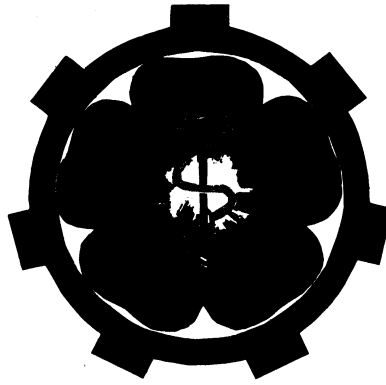
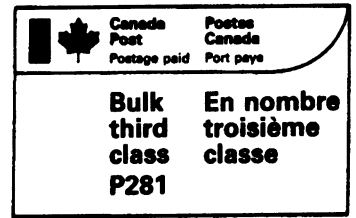


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ALBERTA OCCUPATIONAL MEDICINE NEWSLETTER

EDITORIAL

This first issue of 1996 has articles in several of the theme areas established for the Newsletter. The first article describes the utility of lumbar spine radiographs in predicting future low back disability. Dr. Hilliard and Dr. Seymer provide a concise review of this issue and several key references. As they describe, pre-placement medical examinations and investigations must relate to the specific hazards and demands of the job and must have "reasonable" predictive value. As is often the case, the history and physical examination remain the mainstays of pre-placement screening of musculoskeletal disorders. For further information, please note the recent consensus documents cited by the authors.

Next is the 1995 Continuing Education report of the Occupational and Environmental Association of Canada. This is the national specialty association for occupational medicine in Canada, with approximately 300 members in all provinces and territories. A brief description of the Association is also found in this issue.

The Workers' Compensation Board of Alberta has announced three pilot projects for the more effective clinical and vocational management of occupational injuries. These Occupational Injury Service clinics will provide diagnostic and treatment

services for workers that do not require emergency room care or hospitalization. The most unique aspects of these clinics are the early initiation of return-to-work planning and the improved flow of medical, job demands and administrative information.

A second WCB Alberta initiative is the development of Medical Advisory Guidelines for several common musculoskeletal conditions. The short article by Dr. Byron Lauber outlines the objectives and development process for these Guidelines.

The last item in this newsletter is a description of the Canadian Board of Occupational Medicine. For practising Canadian physicians, the Board continues to be one of the main routes by which to obtain certification in occupational medicine. Other avenues, such as university-based Master's programs and residency training programs will be described in upcoming issues. Of note is that the CCBOM or ACBOM certification is recognized by the Alberta College of Physicians and Surgeons, and allows the physician to designate a 'Special Interest in Occupational Medicine' on office letterhead or practice listings.

Kenneth Corbet, MD, FRCPC
Editor

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PRE-EMPLOYMENT LUMBAR SPINE X-RAYS: A DINOSAUR IN OUR MIDST

Neva Hilliard, MD, FRCPC
John Sehmer, MD, CCBOM

There are still companies and occupational physicians in Canada who are performing routine lumbar spine x-rays on candidates for employment in heavy occupations. Yet from review of the occupational medicine literature^{1,2} it is clear that back x-rays have low sensitivity, low specificity and a low predictive value.

The radiation dosage for a good set of lumbar spine x-rays is about 300 times that required for a chest x-ray, as unlike the chest which is hollow, the abdominal cavity is dense and requires strong x-ray penetration. This increases the exposure to the reproductive organs, particularly with the oblique views.

Positive statistical relationships between future pain and low back x-rays have been shown where there is disc degeneration of at least three levels and in the case of lumbar Scheuermann's disease³; however, this relationship is not strong enough for a physician to deny employment to an individual. A recent review⁴ confirms that plain lumbar x-rays do not add useful clinical information in screening for spinal degeneration, congenital anomalies, spondylolysis, spondylo-

listhesis or scoliosis. Only one of 2,500 x-rays detected something not suspected on medical history and examination.

As physicians we should have confidence in taking a good history and physical examination. If the individual has evidence of mechanical back pain or nerve root irritation and is to be performing a particularly strenuous occupation, the history and physical examination provide enough evidence for making a decision regarding employee fitness.

The American College of Occupational Medicine published guidelines for use of routine x-rays examinations back in 1979. These state:

"Lumbar spine x-ray examinations should not be used as a routine screening procedure for back problems, but rather as a special diagnostic procedure available to the physician on appropriate indications.^{5"}

If we, as occupational physicians, are approached by a company that wants and by tradition has always done, pre-employment lumbar spine x-rays, it is our obligation to educate them as to the costly futility and possible harm of such procedures.

