



Veille documentaire Médecine du travail du personnel hospitalier

- Literature Follow-up : occupational health for Healthcare Workers -



Avril 2006

Objectif

L'objectif de ce travail est de fournir un outil de veille aux médecins du travail concernant les nouvelles connaissances scientifiques relative à la santé au travail des personnels de soins. La priorité est donnée aux documents en français. Ce travail est réalisé par les documentalistes de l'[équipe CISMef](#) et le service de médecine du travail et de pathologie professionnelle du CHU de Rouen (Dr JF Gehanno), dans le cadre d'un projet financé par la [CNRACL](#) (Caisse Nationale de Retraites des Agents des Collectivités Locales). Les résultats proposés sont issus de la surveillance mensuelle d'une sélection de périodiques, de sites Internet d'organismes spécialisés et des bases de données [CISMef](#), [PubMed](#) et [BDSP](#).

La veille juridique est réalisée par l'[ISTNF](#) (Institut de santé du nord de la France).

Pour obtenir un document, vous pouvez vous adresser à la [BIUM](http://www.bium.univ-paris5.fr/) (<http://www.bium.univ-paris5.fr/>) ou à l'[INIST-CNRS](http://www.inist.fr/) (<http://www.inist.fr/>).

Sommaire

1. Allergies	p.3
2. Bonnes pratiques	
3. Conditions de travail et santé psychologique	p.3
4. Hygiène et gestion des risques	p.4
5. Infections nosocomiales	
6. Risques biologiques	p.5
6.1 Accident d'exposition au sang	p.5
6.2 Contamination soignant-soigné	
6.3 Transmission aérienne	
6.4 Transmission de contact	
6.5 Vaccination	
7. Risques chimiques	p.7
8. Risques physiques	p.8
8.1 Rayonnements ionisants	p.8
8.2 Troubles musculo-squelettiques	p.10
9. Violence	p.11
10. Autres	p.12
Veille juridique	

1. Allergies

- *Documents en anglais* :

Occup Med (Lond). 2005 Sep;55(6):501-3.

Impact of a latex policy on an acute NHS hospital: an audit.

Bell L, Watt AD, Straine L.

Occupational Health, Navy House, Fife, UK. Linda.Bell@lanarkshire.scot.nhs.uk

BACKGROUND: A latex policy was introduced in 1999 in a large, acute UK hospital. AIM: To audit the impact of the policy. METHOD: Semi-structured interview of the managers of 40 wards between April 2001 and July 2002. RESULTS: A policy was available on only 26 (65%) of the wards. Compliance with the policy was limited to 20 (50%) wards. CONCLUSIONS: Compliance with the policy was low in the hospital. Staff and patients are being unnecessarily exposed to the hazard of latex.

MeSH Terms: Cohort Studies - Gloves, Protective/utilization* - Guideline Adherence* - Health Policy* - Hospitals, Teaching/organization & administration - Humans - Interviews - Latex/adverse effects* - Medical Staff, Hospital - Occupational Exposure/prevention & control* - State Medicine Substances: Latex

2. Bonnes pratiques

3. Conditions de travail et santé psychologique

- *Documents en anglais* :

Br J Psychiatry. 2006 Jan;188:75-80.

Mental health, burnout and job satisfaction among mental health social workers in England and Wales.

Evans S, Huxley P, Gately C, Webber M, Mears A, Pajak S, Medina J, Kendall T, Katona C.

Box 032, Social Work and Social Care Section, Health Services Research Department, David Goldberg Centre, De Crespigny Park, Denmark Hill, London SE5 8AF, UK. S.Evans@iop.kcl.ac.uk

BACKGROUND: Previous research suggests that social workers experience high levels of stress and burnout but most remain committed to their work. AIMS: To examine the prevalence of stress and burnout, and job satisfaction among mental health social workers (MHSWs) and the factors responsible for this. METHOD: A postal survey incorporating the General Health Questionnaire, Maslach Burnout Inventory, Karasek Job Content Questionnaire and a job satisfaction measure was sent to 610 MHSWs in England and Wales. RESULTS: Eligible respondents (n=237) reported high levels of stress and emotional exhaustion and low levels of job satisfaction; 111 (47%) showed significant symptomatology and distress, which is twice the level reported by similar surveys of psychiatrists. Feeling undervalued at work, excessive job demands, limited latitude in decision-making, and unhappiness about the place of MHSWs in modern services contributed to the poor job satisfaction and most aspects of burnout. Those who had approved social worker status had greater dissatisfaction. CONCLUSIONS: Stress may exacerbate recruitment and retention problems. Employers must recognise the demands placed upon MHSWs and value their contribution to mental health services.

