randi Fulford
Mandeep K. Gill
Ranj Gill
Sharon Ginty
Kerrie-Lynn Harris

Taralyn Hrynyk
Allison E. Hudzieczko
Caleigh J. Hunt
Adriana Jonca
Jamie A. Kent
Shawn-Patrick Kerrigan
Matthew Keyzers
Karen Kinare
Stamatina Konstantakos
Caroline E. Kreski
Laurie J. Kubik
Phoebe Y.K. Lam
Philip S. Lau
Amber D. Leahy
Bianca H.Y. Lee
Sherry-Lee Legge
Erin J. Letto
Diana Li
Monique M. Mackie
D. Blair Mackie
Daphne Marrs
Sean T. Martin
Stephanie McKerral
Katrina C. Metz
Hae-Jin (Gina) Min
Jaime Monasterski
Harvinder Nagra
Heather E. Naylor
Michelle Theresa New
Alison L. Pagesyuin
Chris Perry
Meredith A. Peterson
Thien Thu N. Phung

Thomas Piraino
Crystal Prowse
Amy E. Punke
Geetanjali J. Raval
Darlene Regular
Amy L. Reid
Tammy Rimmington
Tara L. Rivest
Kathryn L. Robarts
Jody Saarvala
Nicole M.L. Sacouman
Natalie E. Sampanio
Daman K. Sangha
Karla M. Schiefer
Jennifer Scott
Hardeep Serown
Andrea G. Shapiro
Lauralee P. Smith
Carol A. Stallaert
Sarah Stanley
Deanna M. Steiger
Melissa J. Stiner
Simi Sungar
Tara J. Sutch
Micah N. Thomas
Naresh Tinani
Joanne Vaccaro
Kelly E. Wallis
Valerie E. Weagle
Mitchell L. Wilkey
Jacqueline Yih
Charmaine Ying Sun
CARTA Writers Awarded CSRT Credential

Honours
Nicole Fitzner
Saad Khan
Jadene Klarenbach
Janine Kropiniski
Connie H. Maley
Samantha L. Robertson
Murray Sampson
Shannon Trojan

Deborah L. Anderson
Catriona Auld
Jada L. Bowie
Shevauni I. Clark
Corrine K. Clouson
Christine J. Cuthbert
Marla Dirkson
Carly B. Enman
Joel K. Hathaway
Yaunna E. Jensen
Hailey A. Kasha
Candice Kochan
Wendy L. S. MacNaughton
Brandis D. Malloy
Catherine Morris
Kathryn E. Norrish
Lee R. Poliues
Steve Saramaga
Carmen L. Unruh
Colleen Verhage
Jeannie E. Zimmel

CSRT National Certification Exam Stats July 2003

Number of first-time writers 195
Number of first-time passes 153
Number of second-time writers 4
Number of second-time passes 0
Number of third-time writers 3
Number of third-time passes 1

Graduates of achieved honours standing of 75.73 or higher – 20
Combined National pass – 61.45
Combined National mean – 67.9

January Exam Locations

The CSRT National Certification Examination will be written January 12, 2004 in the following locations:

Toronto, Ontario
Saint John, New Brunswick
Edmonton, Alberta

Dedicated Fanshawe Faculty Members

Left to right: Paul Robinson, Clinical Instructor; Paul Williams, Faculty; Pam Hall, Clinical Instructor; Sandy Annett, Faculty; Dennis Hunter, Program Coordinator; Gary Tang, Clinical Instructor
Candace Britton
The CSRT sadly reports the death of CSRT student member Candace Britton on October 7, 2003. Twenty-four-year-old Candace, was about to graduate from the Algonquin College respiratory therapy program in Ottawa. Her fiancé, Joe Tischer accepted her diploma posthumously in late October. The CSRT extends its deepest sympathies to her family.

Forum Chairs
Thanks to Melva Bellefountaine of Brampton and Allison Nykolaychuk of Milton who have taken on the task of co-chairing the CSRT Educational Forum 2004.

A special thank you to the committee members and those who are taking a strong interest in making this event a success. Thank you for all your enthusiasm and hard work.

Rick Culver
Leanne Grant
Cheryl Homuth
Mike Keim
Gail Lang
Anne MacPherson
Sue Martin
Allison Nykolaychuk
Rick Paradis
Marg Patell
Gil Vergilio
Andrea White Markham

NCPD Learning Logs
Individuals wishing to submit their NCPD Learning Log for a transcript of their 2003 credits, should do so before December 31, 2003.

The NCPD Learning Log is a highly recommended program emphasizing self-directed learning that helps RTs improve their expertise while staying abreast of current issues and information in the profession. This program is designed to be flexible and portable. It is a free service to CSRT members and will help RTs record their career path and continuing professional development. Look for information on National Continuing Professional Development under Education on the CSRT website at www.csrt.com.

Congratulations!
Connie Brooks, RRT of Edmonton, Alberta, is the recipient of the CARTA 2003 Outstanding Service Award.

She was nominated for her exceptional service to clients and colleagues in her capacity with the Alberta Aides to Daily Living Program in the Alberta Ministry of Health and Wellness. The CSRT extends it’s congratulations to Connie!
CSRT
Annual
Educational
Forum 2004

Celebrating 40 Years
of Inspiration!

Sheraton Centre
Toronto, Ontario
May 28–30, 2004
Celebrating 40 Years of Inspiration

PROGRAM HIGHLIGHTS

Many of the CSRT special interest groups have taken a lead role in facilitating educational events at previous forums. Building on the excellent results of these events, this year’s program breakout sessions are designed to help create a framework for the ongoing development and support for these groups. All program sessions will assist you in developing the relevant skills and strategies required to be effective in your area of practice.

Clinical Practice Guidelines
- What are CPGs and why do we need them?
- What CPGs have been developed and what are the barriers and strategies for effective implementation into current practice areas?

Research
- Learn practical research skills and about access to funding sources
- RTs doing research; Poster presentations!

Acute Care/Hospital
- Nutrition: Gain an understanding how nutrition affects ventilation. The new Canadian guidelines for nutrition in the ventilated patient will be discussed along with how nutrition impacts the septic patient. The needs of the neonatal patient will also be addressed.
- Find out what is new in non-invasive ventilation, the current uses and equipment.

Infectious Diseases
- Showcasing how Respiratory Therapists coped with SARS in Ontario’s hospitals and the lessons learned.
- Learn how infectious diseases are affecting the practice of respiratory care in both the hospital and community settings, specifically focusing on procedures and guidelines

Management and Leadership
- National quality assurance programs
- External operational reviews
- Expanding and enhancing RT services in times of fiscal restraint.
- Road to evidence based Practice: Research Opportunities for Respiratory Therapists.

Anaesthesia Assistants
- Equipment needs such as “what new gas machine should the hospital purchase” to “seeing new airway devices on the market.”
- New anaesthetic agents or IV drugs
- Malignant Hyperthermia
- There will be opportunity to explore the role of the RT in the OR. Questions such as “How will the RT facilitating conscious sedation in the OR, effect the caseload in the operating room?” and “Who should perform this role and who is responsible for regulating our professionals in this area?” will be addressed.

Education Interest Group
- Learn useful teaching techniques for students, patients and the general public

Community Care
- Sleep labs
- Long term ventilation
- Cardio pulmonary diagnostics

A Letter from the 2004 Forum Co-Chairs

The Canadian Society of Respiratory Therapists is 40 years old next year! Where has the time gone? We are not as old or as large as some health care professions, but we certainly have inspired positive change in the health care system. We have come a long way! We seem to live in a world of challenges — such as SARS, evidence-based medicine and clinical practice guidelines, hospital politics and budgets, balancing a work and home life, to name but a few. With all the pressures on our time, one may struggle to justify going to a conference, especially if it is out-of-town and may not meet all our learning objectives.