Any physician who orders lumbar spine x-rays as a pre-employment screening procedure in an asymptomatic individual is performing a potentially harmful and invasive test due to the radiation exposure discussed previously. Based on the conclusive evidence we have to date, we feel it is not ethical to perform screening lumbar spine x-rays.

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3. Gibson, ES, Martin, RH, Terry, CW. Incidence of low back pain and replacement x-ray screening. *Journal of Occupational Medicine*. 1980; 22:5,160-175.

4. U.S. Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research, AHLPR Publications No. 95-0642, December 1994.

5. Guidelines for use of routine x-rays in occupational medicine. ACOM Board of Directors, April 20-21, 1979.

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OCCUPATIONAL INJURY SERVICE CLINICS: WORKER'S COMPENSATION BOARD, ALBERTA

The Workers' Compensation Board is working cooperatively with three medical clinics in the province to introduce an innovative pilot project - Occupational Injury Service (OIS) Clinics. Implementation is anticipated for the second quarter of 1996.

The objectives for the clinics are:

- to provide access to effective and appropriate medical interventions immediately following a compensable injury,
- to ensure accurate diagnosis and appropriate medical treatments for injured workers,
- to establish realistic return to work expectations with the worker,
- to establish timely, accurate and appropriate communication between OIS clinics, workers, employers, physicians, other health care providers and the WCB.

OIS clinics are one component of the WCB's new health care strategy aimed at realizing better outcomes for injured workers at less cost to employers. As physicians know so well, early intervention for injuries and early communication with all stakeholders significantly increase chances of returning workers safely to work, while lowering the overall costs of disability claims.

The following clinics have been selected by the WCB to jointly develop and implement the OIS clinics:

- Advantage Health Limited - Edmonton
- Concept Health Services Limited - Calgary
- Canadian Care Management Centres - Calgary

The WCB and clinic representatives will be meeting with selected employers in the coming weeks to present how this enhanced service can be of great benefit to their workers and their organizations.

Through new and innovative initiatives such as OIS clinics the WCB hopes to work with health care providers and contribute in a positive manner to the health care industry and resultant services provided to employers and their employees.

* * *

ALBERTA WORKER'S COMPENSATION BOARD Medical Advisory Guidelines

Byron G. Lauber, MD
Chief Medical Advisor

Physicians employed by Alberta Workers' Compensation Board work in an advisory capacity providing opinion to case managers in three broad areas:

1. Causation and work-relatedness
2. Diagnosis and medical management/rehabilitation
3. Disability management including fitness to work and permanent clinical impairment assessment.

To provide consistent and credible opinions, medical advisors must be aware of what the current scientific literature is and be able to apply this information to a specific claim. To assist medical advisors in this process, Medical Services is presently in the process of reviewing the medical literature on specific clinical conditions and summarizing information on causation/work-relatedness, diagnosis and treatment, as well as fitness to work and disability evaluation. The guidelines are referred to as Medical Advisory Guidelines and mirror the clinical practice guidelines being developed in the general medical community.

The development team has included board-certified medical specialists, the Occupational Health Program - Faculty of Medicine at the University of Alberta, and other allied health professionals.

These guidelines form the foundation for medical advice given to case managers and external practitioners with regards to work related injuries, and will provide consistent criteria and standards against which quality and related costs can be measured.

Development and Validation Methodology

The development methodology utilized by the Alberta Workers' Compensation Board combines the following key elements:

- An evidence-based approach
- An integration of scientific evidence with expert opinion
- A focus on clinical outcomes.

It is anticipated that all Medical Advisory Guidelines will be reviewed on a regular basis to incorporate new medical research.

The comprehensive development process involves the following key activities:

- In-depth medical literature review by Alberta Workers' Compensation Board staff, the Occupational Health Program - Faculty of Medicine at the University of Alberta, or contract specialists in the field.
- Synthesis of relevant literature into an extensive Background Paper which discusses the definition, epidemiology, anatomy-pathophysiology, diagnosis, treatment and work-relatedness of a specific condition.
- Development of a Medical Advisory Guideline which summarizes important background information, evidence of work-relatedness, diagnostic procedures and treatment interventions.
- Expert review and deliberation by a panel of up to 20 physicians affiliated with the Alberta Workers' Compensation Board. Information distributed includes the background

paper with reference list, access to original articles and the draft Medical Advisory Guidelines.