MeSH Terms: Burnout, Professional/epidemiology - Burnout, Professional/etiology* - Community Mental Health Services* - England/epidemiology - Female - Health Personnel/psychology* - Humans - Job Satisfaction* - Male - Middle Aged - Questionnaires - Research Support, Non-U.S. Gov't - Social Work* - Stress, Psychological - Wales/epidemiology

Acad Med. 2006 Apr;81(4):354-73.

Systematic review of depression, anxiety, and other indicators of psychological distress among u.s. And canadian medical students.

Dyrbye LN, Thomas MR, Shanafelt TD.

200 First Street SW, Rochester, MN 55906. dyrbye.liselotte@mayo.edu

Purpose To systematically review articles reporting on depression, anxiety, and burnout among U.S. and Canadian medical students. Method Medline and PubMed were searched to identify peer-reviewed English-language studies published between January 1980 and May 2005 reporting on depression, anxiety, and burnout among U.S. and Canadian medical students. Searches used combinations of the Medical Subject Heading terms medical student and depression, depressive

disorder major, depressive disorder, professional burnout, mental health, depersonalization, distress, anxiety, or emotional exhaustion. Reference lists of retrieved articles were inspected to identify relevant additional articles. Demographic information, instruments used, prevalence data on student distress, and statistically significant associations were abstracted. Results The search identified 40 articles on medical student psychological distress (i.e., depression, anxiety, burnout, and related mental health problems) that met the authors' criteria. No studies of burnout among medical students were identified. The studies suggest a high prevalence of depression and anxiety among medical students, with levels of overall psychological distress consistently higher than in the general population and age-matched peers by the later years of training. Overall, the studies suggest psychological distress may be higher among female students. Limited data were available regarding the causes of student distress and its impact on academic performance, dropout rates, and professional development. Conclusions Medical school is a time of significant psychological distress for physicians-in-training. Currently available information is insufficient to draw firm conclusions on the causes and consequences of student distress. Large, prospective, multicenter studies are needed to identify personal and training-related features that influence depression, anxiety, and burnout among students and explore relationships between distress and competency.

4. Hygiène et gestion des risques

- Documents en français :

GERES, 27/02/2006

Evaluation d'une seringue de sécurité pour la réalisation des tests tuberculiniques BD SafetyGlide TNT Tuberculine

G. Pellissier, F. Goyer, C. Sadorge, D. Abiteboul, E. Bouvet, et le GERES

L'injection est la première tâche en cause dans les accidents d'exposition au sang (AES) déclarés dans les établissements de santé. Les Précautions Standard ne sont pas suffisamment respectées lors de ce geste, vécu comme un geste banal et bien moins dangereux que les autres gestes invasifs. Des matériels protégés répondant aux différentes spécificités de l'injection sont disponibles, susceptibles de diminuer les expositions. Si la priorité est de sécuriser les gestes en intravasculaire et, dans le cadre de l'injection, les gestes en sous-cutané (SC) et en intra-musculaire (IM), l'intérêt de sécuriser l'ensemble des gestes d'injection est réel. Un dispositif BD SafetyGlide Insuline identique à celui testé a ainsi été validé pour l'injection SC d'insuline dans une évaluation antérieure. La seringue BD SafetyGlide TNT Tuberculine évaluée, destinée à la réalisation des tests tuberculiniques par voie intradermique (IDR), répond aux exigences des soignants en terme d'ergonomie et de sécurité de l'utilisateur. La plupart des investigateurs la préfèrent à une seringue non protégée et souhaitent en disposer par la suite pour les IDR.