Continued on page 34
Call for Poster and Papers
Forum 2004

The CSRT invites administrators, practitioners, researchers, educators, students, health policy and health services planners to submit abstracts for poster or paper presentation to be presented at “Forum 2004 — Celebrating 40 Years of Inspiration” in Toronto.

Proposals may pertain to clinical practice areas, program development, research investigation, evaluation of a process/program and respiratory healthcare delivery.

Deadline for submissions is January 30, 2004.

For complete instructions, guidelines and application details visit the CSRT website at www.csrt.com.
As you will read elsewhere in this edition, the CSRT has a new Executive Director. I am pleased to welcome Mr. Douglas Maynard to the head office team. His enthusiasm for the profession, his educational background and skills will surely have a positive impact on our Society. I look forward to working with him as he assumes his duties in Ottawa.

In this, my third President’s message, I would like to cover a few of the many exciting challenges and opportunities facing the CSRT over the next few months. At the end of October, I represented the CSRT and the non-regulated provinces at a meeting of the Labor Mobility Consortium and the National Alliance of Respiratory Therapy Regulatory Bodies. A major item of discussion was the new National Competency Profile – and thank you to the many CSRT members who provided input into the profile’s validation survey. The final document was reviewed by the parties and was accepted by all jurisdictions as a truly common competency profile. The National Alliance will be formally announcing the NCP to the schools before the end of the year and is planning a meeting in February with representative educators to explore opportunities for future exam weighting matrices. Further meetings are proposed to assist schools in planning for future curricula. The CSRT has been an active member of both these groups and continues to be a committed advocate for the profession and works to assist the regulators to protect the public.

One important item stemming from the National Alliance meeting will be the necessity for the CSRT to revisit the need for a recognition mechanism or membership class that meets the spirit of the Mutual Recognition Agreement in a more directed manner than simply using the Associate Member category. As directed by the membership at the June AGM, the CSRT BOD has addressed this at the November BOD meetings in Ottawa and is developing a proposal that can be brought back to the membership, either in the form of a mail-in ballot or at the 2004 AGM.

At this time I would like to acknowledge and congratulate the College of Respiratory Therapists of Ontario on their recent decision to recognize individuals who have previously passed the CSRT examination and to participate in a common exam process for CRTO certification. The CSRT is pleased to partner with CARTA and the CBRC to facilitate an examination and writing venue for CRTO eligible candidates for the January writing of the examination.

As you can see the CSRT is working hard on behalf of the Profession and its members on a wide variety of complex and significant issues. With the CSRT in transition and the profession of Respiratory Therapy sitting on the brink of a new national reality your dedicated volunteers and head office staff are committed to the important work of maintaining the CSRT as a relevant and respected advocate for our profession.
The Council on Accreditation for Respiratory Therapy Education (CoARTE, pronounced CO-AR-TEE) is the national accrediting body for respiratory therapy educational programs.

**Approval Process**

The CSRT approves schools that have been accredited by CoARTE. As an interim measure, until the first site visit is actually conducted, CoARTE awards Approval Status to schools that, on paper, meet the prerequisites and then an accreditation site visit is scheduled. Approval status gives students the rights and privileges of a nationally accredited program until the site visit takes place.

**Accreditation Site Visits**

At its inception in January 2001, CoARTE developed a six-year calendar for accreditation site visits, taking into consideration the expiry date of the schools’ previous accreditation. CoARTE also considers the fiscal and human resource implications when scheduling site visits.

**CoARTE Workshops**

To promote a clear understanding of the CoARTE accreditation requirements and accreditation processes, workshops are offered in conjunction with the CSRT Annual Forum, for schools, for prospective program reviewers and provincial regulatory body representatives.

**Accreditation Process**

Schools begin preparing for the accreditation visit one year ahead of time; they are required to submit their Self-Study (application for accreditation) six months before the scheduled site visit. A respiratory therapy educator with in depth knowledge of the CSRT Occupational Profile is designated as the document reviewer. The program review team is comprised of at least one respiratory therapist, a physician, a senior educational administrator and, where applicable, a provincial regulatory body representative. The Accreditation Secretariat, housed at the CSRT Head Office in Ottawa, coordinates the process and provides support to both the school and to the program review team.

CoARTE accords an accreditation status after the site visit, based on the program review team’s report. The CSRT web site, www.csrt.com provides a list of the accredited and approved schools.

**Maintaining Accreditation/Approval**

In recognition that much can change within a 6-year period, schools are required to submit an annual report. CoARTE will review the status of each school during their annual meeting on November 16, 2003.

**Deep Appreciation**

The time and expertise donated by respiratory therapists, physicians, school administrators and the public has contributed to CoARTE’s success. Without them, the process could not exist. CoARTE spends many hours reviewing reports, developing policies, participating in teleconferences and meetings in the interest of promoting national standards. Document reviewers and program review team members take on the responsibility for assessing the extent to which schools meet the national standards. The work is intense but deeply gratifying.

Sincere appreciation is extended to the following individuals, listed alphabetically, for their generous contribution of time and expertise.
CoARTE members

Each member is a national representative for a particular area of expertise.
Debbie Cain, Clinical Education
Helen Clark, Employer (previously Jim Winnick until he became CSRT President Elect)
Myrna Gunter, Public Member
Ray Hubble, Didactic Education
Dr. Fred MacDonald, Medicine
Fred MacDonald, Senior Educational Administration (previously Donald Bartlett)

Document Reviewers and Program Reviewers
Respiratory Therapists
Michael Bachynsky
Debbie Cain
Susan Dunington
Lori Gordon
Elenore Haywood
Adrienne Leach
Rob Leathley
Tony Locco
Eleanor Lord
Joel MacPherson
David Sheets

Physicians
Dr. Nigel Duguid,
Dr. Paul Hernandez,
Dr. Colm McParland,
Dr. Ward Patrick
Dr. Sharon Peters
Dr. Don Reid

Educational Administrators
Linda Assad-Butcher, La Cité Collégiale
Donald Bartlett, Michener Institute
Fred MacDonald, Vanier College
Pamela Skinner, Fanshawe College
June MacDonald, New Brunswick Community College
Saint-John
Marlene Raasok, SAIT

The CSRT wishes to acknowledge the on-going support of our Corporate Members. Sponsorship by our Corporate Members helps the CSRT maintain the current standards of excellence in the profession. Thank you!

CSRT Corporate Members 2003 – 2004
All-Can Medical
AstraZeneca Canada
Cardinal Health
DHD Healthcare
GlaxoSmithKline
London Scientific
Medigas/Praxair
Methapharm
Respan Products
Roxon-Universal Medical
Source Medical
Summit Technologies
The Michener Institute for Applied Sciences
Trudell Medical Marketing
Tyco Healthcare
VitalAire
CSRT Board of Directors Election Process

How does it work?

Brent Kitchen, RRT

Part of the process of restructuring the CSRT Board of Directors, which was approved by the membership at the 2003 Annual General Meeting in Ottawa, includes a new process for how Board members (Directors) are nominated and elected. Historically most of the CSRT Directors were the presidents of their provincial bodies. Starting in 2004 all of the Directors will be elected by the membership through a mailout ballot. Each Director will also have a specific portfolio to which they are elected.

The portfolios for the Directors are:

- President
- President-Elect
- Past-President
- Treasurer/Chair of the Finance Committee
- Director of Human Resources (to manage legalities, job descriptions for positions, committees, etc.)
- Director of Education and Clinical Standards (to Chair the Advisory Cabinet of Education/Standards)
- Director of Professional Advocacy (to Chair the Advisory Cabinet for Professional Advancement)
- Director of Membership Services (CJRT, Education forum, website development, member benefits, etc.)
- Director of National/Provincial Relations (to link with the proposed House of Delegates to ensure that all regions of the country are represented)

These nine directors, plus a public member, will make up the CSRT Board of Directors.