- Internal Alberta Workers' Compensation Board review for procedural/policy implications of medical position.
- External review of comprehensiveness of medical research and the validity of diagnostic /treatment recommendations by several community practitioner specialists.
- Guidelines and background papers are shared/circulated to the Alberta Medical Association Clinical Practice Guideline Committee to be available for access by community physicians. Review of Alberta Workers' Compensation Board Medical Advisory Guidelines may be incorporated into Clinical Practice Guideline reviews conducted by the Alberta Medical Association.

Alberta Workers' Compensation Board encourages feedback on the Medical Advisory Guidelines. To comment or obtain more information, call (403) 498-4120.

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OCCUPATIONAL AND ENVIRONMENTAL MEDICAL ASSOCIATION OF CANADA 1995 Continuing Education Report

Kenneth Corbet, MD, FRCPC*
Membership Development Committee

The Membership Development Committee is one of four standing committees within the Occupational and Environmental Medical Association of Canada (OEMAC). This report will describe the Committee's activities in five areas: the Liaison Newsletter, membership surveys, development of practice guidelines, the annual scientific conference, and the Royal College Maintenance of Competence Program (MOCOMP^(R)).

Liaison Newsletter:

The quarterly Newsletter remains the primary source of information on the activities of our Association and those of the Canadian Board of Occupational

Medicine. It contains articles on medical practice, membership news and surveys, upcoming conferences, legislative developments, and work opportunities. Mrs. Pat Mills, our office manager in London, is retiring as acting editor. For 1996, Murray Flotre (Regina, Saskatchewan) and Joel Andersen (Sudbury, Ontario) have volunteered to co-edit the newsletter, with our incoming office manager, Lise Jamieson, to handle formatting and printing.

Membership Survey:

OEMAC is one a growing number of national specialty associations that conducts regular surveys of its members. Our next survey is planned for the first quarter of 1996 and will address practice profiles, billing and income, practice opportunities and satisfaction, and educational and practice needs. OCR forms will be used to reduce costs and data errors. We hope to repeat the survey triannually.

Annual Scientific Conference:

A very successful Conference was held in Toronto from October 2-4, 1995 in conjunction with the Occupational Medicine section of the Ontario Medical Association. This conference was approved credit hours with Royal College of Physicians and Surgeons, the College of Family Practice of Canada, and the Canadian Board of Occupational Medicine. In total, there were 106 registrants, approximately 25% of whom were not members of OEMAC. A one-day course on "Drug Testing and Medical Review Officers" was presented at the 1995 Toronto Conference; approximately 16 persons attended this non-certifying course. Thanks again to the conference planning committee and Barry Kurtzer.

Royal College Maintenance of Competence Program (MOCOMP^(R)):

The Annual MOCOMP^(R) two-day workshop was held in May 1995 at the Royal College offices in Ottawa. K. Corbet attended on behalf of OEMAC; an overview of the MOCOMP^(R) program was presented at the 1995 Toronto Conference, including the potential benefits of this model for the planning and documentation of continuing education activities. Based on 1994 diary submissions for OEMAC

members (approximately 15), the MOCOMP[®] office provided a listing of the self-directed learning topics in occupational medicine - this information has been forwarded to the 1996 and 1997 conference planning groups.

Practice Guidelines in Occupational Medicine:

In 1994, we undertook a survey of provincial medical associations and registrars regarding existing documentation in key areas of occupational medicine practice. The results and collected documents were presented at the 1995 Toronto Conference. Three working groups will further research, review and summarize the documentation on the following topics:

- Acute Low Back Pain and Return to Work Planning (contact: B. Gascon)

- Reproductive and Development Hazards: Fitness to Work (contact: D. Johnston, K. Corbet)
- Confidentiality of Medical Information and Records (contact: R. Kosnik, C. O'Shea)

For each of these areas, the groups have been asked to recommend whether an existing guideline be adopted, or alternatively, that OEMAC should undertake to modify or develop a new guideline. Susan Beardall with the Clinical Practice Guidelines Project of the Canadian Medical Association has been of considerable help by providing information on the methods and resources required for practice guidelines. We hope that bibliographies and recommendations will be available for members at the 1996 St. John's Conference.

In regards to confidentiality, concerns arose when the Ontario College expressed their position that medical fitness to work opinions could not be released to employers without the express consent of workers. Several of our members felt this could pose a dilemma when a worker's return to work could place themselves or others at imminent risk of illness or injury. To gain perspective, we wrote to all provincial colleges on this matter; responses will be forwarded to the guidelines working group as they are received, and a letter to the Ontario College prepared.