<http://www.geres.org/docpdf/BDsafetyGlide06.pdf>

- Documents en anglais :

J Hosp Infect. 2006 Feb;62(2):195-9. Epub 2005 Sep 8.

Using an integrated infection control strategy during outbreak control to minimize nosocomial infection of severe acute respiratory syndrome among healthcare workers.

Yen MY, Lin YE, Su IJ, Huang FY, Huang FY, Ho MS, Chang SC, Tan KH, Chen KT, Chang H, Liu YC, Loh CH, Wang LS, Lee CH.

Department of Infectious Diseases, Kaohsiung Veterans General Hospital, Kaohsiung, Taiwan, ROC.

Healthcare workers (HCWs) are at risk of acquiring severe acute respiratory syndrome (SARS) while caring for SARS patients. Personal protective equipment and negative pressure isolation rooms (NPIRs) have not been completely successful in protecting HCWs. We introduced an innovative, integrated infection control strategy involving triaging patients using barriers, zones of risk, and extensive installation of alcohol dispensers for glove-on hand rubbing. This integrated infection control approach was implemented at a SARS designated hospital ('study hospital') where NPIRs were not available. The number of HCWs who contracted SARS in the study hospital was compared with the number of HCWs who contracted SARS in 86 Taiwan hospitals that did not use the integrated infection control strategy. Two HCWs contracted SARS in the study hospital (0.03 cases/bed) compared with 93 HCWs in the other hospitals (0.13 cases/bed) during the same three-week period. Our strategy appeared to be effective in reducing the incidence of HCWs contracting SARS. The advantages included rapid implementation without NPIRs, flexibility to transfer patients, and reinforcement for HCWs to comply with infection control procedures, especially handwashing. The efficacy and low cost are major advantages, especially in countries with large populations at risk and fewer economic resources.

MeSH Terms: Cross Infection/epidemiology - Cross Infection/prevention & control* - Cross

Infection/transmission - Disease Outbreaks* - Disease Transmission, Patient-to-Professional/prevention & control* - Female - Health Personnel* - Hospitals, Military - Humans - Infection Control/methods* - Infection Control/organization & administration - SARS Virus - Severe Acute Respiratory Syndrome/epidemiology* - Severe Acute Respiratory Syndrome/prevention & control - Severe Acute Respiratory Syndrome/transmission - Taiwan/epidemiology

5. Infections nosocomiales

6. Risques biologiques

- Documents en français :

In NOSO - info, vol. IX N 4, p.17-19, 2005

Gants de protection : malédiction ou bénédiction ?

Frank Van Laer, Hilde Jansens, Emiel Goovaerts, Service d'hygiène hospitalière (UZA).

Article de périodique

Accès au texte intégral : <http://www.md.ucl.ac.be/nosoinfo/Noso-Info-0405.pdf>

- Documents en anglais :

Respir Res. 2005 Apr 14;6(1):35.

Occupational risk of tuberculosis transmission in a low incidence area.

Diel R, Seidler A, Nienhaus A, Rusch-Gerdes S, Niemann S.

School of Public Health, University of Dusseldorf, Germany. Roland.Diel@harburg.hamburg.de

BACKGROUND: To investigate the occupational risk of tuberculosis (TB) infection in a low-incidence setting, data from a prospective study of patients with culture-confirmed TB conducted in Hamburg, Germany, from 1997 to 2002 were evaluated. METHODS: M. tuberculosis isolates were genotyped by IS6110 RFLP analysis. Results of contact tracing and additional patient interviews were used for further epidemiological analyses. RESULTS: Out of 848 cases included in the cluster analysis, 286 (33.7%) were classified into 76 clusters comprising 2 to 39 patients. In total, two patients in the non-cluster and eight patients in the cluster group were health-care workers. Logistic regression analysis confirmed work in the health-care sector as the strongest predictor for clustering (OR 17.9). However, only two of the eight transmission links among the eight clusters involving health-care workers had been detected previously. Overall, conventional contact tracing performed before genotyping had identified only 26 (25.2%) of the 103 contact persons with the disease among the clustered cases whose transmission links were epidemiologically verified. CONCLUSION: Recent transmission was found to be strongly associated with health-care work in a setting with low incidence of TB. Conventional contact tracing alone was shown to be insufficient to discover recent transmission chains. The data presented also indicate the need for establishing improved TB control strategies in health-care settings.