In October, a Call for Nominations was requested by the CSRT. Information on the nomination process was posted on the CSRT website (www.csrt.com/main.htm) as well as mailed out to the membership. To better describe what each Director portfolio will be responsible for, the nomination committee drafted position profiles for each of the Director positions. These profiles explain in more detail the key responsibilities of each position and the qualifications that are preferred. They are available through the CSRT head office.

To be nominated, an individual needed to obtain a copy of the nomination form (available at www.csrt.com/main.htm) and have 5 registered CSRT members in good standing nominate them (sign the form). Nominees were also asked to specify which Director position they are running for. The deadline to receive nominations was December 1/03 as outlined in the revised CSRT bylaws.

Once nominations were received and validated, nominees were contacted and asked to provide the nomination committee with a short biography indicating their qualifications for the position they are running for. This information should be printed in the spring issue of the CJRT prior to the election. This spring election will take place through a ballot mailout to the membership.

New Directors will come on to the Board at the end of the Annual General Meeting.

To generate interest in the elections, the nomination committee also sent out information to individuals who have shown or expressed an interest in participating on the CSRT Board.

Although the deadline has past, it’s never too late to express your interest in volunteering for the CSRT. People who were nominated but were not elected may be asked to participate on CSRT
committees or to represent the CSRT to external organizations. We won’t turn away volunteers! Please send in your nomination forms even if the deadline has past. It is a great way to make the CSRT aware of your interest in volunteering and expressing what area you are interested in.

Questions? Please contact the CSRT head office or myself at brent.kitchen@rqhealth.ca.

Brent Kitchen, RRT is President-Elect of the Canadian Society of Respiratory Therapists. He is a manager at Regina Qu’Appelle Health Region, Regina, Saskatchewan.

CSRT Membership Renewal Notice

A reminder that CSRT Members are due in just a few short months. Members have the option of using the CSRT Debit Plan to pay their CSRT fees, as well as their professional association membership and related fees. You can arrange to have monthly installments for your membership deducted directly from your bank account.

For CRTO and CARTA members who wish to take advantage of CSRT Membership, renewals must be received no later than February 15, 2004.

For more information please contact the CSRT office (1-800-267-3422) or visit the Membership page on our website to download the Membership Renewal Form.

CSRT News

CALENDAR OF EVENTS

January 6 – 11, 2004
Bioterrorism and Emerging Infectious Diseases: Antimicrobials, Therapeutics and Immune-Modulators
Keystone, Colorado
http://www.keystonesymposia.org

February 29 – March 3, 2004
International Conference on Emerging Infectious Diseases
Atlanta, Georgia
http://www.cdc.gov/CEID/index.htm

March 7 – 11, 2004
3rd World Assembly on Tobacco Counters Health
New Delhi, India

March 7 – 10, 2004
ACC Annual Scientific Session 2004
New Orleans, Louisiana
http://www.acc.org/2004ann_meeting/home/home.htm

March 14, 2004
Society of Cardiovascular Anesthesiologists 9th Annual Cardiopulmonary Bypass Meeting
Snowmass, Colorado
www.scahq.org

April 17 – 23, 2004
13th World Congress of Anaesthesiologists
Paris, France
http://www.wca2004.com

April 22 – 24, 2004
4th Annual FOCUS Conference
Baltimore, Maryland
www.foocus.com

April 24 – 29, 2004
Canadian Association of Emergency Physicians
Montreal, Quebec
http://www.caep.ca/

May 6 – 9, 2004
National Research Forum For Young Investigators in Circulatory and Respiratory Health
Winnipeg, Manitoba
www.yiforum.ca

May 21 – 26, 2004
100th International Conference — American Thoracic Society
Orlando, Florida
http://www.thoracic.org/

May 21 – 25, 2004
Third All Africa Anaesthesia Congress
Tunis, Tunisia
http://www.staar-tunisie.net

May 27 – 30, 2004
CSRT Educational Forum
Toronto, Ontario
www.csrt.com

June 2, 2004
6th International symposium on Memory and Awareness in Anaesthesia
Hull UK
www.maa6.com
email: B.J.Leak@hull.ac.uk

June 5 – 8, 2004
European Society of Anaesthesiologists – Euroanaesthesia 2004
Lisbon, Portugal
www.euroanaesthesia.org

June 18 – 22, 2004
Canadian Anaesthesiologists’ Society 61st Annual Meeting
Quebec City, Quebec
www.cas.ca

September 15 – 18, 2004
7th Asia Pacific Conference on Tobacco or Health
Gyeongju, Republic of Korea
http://www.apact2004.org/

October 10 – 13, 2004
17th Annual Congress of the European Society of Intensive Care Medicine
Berlin, Germany
www.esicm.org
CSRT Welcomes New Executive Director

The CSRT is pleased to announce the appointment of Mr. Douglas Maynard as the Executive Director of the Canadian Society of Respiratory Therapists. Mr. Maynard received a Bachelor of Sciences degree in Biology from the University of Western Ontario in 1992 and his Diploma of Respiratory Therapy in June of 1996. He completed his didactic Respiratory Therapy course work at Algonquin College and his clinical preparation in Kingston. He has worked as a Respiratory Therapist in Ontario, Maine, Saskatchewan and Alberta and has served on the Board of the College and Association of Respiratory Therapists of Alberta. In May of this year, Mr. Maynard received his Masters in Business Administration from the University of Saskatchewan.

Please join us in congratulating Mr. Maynard on his appointment and welcoming him to his new role.

Airway Management Conference

The respiratory team at The Rehabilitation Centre, a subsidiary corporation of The Ottawa Hospital, is pleased to report on the success of another education opportunity on “Airway Management in Neuromuscular and Spinal Cord Injured Patients”. Forty candidates including physicians, respiratory therapists, nurses and other health-care providers attended. They participated in a collaborative educational experience with health-care practitioners and patients who actively use the non-invasive techniques. The participants where able to meet with patients and learn about the non-invasive techniques from their perspective, explore the indications for non-invasive techniques, learn how to initiate this therapy and take home a CD-Rom.

For more information about these techniques we invite you to visit www.rehab.on.ca/program/respiratory/neuromuscular.html.

Conference participants, RRT Carole LeBlanc, Paul Bertrand and Dr. Doug McKim.

Mr. Paul Bertrand attended, speaking candidly about his condition and his choice of mouth piece ventilation versus tracheal ventilation. Mr. Bertrand who has ALS attributes his success to his willingness to enjoy life with his loved ones and the consistent practice of non-invasive lung secretion clearance.
2003 Membership Services Survey

Please complete and return to the CSRT. All information will be kept in confidence. Thank you for taking the time to respond. Win a one-year CSRT membership.