*Assistant Professor, Department of Community Health Sciences, The University of Calgary.

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OCCUPATIONAL AND ENVIRONMENTAL MEDICAL ASSOCIATION OF CANADA

The Occupational and Environmental Medical Association of Canada (OEMAC) can trace its beginning to the early 1940's. At that time two groups of occupational physicians, The Ontario Section of Industrial Medicine and the Industrial Medical Association of the Province of Québec, joined forces for combined annual conferences held alternately in each province. Annual meetings followed this format for nearly

forty years. During this period the names of both organizations were changed, one to the Section on Occupational Health of the Ontario Medical Association, and the other to l'Association des médecins du travail du Québec.

These early meetings provided educational opportunities and social contacts, and eventually attracted physicians from other parts of Canada. There developed also a concern that not enough was being done to advance the profession of occupational medicine. At the same time, governments and universities were talking of moving into this field but were not involving experienced occupational physicians.

In the early 1970's, several senior occupational physicians formed an ad hoc group with the blessing of the two provincial associations. Out of this came the first national grouping called the Canadian Council of Occupational Medicine (CCOM), and all provinces and the territories were asked to send a representative to the annual business meetings. As membership grew, a formal decision was made to make the annual Ontario-Québec meeting a national event. The name chosen was the Occupational Medical Association of Canada (OMAC). In 1983, OMAC held its first annual meeting and national scientific conference. By 1985, OMAC was federally incorporated as a non-profit organization with Constitution and By-laws in place. In 1994, the name was changed to Occupational and Environmental Medical Association of Canada (OEMAC).

OMAC (and its predecessor CCOM) worked hard to become the voice of occupational medicine in Canada. In 1980, with funds from CCOM, the Canadian Board of Occupational Medicine (CBOM) was established to certify occupational medicine practitioners through a formal examination procedure. As well, OMAC/CBOM lobbied the Royal College of Physicians and Surgeons of Canada and succeeded in having occupational medicine recognized as a speciality with the first examinations held in 1988.

CERTIFICATION EXAMINATIONS IN OCCUPATIONAL MEDICINE

- 1997 -

The Canadian Board of Occupational Medicine is accepting **new** applications for examinations leading to Certification (CCBOM) and Associate Membership (ACBOM) to be held in Vancouver in September 1997.

Physicians currently in the full or part-time practice of occupational medicine may be eligible to sit these exams which are offered in English and French.

For further information contact:
CBOM Secretariat
46-1040 Riverside Drive
London, Ontario, N6H 5C8
Tel: (519) 472-6286 or
Fax: (519) 472-1637

**Application deadline for 1997:
September 30, 1996**

OEMAC is a member of the Committee of Affiliated Societies of the Canadian Medical Association. The Royal College of Physicians and Surgeons of Canada has recognized OEMAC as the National Specialty Society for occupational medicine.

For more information please contact:

Lise Jamieson
OEMAC Office Manager
London, Ontario
Phone: (510) 439-7970
Fax: (519) 439-8840

* * *

CANADIAN BOARD OF OCCUPATIONAL MEDICINE

GENERAL INFORMATION AND REGULATIONS ON TRAINING REQUIREMENTS AND EXAMINATIONS (Revised 1995)

The Canadian Board of Occupational Medicine (CBOM) was incorporated in 1980 to "encourage the study, improve the practice, and elevate the standards of occupational medicine throughout Canada."

In order to recognize those physicians who have distinguished themselves in the practice of occupational medicine, three methods were devised:

(a) Certification

Certification (CCBOM) is granted to those physicians whose training and experience in occupational medicine meet the standards of the Board and who have passed an examination of the Board.

(b) Associate Membership

Associate Membership (ACBOM) recognizes those physicians in the part-time practice of occupational medicine whose training and experience in occupational medicine meet the standards of the Board and who have passed an examination of the Board.

(c) Fellow Emeritus

Fellow Emeritus status is granted to those physicians who retire from active practice after making an outstanding contribution to the practice of occupational medicine.

In occupational medicine, as in other fields, it is believed that an incentive for attaining higher qualifications will lead to higher standards of service to the public.

Assessment of Eligibility

Applicants should study carefully the eligibility requirements before requesting a review of their qualifications for admission. A fee is charged, which must accompany the application, and is not refundable. An assessment is valid for three years; application forms may be obtained from the Board office. All candidates require a medical qualification acceptable to the Canadian Board of Occupational Medicine, and a licence to practise medicine in a Canadian province or territory.