MeSH Terms: Adult - Comorbidity - Disease Transmission, Horizontal/statistics & numerical data* - Female - Germany/epidemiology - Health Personnel/statistics & numerical data* - Humans - Incidence - Male - Occupational Diseases/epidemiology* - Occupational Exposure/statistics & numerical data* - Research Support, Non-U.S. Gov't - Risk Assessment/methods* - Risk Factors

6.1 Accident d'exposition au sang

- Documents en français :

BEH - Bulletin Epidémiologique Hebdomadaire, n 46-47, 2005

Analyse des motifs de sollicitation de VIH Info soignants en France, 1998-2003.

Numéro thématique. Infection VIH-sida en France : vision d'ensemble et spécificités des départements français d'Amérique.

KUDJAWU (Y.), OHAYON (M.)

Sida Info Service. Paris. France

En France, l'association Sida info service (Sis) a développé VIH info soignants (Vis) qui a pour vocation d'écouter, d'informer, d'orienter, de soutenir les personnels de santé (PS) confrontés à la problématique VIH en terme de prise en charge des personnes vivant avec le VIH/sida, d'accueil et de prise en charge des accidents d'exposition au sang (AES). Cette étude, présentée dans cet article, identifie les catégories de PS ayant sollicité Vis, et analyse les motifs de cette sollicitation entre 1998 et 2003. (Extrait).

VIH, sida, accès information, profession santé, France, service accueil écoute téléphonique, exposition sang

http://www.invs.sante.fr/beh/2005/46_47/index.htm

- *Documents en anglais* :

J Hosp Infect. 2006 Feb;62(2):166-73. Epub 2005 Oct 27.

Effectiveness of protocols for preventing occupational exposure to blood and body fluids in Dutch hospitals,

van Gemert-Pijnen J, Hendrix MG, Van der Palen J, Schellens PJ.

Department of Communication Studies, Faculty of Behavioural Sciences, University of Twente, Enschede, The Netherlands. j.vangemert-pijnen@utwente.nl

Compliance of different healthcare workers (HCWs) (nurses, physicians, laboratory technicians and cleaners) with protocols to prevent exposure to blood and body fluids (BBF) was studied. Questionnaires were used to assess perception of risks, familiarity with protocols, motivation and actual behaviour. Performance of the protocols in practice was also tested. The practical test provided more reliable results than the questionnaire. HCWs overestimated their knowledge and skills, and compliance was influenced by risk perception. HCWs encountered problems with comprehension, acceptability and applicability of protocols, especially for post-exposure precautions. Protocols are not tailored to the differences in knowledge, risk perception and practical needs of different professional groups, probably because HCWs have rarely been involved in writing them and they are governed more by legal considerations than applicability. Most HCWs experienced a lack of organizational support to aid compliance. To improve compliance, we recommend information and training on risk management and individual responsibilities regarding the safety of coworkers and patients, participation of HCWs in protocol development, and support of management to avoid reversion to previous habitual behaviour.

MeSH Terms: Accidents, Occupational/prevention & control - Blood-Borne Pathogens* - Body Fluids/virology* - Disease Transmission, Patient-to-Professional/prevention & control - HIV Infections/prevention & control - Health Knowledge, Attitudes, Practice* - Health Personnel* - Hepatitis B/prevention & control - Hepatitis C/prevention & control - Hospitals, General - Hospitals, Teaching - Humans - Infection Control/methods* - Netherlands - Occupational Exposure/prevention & control* - Questionnaires

J Hosp Infect. 2006 Mar 13; [Epub ahead of print]

Risk of needlestick injuries by injection pens.

Pellissier G, Miguères B, Tarantola A, Abiteboul D, Lolom I, Bouvet E; the GERES Group.

Groupe d'Etude sur le Risque d'Exposition des Soignants aux agents infectieux (GERES), Faculte de Medecine X. Bichat, Paris Cedex, France.