1. What is your age?
   ✔️ < 24 years  □ 35–39 years  □ 50–54 years
   □ 24–29 years  □ 40–44 years  □ 55–60 years
   □ 30–34 years  □ 45–49 years  □ > 60 years

2. Are you?  □ Female  □ Male

3. Province of residence (or country if outside of Canada) ____________________________

4. How long have you been a member of the CSRT?
   □ < 2 years  □ 6–10 years  □ > 10 years
   □ 3–5 years

5. Who pays for your CSRT membership?
   □ Self  □ Hospital  □ Industry employer  □ Other

6. Have you attended the annual educational forum in the past 5 years?  □ Yes  □ No

7. Practice Type?
   □ Critical Care  □ Anesthesia  □ Homecare
   □ Diagnostics  □ Education (entry to practice)
   □ Education (professional)  □ Management  □ Industry/Sales  □ Other

8. Location?
   □ Acute Care Hospital  □ Univ/College/CGEPE (sp)
   □ Community  □ Industry  □ Other

9. What is your primary source of information about CSRT news or events?
   □ Canadian Journal of Respiratory Therapy
   □ Calling the CSRT office
   □ CSRT website
   □ Provincial Association
   □ CSRT email listserves
   □ Your employer
   □ Other

Please rate these CSRT offerings and activities according to the following scale


   a. Subscription to Canadian Journal of Respiratory Therapy  1  2  3  4  5
   b. CSRT Annual Educational Forum  1  2  3  4  5
   c. CSRT Website (www.csrt.com)  1  2  3  4  5
   d. CSRT email listserves  1  2  3  4  5
   e. NCPD program for tracking professional development  1  2  3  4  5
   f. Representation on national issues such as: Canadian Standards Association, CPR standards, NRP standards  1  2  3  4  5
   g. Access to professional liability insurance via membership  1  2  3  4  5
   h. Ability to pay fees via debit plan  1  2  3  4  5
   i. Ability to pay provincial society or regulator fees via CSRT debit plan  1  2  3  4  5
   j. Discounts on items such as car rental, insurance  1  2  3  4  5
   k. Public Education about Respiratory TherapyResearch support for Respiratory Therapists  1  2  3  4  5
   l. Joint membership with organizations such as CLA  1  2  3  4  5
   m. CRTF (charitable organization supporting education and research in Respiratory Care)  1  2  3  4  5
   n. CSRT Occupational Profile  1  2  3  4  5
   o. CSRT credentialling examYour overall  1  2  3  4  5
   p. CSRT membership  1  2  3  4  5

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Robert Merry Memorial Award

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The winner of this award will receive airfare, hotel and out of pocket expenses to attend the awards presentation held during the CSRT Educational Forum 2004, in Toronto, Ontario, May 2004. Please check the CSRT website for details and a nomination form.

*The deadline for the receipt of nominations is January 31, 2004.*

Advanced Practice Award

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*Deadline for applications is February 1, 2004. More information is available under Foundation on the CSRT website.*

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Applications are now being accepted 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, 2003. Please check the Foundations section of the CSRT website for details.

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Abstracts

Control of Exposure to Mite Allergen and Allergen-Impermeable Bed Covers for Adults with Asthma


Background: The effectiveness of avoidance of house-dust-mite allergen (Dermatophagoides pteronyssinus 1 [Der p1]) in the management of asthma is uncertain.

Methods: We conducted a double-blind, randomized, placebo-controlled study of allergen-impermeable bed covers involving 1122 adults with asthma. The primary outcomes were the mean morning peak expiratory flow rate over a four-week period during the run-in phase and at six months and the proportion of patients who discontinued inhaled corticosteroid therapy as part of a phased-reduction program during months 7 through 12. Der p1 was measured in mattress dust in a 10 percent random subsample of homes at entry and at 6 and 12 months.

Results: The prevalence of sensitivity to dust-mite allergen was 65.4 percent in the group supplied with allergen-impermeable bed covers (active-intervention group) and 65.1 percent in the control group supplied with non-impermeable bed covers. The concentration of Der p1 in mattress dust was significantly lower in the active-intervention group at 6 months (geometric mean, 0.58 µg per gram vs. 1.71 µg per gram in the control group; P=0.01) but not at 12 months (1.05 µg per gram vs. 1.64 µg per gram; P=0.74). The mean morning peak expiratory flow rate improved significantly in both groups (from 410.7 to 419.1 liters per minute in the active-intervention group, P<0.001 for the change; and from 417.8 to 427.4 liters per minute in the control group, P<0.001 for the change). After adjustment for base-line differences (by analysis of covariance), there was no significant difference between the groups in the peak expiratory flow rate at six months (difference in means, active-intervention group vs. control group, -1.6 liters per minute [95 percent confidence interval, -5.9 to 2.7] among all patients [P=0.46] and -1.5 liters per minute [95 percent confidence interval, -6.9 to 3.9] among mite-sensitive patients [P=0.59]). There was no significant difference between the groups in the proportion in whom complete cessation of inhaled corticosteroid therapy was achieved (17.4 percent in the active-intervention group and 17.1 percent in the control group) or in the mean reduction in steroid dose, either among all patients or among mite-sensitive patients.

Conclusions: Allergen-impermeable covers, as a single intervention for the avoidance of exposure to dust-mite allergen, seem clinically ineffective in adults with asthma.

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Inadequate Sleep Hygiene Practices: Level of Community Awareness

Sheryl O’Quinn, C.A.E., R.R.T., RPSGT

Abstract
Lack of knowledge concerning adequate sleep hygiene appears to be a contributing factor to poor sleep practices, which, in turn, negatively affects the health and well-being of the population. The objective of this pilot study was to determine the level of community awareness pertaining to sleep hygiene. The research conducted targeted a non-clinical population in a community setting and utilized non-probability, convenience sampling in the form of a self-administered questionnaire. The bulk of the questions pertained to the general sleep hygiene guidelines by way of determining each respondent’s knowledge level of good sleep practices. Respondents were also asked to specify their sex, age, level of education, and work schedule so as to examine relationships between specific variables. Results of the study found that the total average score was only 61%, which showed that the overall level of community awareness pertaining to sleep hygiene was low. This suggests that efforts need to be made to address attitudes about sleep and to increase knowledge levels through sleep hygiene education.

Introduction
The purpose of this pilot study was to determine the level of community awareness pertaining to sleep hygiene. According to the International Classification of Sleep Disorders, inadequate sleep hygiene is defined as “a sleep disorder due to the performance of daily living activities that are inconsistent with the maintenance of good quality sleep and full daytime alertness.” Kryger et al explains, “practices and activities of everyday living have long been known to be capable of promoting or preventing sleep.” Lack of knowledge concerning adequate sleep hygiene appears to be a contributing factor to poor sleep practices, and subsequently, detrimentally affects the health and well-being of the population. The findings of a recent study, which examined the relationship between sleep hygiene awareness, sleep hygiene practices, and sleep quality in a non-clinical population consisting of university students, “suggests that knowledge of sleep hygiene is related to sleep practices, which, in turn, is related to overall sleep quality.”

Sleep is essential to our health and well-being. Problems associated with poor sleep can result in excessive daytime sleepiness severe enough to interfere with daily activities. For instance, in forty per cent of adults, the effects of daytime sleepiness interfere with day-to-day activities about two to three days per month. Approximately one half of those adults feel their daytime sleepiness affects their ability to function normally as much as two to three days per week. To further aggravate the sleepiness problem, physicians do not ask patients about the quality of their sleep sixty per cent of the time, and less than twenty per cent of patients bring up the sleepiness problem with their physicians. The 2002 Sleep in America Poll found the public does understand that there is a significant link between their sleep and behaviour and quality of life. Although sleep hygiene practices have received greater attention as of late, sleep hygiene education is limited due to lack of physician awareness and training.

Good quality sleep is an important factor for psychological and emotional functioning, in the consideration of safety issues, and for matters associated with level of productivity. Lack of sleep results in increased stress levels and difficulty in concentrating; consequently, sleep loss causes difficulty in completing tasks, particularly those that involve recall, logic, and learning. Excessive sleepiness may cause people to make costly mistakes, suffer loss of potential in work and educational situations, and hamper their ability to resolve conflict and handle trivial...
irritations. Excessive sleepiness stresses personal and working relationships and causes absenteeism from work and school. The American economy loses $100 billion annually due to productivity loss caused by poor sleep. Safety issues related to the sleepiness problem are a concern in terms of serious or fatal accidents. It is estimated that 100,000 auto crashes and 1,500 deaths that occur each year are believed to be caused by excessive sleepiness. The National Sleep Foundation points out that 51% or 100 million Americans indicate they have driven a vehicle while feeling sleepy in the past year. Additionally, 14 million people admit to falling asleep while driving and two million people say they have caused an accident after having fallen asleep at the wheel.