A. Certificate (CCBOM)

A clinical internship of one year or more. A minimum of five years (or the equivalent thereof) experience in the practice of occupational medicine. A maximum of two years residency or other approved academic post-graduate work in areas relevant to the practice of occupational medicine, may be credited towards this time requirement.

Candidates will be required to provide information about their Continuing Medical Education (CME) experience during recent years. In this context, relevant CME Experience in general medicine may be acceptable. At the discretion of the Membership Committee, relevant CME experience may be credited towards a maximum of one year of the full-time equivalency referred to above. Credit may also be awarded to teaching experience in the field of occupational medicine.

Applicants shall either be currently employed in the full-time practice of occupational medicine, or if working on a part-time basis, shall spend no less than fifteen hours per week in the practice of occupational medicine.

B. Associate (ACBOM)

A clinical internship of one year. A minimum of three years practice, e.g., six years of occupational medicine practised 50% of the time or twenty years of occupational medicine practised 15% of the time would provide the required three years

experience. To be eligible, the applicant must be practising occupational medicine at least 15% of available practice time. Practice time equivalent up to one year will be awarded for:

- an academic year in occupational medicine,

- a year of supervised practice in occupational medicine,

- related residencies, postgraduate diplomas in occupational health, and other qualifications considered to be relevant to occupational medicine.

Candidates will be required to provide information about their Continuing Medical Education (CME) experience during recent years. In this context, relevant CME experience in general medicine may be acceptable. At the discretion of the Membership Committee, relevant CME experience may be credited towards a maximum of one year of the full-time equivalency referred to above.

Examinations

For both the CCBOM and the ACBOM examinations, a candidate is required to prepare a dissertation on a topic chosen by the candidate from a list provided by the Chair of the Examinations Committee. The standard for the CCBOM dissertation is that of an MSc level thesis. After the dissertation has been received by the Chair, the candidate will be called to an oral examination lasting approximately two hours. The oral examination will relate to the dissertation and to the principles and practices of occupational medicine. Study guides will be provided.

A similar procedure is followed for the ACBOM examination, but requirements for the dissertation and the oral examination will be appropriate to the experience of the candidate.

Examinations for both CCBOM and ACBOM take place in the fall of each year. Candidates who wish to be examined in the following year should send their applications to the Board no later than September 30 of the year prior to examination; notice of eligibility will be sent no later than November and will include a list of dissertation topics from the Chair of the Examinations Committee. Candidates who wish to take either of the examinations must

inform the Board of their intent no later than January 31 of the year in which the examination is to take place. Dissertations must be received by the Chair of the Examinations Committee no later than June 30 of the year in which the examination is to take place.

Requests for information or for application forms should be directed to:

Canadian Board of Occupational
Medicine
#46, 1040 Riverside Drive
London, Ontario
N6H 5C8
Tel (519) 472-6286
Fax (519) 472-1637

UPCOMING CONFERENCES

CANADA:

**14th Annual General Meeting and Scientific Conference of Occupational and Environmental Medical Association of Canada (OEMAC), Delta St. John's (Nfld.) Hotel and Conference Centre
June 8-12, 1996**

Contact:
Dr. Ciaran O'Shea
Phone: (709) 722-4074
Fax: (709) 722-6801

**8th International Society for Environmental Epidemiology (ISEE) Annual Conference
"Environmental Exposures, Risks and Values: Setting Priorities in Epidemiology"
University of Alberta, Edmonton, Alberta
August 17-21, 1996**

Contact:
Dr. Colin L. Soskolne
ISEE '96 Conference Chair
University of Alberta
13-103 Clinical Sciences Building
Edmonton, Alberta T6G 2G3
Phone: (403) 492-6013
Fax: (403) 492-0364
E-mail: colin:soskolne@ualberta.ca

**28th Annual Conference of the Human Factors Association of Canada. Evidence-based Ergonomics/Arguments pour l'ergonomie - Valhalla Inn, Kitchener
October 23-26, 1996**

Contact:
Phone: (905) 567-7193
Fax: (705) 567-7191

INTERNATIONAL:

**25th International Congress on Occupational Health, Stockholm, Sweden
September 15-20, 1996**

Contact:
ICOH Congress
National Institute of Occupational Health
Fax: (+46) 8-82 05 56

**7th International Conference on Indoor Air Quality and Climate, Nagoya, Japan
July 21-26, 1996**

Contact:
Mr. M. Kato
Japan Convention Services, Inc.
Fax: (+81) 52-933-0644