Injection pens are used by patients when auto-administering medication (insulin, interferon, apokinon etc.) by the subcutaneous route. The objective of this study was to evaluate the rate of injection pen use by healthcare workers (HCWs) and the associated risk of needlestick injuries to document and compare injury rates between injection pens and subcutaneous syringes. A one-year retrospective study was conducted in 24 sentinel French public hospitals. All needlestick injuries linked to subcutaneous injection procedures, which were voluntarily reported to occupational medicine departments by HCWs between October 1999 and September 2000, were documented using a standardized questionnaire. Additional data (total number of needlestick injuries reported, number of subcutaneous injection devices purchased) were collected over the same period. A total of 144 NSIs associated with subcutaneous injection were reported. The needlestick injury rate for injection pens was six times the rate for disposable syringes. Needlestick injuries with injection pens accounted for 39% of needlestick injuries linked with subcutaneous injection. In all, 60% of needlestick injuries with injection pens were related to disassembly. Injection pens are associated with needlestick injuries six times more often than syringes. Nevertheless, injection pens have been shown to improve the quality of treatment for patients and may improve treatment observance. This study points to the need for safety-engineered injection pens.

Healthc Q. 2006;9(1):68-70, 4.

Toronto hospital reduces sharps injuries by 80%, eliminates blood collection injuries. A case study: Toronto East General Hospital pioneers healthcare worker safety.

Visser L.

Planning, Partnerships and Public Relations at Toronto East General Hospital.

Needlestick and other sharps injuries are a key Canadian public health issue, affecting 70,000 people per year and costing some dollar 140 million. A safety program at Toronto East General Hospital--focusing on blood collection and patient injection--achieved an 80% reduction in injuries within one year (from 41 in 2003 to eight in 2004), with blood collection injuries eliminated entirely.

MeSH Terms: Blood Specimen Collection/instrumentation - Blood-Borne Pathogens - Equipment Design - Hospitals, Urban/organization & administration* - Hospitals, Urban/standards - Humans - Infusions, Intravenous/instrumentation - Injections/instrumentation - Inservice Training - Needles - Needlestick Injuries/prevention & control* - Nursing Staff, Hospital/education - Ontario - Organizational Case Studies - Patient Care - Personnel, Hospital/education - Safety Management* - Technology, Medical/education

6.2 Contamination soignant-soigné

6.3 Transmission aérienne

6.4 Transmission de contact

6.5 Vaccination

7. Risques chimiques

- Documents en français :

In Travail et sécurité, n 661, p.34-35, avril 2006

Anticancéreux : Le confinement pour la sécurité de tous

Jean-Paul Richez

Article de périodique

Accès au texte intégral : [http://www.travail-et-securite.fr/inrs-pub/inrs01.nsf/IntranetObject-accesParReference/Pdf%20TS661page34/\\$File/TS661page34.pdf](http://www.travail-et-securite.fr/inrs-pub/inrs01.nsf/IntranetObject-accesParReference/Pdf%20TS661page34/$File/TS661page34.pdf)

- Documents en anglais :

J Oncol Pharm Pract. 2005 Jun;11(2):69-78.

Are health care providers who work with cancer drugs at an increased risk for toxic events? A systematic review and meta-analysis of the literature.

Dranitsaris G, Johnston M, Poirier S, Schueller T, Milliken D, Green E, Zanke B.

Cancer Care Ontario, 429 Danforth Ave, Suite 476, Toronto, Canada, M4K 1P1. gdranit@ca.inter.net