The National Sleep Foundation estimates that 47 million Americans are achieving less than their optimal sleep needs and are at risk of developing health problems associated with poor sleep. There is a direct link between inadequate sleep and mood, behaviour, and performance. Excessive sleepiness leads to negative moods that precipitate feelings of rage, anxiety, cynicism, and tiredness. For instance, daytime sleepiness has been associated with many societal dilemmas such as obesity and road rage. A recent poll of American adults shows that younger adults experience more sleepiness than older ones. For example, the sleepiness problem is felt by at least a few days per week by 44% of adults aged 18–29 years, 38% of 36–64 year olds, and 23% of adults 65 years of age and older. The poll also indicates that the American public understands and believes there is a strong link between inadequate sleep and poor work performance, increased likelihood of illness and injuries, and emotional instability. However, by and large, the sleep routines of adults have not changed in the last four years. In fact, the American poll shows a small tendency towards achieving less sleep in 2002.

Inadequate sleep hygiene is an extrinsic sleep disorder that arises from causes outside of the body; therefore, by removing the external factor producing the disorder, resolution of the disorder is most likely. Extrinsic sleep disorders may precipitate or perpetuate other sleep disorders. Lack of sleep or poor quality sleep induced by inadequate sleep hygiene causes disturbing changes in mood and behaviour, reduced levels of concentration, unrelenting tiredness, and increasing bouts of sleepiness. It is critical to assess an individual’s sleep hygiene practices with all other sleep disorders because a reduced response to treatment is possible if inadequate sleep hygiene is present.

According to the International Classification of Sleep Disorders, there are four categories of sleep disorders. These categories along with specific examples are described below:

a. Dyssomnias produce excessive sleepiness or create difficulties in falling into or maintaining sleep:
- Intrinsic disorders arise from causes within the body such as narcolepsy and obstructive sleep apnea.
- Extrinsic disorders arise from causes outside the body such as inadequate sleep hygiene and alcohol-dependent sleep disorder.
- Circadian rhythm disorders refer to the timing of sleep in a 24-hour day whether or not it is under an individual's control, e.g. shift work, time zone changes, and neurological mechanisms such as advanced sleep phase syndrome.

b. Parasomnias involve disorders that intrude the sleep process:
- Arousal disorders, such as sleepwalking, cause partial arousals during sleep.
- Sleep-wake transition disorders, such as leg cramps and sleep talking, usually occur during the transition from wake to sleep or when shifting from one sleep stage to another.
- Parasomnias, which are generally associated with REM sleep, include nightmares and sleep paralysis.
- Other parasomnias consist of bedwetting, teeth-grinding, snoring, and sudden infant death syndrome.
c. Sleep Disorders associated with medical/psychiatric disorders disturb sleep and/or cause excessive daytime sleepiness. A few examples are listed below:

- Mental disorders such as psychoses, panic attacks, and alcoholism.
- Neurological disorders such as dementia, Parkinson disease, and sleep-related epilepsy.
- Medical disorders including peptic ulcer disease, chronic obstructive pulmonary disease, nocturnal cardiac ischemia, sleep-related asthma, and sleep-related gastroesophageal reflux.

d. Proposed sleep disorders are not confirmed disorders and fall under this category until sufficient data is replicated:

- Long sleeper or short sleeper.
- Menstrual or pregnancy-associated sleep disorder.
- Sleep choking syndrome.

As maintained by the International Classification of Sleep Disorders, minimum diagnostic criteria for inadequate sleep hygiene exists. The following list describes the set criteria:

a. Complaint of insomnia or excessive sleepiness.
b. Presence of at least one of the following:

- Napping at least twice a week.
- Varying bedtimes and wake-up times.
- Extending time in bed at least twice a week.
- Regular use of alcohol, tobacco, and caffeine just prior to bedtime.
- Exercising close to bedtime.
- Participating in stimulating activities close to bedtime.
- Using the bed for activities other than sleep or sex such as watching TV, reading, studying.
- Sleeping on an uncomfortable bed.
- Sleeping in an environment not conducive to sleep such as a room that is untidy, too warm or too cold, lets in too much light, and smells stuffy or stale.
- Engaging in tasks that necessitate high concentration close to bedtime.
- Performing mental activities in bed such as thinking and planning.

The 2001 Sleep in America Poll was a survey conducted to determine the sleep habits and experiences of adults in the United States. It addressed lifestyle and health issues, and knowledge and attitudes about sleep. The Poll illustrated how often adults exhibit poor sleep practices in terms of the activities performed just before bedtime and the frequency of doing specific things if waking up during the night and having difficulty falling asleep. In particular, 87% watch TV and 53% read in the hour before bedtime, but if they are having trouble falling back to sleep after waking up, 56% of adults will watch TV, and 47% will read. Sleep hygiene guidelines are designed to help people sleep better; however, they are not cut in stone because people’s lives evolve around everyday situations that may affect sleep. For example, a mother often experiences a disrupted sleep while caring for a newborn. Shiftworkers contradict their normal circadian rhythm and some researchers believe that the body may never adjust to sleeping abnormal hours. Consequently, shiftworkers are usually sleep deprived because sleep is fragmented and the sleep cycle is generally shorter by two to four hours than someone who works straight days. Regardless, shiftworkers still need to follow the sleep hygiene guidelines to develop good sleep habits. General guidelines are as follows:

a. After a period of time of lying in bed and you are not sleepy or you are trying to sleep and cannot fall asleep, it is best to get up, leave the room, and do something not too stimulating.

b. Watching TV and reading in bed encourage wakefulness. The bedroom should only be used for sleep and sex.

c. A routine close to bedtime should be developed so as to slow the body and mind down. Abandon work-related activities and stick to light reading material.

d. Exercises should not be performed four to six hours before bedtime because it enhances alertness.
e. A light snack close to bedtime may help promote sleep; however, a full meal just before bedtime hampers sleep.

f. Sleep is facilitated when the body cools, so a warm bath or shower about 90 minutes before bedtime is recommended.

g. Do not nap during the day if you are having trouble sleeping at night. If a nap is necessary due to excessive daytime sleepiness, limit naps to once per day of less than one hour each and taken before 3:00 pm.

h. Sleep in an environment conducive to sleep such as sleeping on a good mattress in a quiet, cool, and dark room. Disruptions, such as permitting children or pets to share your bed on a regular basis, should be kept to a minimum.

i. Wake-up times should be the same time every day, even on weekends, in order to develop a good sleep pattern. It is important to prevent early morning light from entering the bedroom prior to regular wake times.

j. Caffeine is a stimulant that interferes with sleep and should be avoided four to six hours before bedtime. Nicotine is also a stimulant and should be avoided close to bedtime and through the night. Withdrawal effects from nicotine in smokers can disrupt sleep.

k. Alcohol should be avoided four to six hours before bedtime because it causes rebound awakening when the alcohol is metabolized.

Lack of knowledge concerning adequate sleep hygiene appears to be a contributing factor to poor sleep hygiene practices, which, in turn, negatively affects the health and well-being of the population. The research question in this pilot study has attempted to determine what people in a non-clinical population know about inadequate sleep hygiene and good sleep practices.

Method

Research Design

The research conducted targeted a non-clinical population in a community setting that reflected adults of different ages and from all walks of life. Through non-probability, convenience sampling, a smaller than optimal sample was obtained due to time restraints and lack of funding and resources. Ideally, to have obtained a 5% error rate utilizing the general formula and standard Z score (95% confidence level) for sample size, the sample should have been approximately 650 people; however, the pilot study expected to sample 40 people to obtain a significantly higher error rate of 20%. The actual sample totalled 48 people with an error rate of 18.4%. The estimated standard deviation used in the formula was 65% representing the expected level of community awareness pertaining to sleep hygiene.