OBJECTIVE: A systematic review and meta-analysis was conducted to test the hypothesis that oncology health care workers are at an increased risk of cancer, reproductive complications and acute toxic events. **DESIGN:** A structured literature search of Index Medicus/ MEDLINE, CINAHL, EMBASE, the Cochrane Database of Systematic Reviews and Healthstar was performed from 1966 to December 2004 for human epidemiological studies evaluating the risk of toxic events in health care workers exposed to cytotoxic drugs. Raw data and adjusted odds ratios (OR) reported in eligible studies were combined using a random effects model to calculate point estimates and 95% confidence intervals (CI) for each potential risk outcome. **MAIN OUTCOME MEASURES:** Adjusted OR for congenital malformations, stillbirths and spontaneous abortions among health care workers exposure to cytotoxic agents compared to a nonexposed control group. **RESULTS:** The systematic review identified 14 studies evaluating the outcomes of interest, seven of which were suitable for statistical pooling. Due to lack of evidence, we were unable to estimate a pooled OR for the risk of cancer and acute toxic events. However, no significant association was detected between exposure to cytotoxic drugs and; congenital malformations (OR = 1.64; 95% CI: 0.91-2.94) and stillbirths (OR = 1.16; 95% CI: 0.73-1.82). In contrast, an association was identified between exposure to chemotherapy and spontaneous abortions (OR = 1.46; 95% CI: 1.11-1.92). **CONCLUSIONS:** The results of this systematic review identified a small incremental risk for spontaneous abortions in female staff working with cytotoxic agents. Health policy decision makers should effectively communicate the magnitude of this risk to their staff and implement cost effective interventions for its reduction or elimination.

MeSH Terms: Abortion, Spontaneous/chemically induced - Antineoplastic Agents/adverse effects* - Female - Fetal Death/chemically induced - Health Personnel* - Humans - Male -

Neoplasms/chemically induced* - Occupational Diseases/chemically induced - Occupational Exposure/prevention & control - Pregnancy - Pregnancy, Ectopic/chemically induced - Research Support, Non-U.S. Gov't - Risk Factors - Risk Management/methods
Substances: Antineoplastic Agents
Publication Types: Meta-Analysis, Review

8. Risques physiques

- *Documents en anglais :*

AAOHN J. 2006 Jan;54(1):24-31.

Factors associated with work-related injury among hospital employees: a case-control study.

Thomas NI, Brown ND, Hodges LC, Gandy J, Lawson L, Lord JE, Williams DK.

Jacksonville Neurology Clinic, North Little Rock, AR, USA.

The Central Arkansas Veterans Healthcare System (CAVHS) spends \$1 million annually on occupational illnesses and injuries. To address the problem of injuries among hospital employees, a retrospective case-control study was conducted to examine select risk factors for work-related injuries (WRI) among CAVHS employees. Study methods included a review of employee health charts and computer and manual databases from 1997 to 2002 (N = 2,050). The researchers found that WRI increased with age; WRI occurred more often in women than in men; WRI was greater among maintenance and custodial staff compared to direct caregivers, and less among clerical staff; WRI occurred less often in part-time than full-time staff; and WRI increased with increasing body mass index. Developing standards, guidelines, and policies for preplacement screening, preventive measures, training, and education may help to minimize WRI and associated costs.

MeSH Terms: Accidents, Occupational/statistics & numerical data* - Adult - Arkansas/epidemiology - Case-Control Studies - Female - Humans - Male - Middle Aged - Personnel, Hospital/statistics & numerical data* - Research Support, Non-U.S. Gov't - Risk Factors - United States/epidemiology - United States Department of Veterans Affairs/statistics & numerical data* - Wounds and Injuries/epidemiology*

8.1 Rayonnements ionisants

- *Documents en français :*

In DMT (Documents pour le médecin du travail), n 105, 1er trimestre 2006

Médecine et rayonnements ionisants : fiches d'aide à l'analyse des risques en médecine nucléaire

GAURON C.

À la suite d'une enquête menée en Ile-de-France, un groupe de travail multidisciplinaire a élaboré des fiches d'aide à l'analyse des risques en radioprotection dans le domaine médical par types d'activité. Cette deuxième série de fiches (première série publiée dans le n° 100 de la revue Documents pour le Médecin du Travail) présente une synthèse des connaissances utiles pour les principales applications de la médecine nucléaire, ainsi que la réglementation en vigueur.

Ces fiches de radioprotection en médecine nucléaire décrivent :

- les textes applicables ;
- le diagnostic in vivo, avec et sans TEP (tomographie par émission de positons) ;
- la thérapeutique sans hospitalisation ;
- la thérapeutique avec hospitalisation ;
- la prise en charge des patients sortant d'une unité de médecine nucléaire.