Participants

Sixty subjects were recruited for the study to allow for a 25–30% non-response rate. Sampling targeted two recreational sporting leagues in Regina, Saskatchewan whose members consisted of adults of varying ages (18 years of age and older), assorted educational backgrounds, and fairly evenly spread between sexes. Contingency plans were in place to recruit more subjects, in the event that the response rate was poor, from a work environment where the employees’ jobs are multidisciplinary in nature and their personal backgrounds are diverse. However, this was unnecessary due to the higher than expected response rate of 80%.

Procedures

A self-administered questionnaire was used to sample the population in a manner that was both anonymous and confidential. A total of twenty-one multiple choice questions made up the bulk of the questionnaire where the first four questions were variables pertaining to sex, age, level of education, and work schedule (as to whether the subject works shiftwork). The remaining seventeen questions related to the sleep hygiene guidelines by way of determining each respondent’s knowledge level of good sleep practices. A score of 100% would have been most favourable, but scores less than 100% suggested a problem associated with awareness of good sleep hygiene practices. The expected average score was approximately 65%, which was simply speculation because a literature search did not provide an estimate.
The questionnaires, enclosed in an envelope with instructions and a self-addressed, stamped envelope, were hand-delivered to respondents. The respondents, who were also given verbal instructions, were required to fill out the questionnaire and mail it in the enclosed envelope. As questionnaires were returned, they were numbered starting at number one and subsequently recorded onto a checklist. The questionnaires were tallied and scores transcribed onto a separate checklist containing data categories. After a period of one month from the date the questionnaires were distributed, return rates and the total average scores were calculated.

**Results**

**Data Analysis**

A total of sixty questionnaires were distributed to members of two different sporting recreational leagues in Regina. One month later, the number of respondents totalled fifty, which was an 83% response rate. Two questionnaires were rejected as non-usable because, in each case, one entire page of the questionnaire was not completed. As a result, forty-eight usable questionnaires were received at an acceptable response rate of 80%.

The total average score was calculated to be 61%, which was slightly less than the 65% expected score. There were twenty-six female respondents and twenty-two male respondents representing 54% and 46% of total number of respondents respectively. This sex ratio was expected because according to Statistics Canada, 52% of the 2001 census population in Regina was female and 48% was male.\(^\text{19}\)

Of the total respondents, 7 or 15% were 18–30 years of age, 7 or 15% were 31–39 years of age, 25 or 52% were 41–50 years of age, 8 or 17% were 51–60 years of age, and 1 person or 2% was 61–70 years of age. This type of age spread was likely, because in accordance with Statistics Canada’s 2001 Community Profile, the age characteristics of the population in Regina are as follows: 8% are ages 20–24, 30% are ages 25–44, 14% are ages 45–54, 8% are ages 55–64, and 6% are ages 65–75.\(^\text{19}\)

The average scores appeared to differ according to age. In particular, the youngest and oldest adults had the lowest scores, whereas, the middle aged group had the highest scores. The average score for respondents ages 18–30 was 56%, ages 31–40 was 61%, ages 41–50 was 64%, and ages 51–60 was 58%. As there was only one individual and for the purposes of confidentiality, the score of the 61–70 year old was not publicly revealed.

The female average score was 63%, higher than the male average score of 58%.
In terms of the highest educational level attained, ten or 21% of total respondents had less than a high school graduation certificate, 18 or 38% had graduated from high school only, 19 or 40% were trade school or college graduates, no one had an university degree, and only one individual had a post-graduate degree. This trend in educational levels was probable because, according to the Statistics Canada’s 1996 Census, 45% of Saskatchewan residents 15 years of age or older have no degree, certificate, or diploma, 19% have only a high school graduation certificate, 26% have a post secondary certificate or diploma below a university bachelor level, 7% have a bachelor’s degree, and 8% have a post-graduate degree. Conversely, 37 or 77% of respondents were not employed as shiftworkers. When taking into consideration that some of the respondents may not perform paid work, this ratio of shiftworkers to non-shiftworkers is comparable to Human Resources Development Canada’s 1995 statistics where 32% of the national paid labour force works shiftwork.

The average scores tended to increase with higher educational levels attained. Respondents who had less than a high school graduation certificate received a score of 56%, high school graduates achieved an average score of 59%, and college trade school graduates attained a score of 66%. As there was only one individual with a post-graduate degree and for purposes of confidentiality, this particular score was not publicly revealed.

The results of the questionnaire indicated that eleven or 23% of the respondents worked shiftwork in the form of non-day or rotating shifts. Conversely, 37 or 77% of respondents were not employed as shiftworkers. When taking into consideration that some of the respondents may not perform paid work, this ratio of shiftworkers to non-shiftworkers is comparable to Human Resources Development Canada’s 1995 statistics where 32% of the national paid labour force works shiftwork. Conversely, 37 or 77% of respondents were not employed as shiftworkers. When taking into consideration that some of the respondents may not perform paid work, this ratio of shiftworkers to non-shiftworkers is comparable to Human Resources Development Canada’s 1995 statistics where 32% of the national paid labour force works shiftwork.

The average score for non-shiftworkers was 63%; however, shiftworkers attained a lower score of 59%.

The results of the questionnaire indicated that respondents were not familiar with specific good sleep hygiene practices. The following questions (“X” indicates the correct answer) were asked of the respondents:

1. Naps taken during your normal waking hours should be:
   [x] Less than one hour long
   [] More than one hour long

2. The number of naps taken during your normal waking hours should amount to:
   [x] One or none
   [] Two or more
3. When taking a nap during day time hours, it should be:
[ ] While watching TV or reading in the evening after suppertime
[ ] Immediately before suppertime
[x] No later than 3 pm

4. Avoid ingesting caffeine:
[ ] Within one hour of bedtime
[ ] Within two — four hours of bedtime
[x] Within four — six hours of bedtime

5. Do not drink alcoholic beverages:
[ ] Within one hour of bedtime
[ ] Within two — four hours of bedtime
[x] Within four — six hours of bedtime

6. A sound sleep can be promoted by:
[ ] The use of nicotine close to bedtime or during the night
[x] A light snack close to bedtime
[ ] A heavy meal close to bedtime

7. Avoid strenuous exercise:
[ ] Within one hour of bedtime
[ ] Within three hours of bedtime
[x] Within six hours of bedtime

8. Going to bed and getting up from bed should be done:
[x] The same time each day, even on weekends
[ ] The same time each day, but it is OK to sleep in on weekends
[ ] At varying times during the week and weekend

9. Use your bed for:
[x] Only sleep and sex
[ ] Sleep, sex, and watching TV
[ ] Sleep, sex, and reading
[ ] Only sleep

10. To promote sleep, try:
[ ] A warm bath just before bedtime
[ ] A cold shower just before bedtime
[x] A warm bath ninety minutes before bedtime
[ ] A cold shower ninety minutes before bedtime

11. If you are having trouble sleeping:
[x] Do not nap during your normal waking hours
[ ] Have one nap during your normal waking hours
[ ] Have two or more naps during normal waking hours

12. If you are having trouble getting to sleep:
[ ] Get up and have a night cap (alcoholic beverage)
[ ] Turn on the lamp and read for a while
[x] Get up, leave the bedroom, and engage in a quiet activity

13. If it is your regular bedtime but you are not drowsy, you should:
[ ] Go to bed anyways
[x] Do a quiet activity outside the bedroom until sleepy, then go to bed
[ ] Watch a late night action movie on TV, then go to bed

14. The temperature of your bedroom during sleep time hours should be:
[ ] Fairly warm
[x] Fairly cool

15. Should children or pets be regularly permitted into your bedroom during sleep time hours?
[ ] Yes
[x] No

16. Should you prevent early morning light in the bedroom when you sleep during night time hours?
[x] Yes
[ ] No

17. Does sleeping on a poor mattress disrupt sleep?
[x] Yes
[ ] No
Ninety-two percent of respondents answered question nine incorrectly, which pertained to the use of alcohol close to bedtime. Conversely, ninety-six percent of respondents answered question six correctly, which pertained to the number of naps that should be taken during normal waking hours. Other areas of the sleep hygiene guidelines where a large percentage of respondents answered incorrectly involved the participation in strenuous exercise and the use of caffeine close to bedtime.

The results of the study suggest that a middle-aged, college-educated woman who does not work shift work is likely to be the most knowledgeable about good sleep practices. The reasons for the differences in the relationships between specific variables are not clear; however, some assumptions can be deduced. The National Sleep Foundation’s 2002 Poll found that more females than males report feeling excessively sleepy a few days per week during the daytime. This may indicate that women are either obtaining less sleep or require more sleep than men. It may also imply that women are more concerned about their sleep habits and are, therefore, progressively more tuned into their needs in terms of sleep requirements.

Discussion
In terms of reliability, the method in which this study was measured is reproducible if sleep hygiene education for the general public is not emphasized more than the current level and if the survey is not performed on the same sample population. However, the validity of the research project is in question because of the small sample and corresponding higher error rate. Additionally, the questionnaire is not all encompassing and does not cover every detail of sleep hygiene guidelines. For instance, if the questions were re-phrased or other pertinent questions were asked, a different average score may have emerged. In particular, three of the respondents wanted additional clarification of the questions because they assumed they were to answer the questions according to what they actually do, as opposed to what should occur.

According to The National Sleep Foundation’s 2002 Poll, adults aged 18–29, compared to older adults greater than 65 years, are more likely to report having excessive daytime sleepiness a few days per week. In general, adults aged 18–64 are more likely than older adults to get less sleep during the weekdays. These statistics point to factors relating to lifestyle issues. In particular, adults aged 18–64 generally work during the week as opposed to retired people; consequently, adults aged 65 years or greater do not have their sleep restricted due to work schedules and associated early wake-up times. As for the younger generation, the combination of school, employment, and an active social life further limits sleep time and encourages poor sleep practices. Although these assumptions suggest there is a problem with adults’ sleep habits and sleep hygiene practices, it does not explain why adults are less knowledgeable of good sleep hygiene techniques. Possibly, they have been misinformed or are simply not aware of good sleep practices.
The reasons why less educated respondents attained a lower score on the questionnaire may indicate they misunderstood the questions, or their level of general knowledge is narrow, or they purely were not aware of practices related to inadequate sleep hygiene. Individuals, who attain higher educational levels, may be more liable to know and understand that there is a link between their sleep and health and quality of life. Accordingly, they may strive to gain knowledge of good sleep practices.

**Conclusion**

The results of this research project show that the overall level of community awareness pertaining to sleep hygiene is low. Sleep hygiene education needs to be emphasized in primary health care settings and by means of mass communication to increase knowledge levels and to stress the importance of good sleep hygiene. At the same time, physician training and associated funding for sleep hygiene education should be accelerated. Knowledge and attitudes about sleep needs to be addressed so as to enhance overall sleep quality and, in turn, improve quality of life. Those individuals more prone to inadequate sleep hygiene, in particular, need to be targeted, although everyone benefits from exercising good sleep practices. Finally, it needs to be emphasized that sleep is indeed essential to our overall health and well-being.

**References**


A Summer of Fires

Valerie McDougall, R.R.T.

The summer of 2003 in British Columbia, was one of the worst fire seasons in decades, with over 2,500 fires burning in various locations. About 3,400 fire-fighters battled the blazes. More than 250 homes were destroyed. About 48,000 people were evacuated. Approximately 260,000 hectares were burned. The cost and cleanup of the fires may top $500 million dollars.

The fire season started on a dry, sunny August day in the British Columbia Interior.

Staff from our VitalAire offices in Kamloops, Vernon, Penticton, Cranbrook, Castlegar and Kelowna have all dealt with forest fire situations impacting many home oxygen clients in their areas. This summer’s fires were going to be a huge challenge.

While several of our own staff were evacuated from their homes due to the proximity of the fires, they continued to help with evacuation planning, client calls and reassuring those affected. Thankfully, none of their own homes were lost.

One interesting challenge was the impact the volume of smoke and fire had on cell phones and pagers. They did not function properly because smoke was interfering with pager transmissions. Cell phone relay towers had burnt down making matters worse. Communication was difficult to say the least! Because of heavy call number on cell phones and landlines, requests were made to the general public to only use phones for emergencies.

Barrier McLure Fire and Strawberry Hills Fire (August 1/03)

More than 10,000 people, including a small rural hospital, were evacuated from this area. We began preparing for displaced clients. Some of ended up in locations 2 or 3 hours away from their homes. Our RRT’s set up oxygen equipment and product at their temporary locations to support evacuees. The Strawberry Hills fire came right to the Kamloops city limits. We pulled in additional equipment and oxygen cylinders from outlying offices to support our efforts. Discarded cigarette butts in very dry conditions started both fires.

Firefighter Kyle Sanguin on the front lines
*Photo Cory Bialecki*
Cedar Hills Fire — Falkland,
(August 2/03)
This fire was also caused by a cigarette. It threatened the communities of Falkland, Silver Creek and caused many other communities to be on one-hour alerts as the strong winds pushed the fires towards Armstrong and Salmon Arm. Again, we had clients evacuated from their homes on one hours notice.

Ingersol Fire — Nakusp,
Castlegar Area (August 10/03)
Our Castlegar office was notified to prepare for our 18 oxygen clients living in a remote, rural area, who were to be without power. Several fires were impinging on another major power transmission line. We were informed that the area might not have power for two or three days. Thankfully our plans were made, but no power outages occurred.

Okanagan Mountain Park Fire,
(August 16/03)
This fire originated with a lightning strike in a forested area of this mountainous, rugged park, which bordered Okanagan Lake. It spread in extremely dry forest conditions causing huge clouds of smoke and very poor air quality (> 250 — good is less than 25). The situation changed dramatically on Thursday, August 21, when the wind gusted and the first 15 homes were lost to fire.

Over 30,000 people in Kelowna were evacuated from their homes during the next 24 hours. We again put our Emergency Plan into effect. We were getting quite practised at it by this time! Our Kelowna office was manned with RRT’s and drivers late into the night, ready to set up equipment for evacuated clients. The scenes that we witnessed were appalling — watching the fire from our office was horrifically awesome — knowing that homes were being destroyed as we watched. At one point even Kelowna General Hospital was on a one-hour evacuation alert.

At one time, we estimated that approximately 40 of our clients were out of their homes. Many left because of the smoke and deteriorating air quality, and many were evacuated from their homes due to the fire.

Penticton — Vaseaux Lake Fire,
(August 22/03)
This fire was started below a power transmission line, causing a major power outage to the area south of Summerland through to Osoyoos. Initially, we were told that the power would be out for 24 hours. We immediately began planning for 200 clients to be without power — no easy feat to accomplish when at the same time we were preparing for massive evacuations and watching the south eastern portion of Kelowna burn.

When the electricity went down, so did many phone systems. Cordless and multi-line office phones did not function — nor were cell phones and pagers. Our “for emergency” old style analog office phone was our only source of communication with the Penticton office, as many of our clients arrived at our office, greeted by one of our RRTs and driver to pick up extra oxygen cylinders and liquid oxygen for the power outage.

Any client who was using an oxygen concentrator needed to be supported by an alternate oxygen delivery system. Our staff from Kelowna and Penticton began preparing for equipment, cylinders and liquid oxygen to be set up at evacuation centres for these clients. Luckily, BC Hydro was able to put a patch into the system and get electrical system switched to another grid. Power was restored within six hours, allowing us to focus on the Kelowna fire situation. Residents continued to be on one-hour evacuation alerts for many days.

Lamb Creek Fire — Cranbrook,
(August 25/03)
This fire started from a lightning strike in a fierce storm that started 300 fires in the Cranbrook area. Most of these fires were easily
Scientific News

put out — but the Lamb Creek fire grew. High winds pushed it within 10 kilometres of the city of Cranbrook. We were again challenged when the major power line was threatened, again putting approximately 200 clients on alert to lose power for two to three days. Emergency Plan once again! Home oxygen equipment to support this new emergency came from offices throughout BC, Alberta, Saskatchewan and our head office in Mississauga.

A great deal of thanks goes to many other VitalAire staff and offices across the country for being there to support us with equipment, good wishes, and thoughts.

This truly was a huge team effort with our staff always going beyond the requirements of the job. I was very impressed with the true spirit of our team! Our Emergency Plan definitely does not have dust (or soot) on it after this summer of fires.

Valerie McDougall has been an RRT for 21 years, working the last 13 years for VitalAire Healthcare. She is currently the Manager for the BC Interior, with 9 offices located within the region, with staff providing home respiratory care to all areas of the province outside of the lower mainland.

A Perspective from Kelowna
Gwen Chapman, RRT

We may have been a little smug. Over the summer we had watched as other parts of Canada coped with SARS and huge power outages. Then, across British Columbia, forest fires began threatening communities. But, in Kelowna we sat back, enjoying the record heat and absence of rain.

Then, in early morning hours of Saturday August 16, a lightning strike began a series of events that no one in Kelowna would ever forget. The fire ignited by the lightning would, over the next three weeks, travel over 15 miles, destroy hundreds of homes, burn thousands of hectares of tinder-dry forest and devour 12 of the world-famous Kettle Valley wooden trail trestles (now part of the Trans Canada Trail) which have spanned canyons for close to a century.

By Sunday it was clear that this was no ordinary wild fire. It was moving towards Kelowna at an alarming rate. Those of us living on the southern slopes of Kelowna, watched daily as the sky changed from clear blue, to clouds of smoke, to a continuous red glow. In less than four days, the fire could be seen on the ridge above us. The smoke was so thick that the house across the street was barely visible through the “fog”. Ash fell like snow.

My husband Ian is a Platoon Captain with the City of Kelowna Fire Department and a veteran of over 28 years of firefighting. He was calm but concerned. Sprinklers were placed on the roof of my sisters house, where we were staying — a precaution that probably saved the house.

Radio announcements Wednesday afternoon placed us on evacuation alert. My sister and I methodically moved through the house packing up things like pictures, kids artwork and baby booties. I assured my sister it was only a precaution. Little did we know that it would be two weeks before we could return.

Thursday night the call came from my husband, EVACUATE NOW! The fire was moving fast and had begun its menacing attack on neighborhoods. Without discriminating between the $200,000 homes or the $2 million dollar ones, the fire leveled 18 homes that one night. And it was far from over. By Friday afternoon the fire, pushed by high winds, traveled from one neighborhood to another moving at over one kilometer a minute. The evacuation order expanded until over 30,000 people were ordered out. Some left mere minutes ahead of the firestorm. The fire was rated at Class Six — the highest possible rating, complete with Class Two hurricane wind activity.

From my vantage point across the lake, the surreal beauty of the dancing flames and bright
glows, erupted continuously and repeatedly, outlined homes as they were destroyed.

Somewhere in the midst of the walls of fire were my husband and my stepson. One had over 28 years of experience as a firefighter, the other just two months as a volunteer. Ironically, both would experience a fire that night which would probably be the pinnacle of their careers.

Val McDougall, Shaun Gautron, Cam Klusertis and I gathered at the VitalAire office fielding calls from evacuated patients. We found some comfort in each other’s company as we watched the fire, clearly visible behind the office. The fire had traveled over 10 kilometers within a few hours and now the new home we were building was directly in its path. Cam’s would be next in line.

And then about 10 pm, our prayers were answered. Rain fell, not in town, but only on the ridge where the fire was advancing. It was like God turned off the lights of fire and darkness finally fell.

My sister and I spent the rest of the night at the arena helping some of the confused and frightened evacuees settle in. During that time, we had no way of knowing if she still had a home. A 7 am call from my husband brought the most amazing news. My sisters home had survived, but many others had not. Ian drove down streets of the neighbourhood counting 243 driveways. There was nothing else left to mark the homes that had stood there just hours before.

Over the next two weeks fires repeatedly threatening the city. Water bombers and helicopters flew in a continuous convoy overhead. What had been interesting to observe in the early stages was now an ominous reminder of the threat we were under.

While the fire was remarkable to watch, what was equally remarkable was the outpouring of support and human kindness, from within the community and across this country. Fire departments and the military from across Western Canada sent personnel and trucks. Every day thousands of dollars worth of food poured in from local restaurants and grocery stores. I spent many nights at the firehall helping to prepare this food for distribution to over 400 structural fire personnel and other Emergency workers on the line. This community had pulled together in a way no one could have imagined was possible.

Great tracks of trees now stand blackened on a once beautiful hillside. Entire neighborhoods have been flattened, everything reduced to ash. But we are thankful. Few lives were lost. The area will rebuild and recover. And in many ways, I think we have all grown as individuals and as a community. And maybe we are better for that alone.

Post Script

Despite record heavy rains of more than 26 millimeters in October alone, fires are still smoldering in the Okanagan Mountain Park. Forestry spokesman Kevin Matuga says much more precipitation is needed.

“Because of the drought conditions we experienced last winter and throughout the spring, it’s going to take a lot more rain to put the fire right out. There will still be hot spots burning below the surface.”

Hot spots can be as deep as one meter (three feet) underneath the surface. A meter or more of snow should extinguish the fire completely. Matuga says if that doesn’t happen there will likely be flare-ups next spring.
The first European implants of Alveolus’ next generation stents were carried out in three procedures in early September at the Lungenklinik in Hemer, Germany.

Two of the three patients, an elderly man and woman who both suffered from lung cancer, received the bronchial stents, while the third patient, a middle aged man, suffering from mustard gas burns, received a tracheal stent. The procedures were completed smoothly and the patients were pleased with the results.

Alveolus, Inc., was honored that the first international procedure was carried out by distinguished interventional pulmonologist Dr. Lutz Freitag. When asked to comment about the procedures, Dr. Freitag said, “the stents performed well and looked quite good in the airways.” Dr. Freitag is world renown in the field of non-vascular interventional pulmonology and is an accomplished physician, author, and inventor of numerous interventional products.

Alveolus is an American-based developer of non-vascular interventional stent technology. Further information can be found on their web site at www.alveolus.com.

A Letter from the 2004 Forum Co-Chairs  
Continued from page 10

Our enthusiastic planning committee has made a commitment to find topics and speakers that will help RTs develop the necessary skills and provide information that is appropriate and practical. We are planning to engage as many respiratory therapists as possible, so you have an opportunity to learn from each other. We are committed is to providing the latest state-of-the-art information on topics in a variety of areas, with speakers that are not only leading authorities in their field, but understand the issues RTs are facing.

In addition to offering the traditional educational programs, these annual meetings are a fantastic opportunity for a growing number respiratory therapists to network and celebrate. It is imperative that respiratory therapists take the time to gather together to learn from one another and to provide support.

On behalf of the CSRT Forum Planning Committee I invite you to join us in Toronto in Celebrating 40 Years of Inspiration.

Come and be inspired. Come celebrate our profession!

Melva Bellefountaine and Alison Nykolaychuk  
Forum 2004
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We thank all candidates for their interest in employment with Peace Country Health. In respect for the environment we have chosen to minimize written correspondence. Only those candidates selected for an interview will be contacted.

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