Dossier médico-technique

Accès au texte intégral : [http://www.dmt-prevention.fr/inrs-pub/inrs01.nsf/IntranetObject-accesParReference/TC%20106/\\$File/TC106.pdf](http://www.dmt-prevention.fr/inrs-pub/inrs01.nsf/IntranetObject-accesParReference/TC%20106/$File/TC106.pdf)

- *Documents en anglais :*

Occup Med (Lond). 2005 Sep;55(6):498-500.

Increased cancer risk among surgeons in an orthopaedic hospital.

Mastrangelo G, Fedeli U, Fadda E, Giovanazzi A, Scozzato L, Saia B.

Department of Environmental Medicine and Public Health, University of Padua, Italy. giuseppe.mastrangelo@unipd.it

BACKGROUND: Five cancer cases over 7 years were reported in a small orthopaedic hospital where radiation protection practice was poor. AIM: To investigate whether workers subject to routine radiation dosimetric assessment in that hospital had an increased cancer risk. METHODS: One hundred and

fifty-eight workers subject to routine dose assessment and 158 age-sex-matched unexposed workers were questioned about cancer occurrence. All tumours were analysed as a single diagnostic category. RESULTS: Cumulative 1976-2000 cancer incidence was 29 (9/31), 6 (8/125) and 4% (7/158) in orthopaedics, exposed other than orthopaedics, and unexposed workers, respectively. At logistic regression analysis, working as orthopaedic surgeon significantly ($P < 0.002$) increased the risk of tumours. CONCLUSION: These findings caution against surgeons' underestimation of the potential radiation risk and insufficient promotion of safe work practices by their health care institutions. MeSH Terms: Epidemiologic Methods - Female - Humans - Incidence - Male - Medical Staff, Hospital* - Neoplasms, Radiation-Induced/etiology* - Occupational Diseases/etiology* - Occupational Exposure/adverse effects* - Orthopedics* - Questionnaires - Radiation Dosage - Risk Factors

Postgrad Med J. 2005 Oct;81(960):660-2.

Radiation exposure to personnel performing endoscopic retrograde cholangiopancreatography.

Naidu LS, Singhal S, Preece DE, Vohrah A, Loft DE.

Department of Gastroenterology, University Hospitals Coventry and Warwickshire NHS Trust, UK. srinaidu@hotmail.com

BACKGROUND: Endoscopic retrograde cholangiopancreatography (ERCP) relies on the use of ionising radiation but risks to operator and patient associated with radiation exposure are unclear. The aim of this prospective study was to estimate the radiation dose received by personnel performing fluoroscopic endoscopic procedures, mainly ERCP. METHODS: Consecutive procedures over a two month period were included. The use of thermoluminescent dosimeters to measure radiation exposure to the abdomen, thyroid gland, and hands of the operator permitted an estimation of the annual whole body effective dose equivalent. RESULTS: During the study period 66 procedures (61 ERCP) were performed and the estimated annual whole body effective dose equivalent received by consultant operators ranged between 3.35 and 5.87 mSv. These values are similar to those received by patients undergoing barium studies and equate to an estimated additional lifetime fatal cancer risk between 1 in 7000 and 1 in 3500. While within legal safety limits for radiation exposure to personnel, these doses are higher than values deemed acceptable for the general public. CONCLUSIONS: It is suggested that personnel as well as patients may be exposed to significant values of radiation during ERCP. The study emphasises the need to carefully assess the indication for, and to use measures that minimise radiation exposure during any fluoroscopic procedure.

MeSH Terms: Cholangiopancreatography, Endoscopic Retrograde/adverse effects* - Cholangiopancreatography, Endoscopic Retrograde/statistics & numerical data - Humans - Occupational Diseases/etiology* - Occupational Exposure/adverse effects - Personnel, Hospital* - Radiation Dosage - Radiation Protection - Risk Assessment - Risk Factors

Spine. 2005 Aug 15;30(16):1893-8.

Radiation exposure to the surgeon during fluoroscopically assisted percutaneous vertebroplasty: a prospective study.

Harstall R, Heini PF, Mini RL, Orlor R.

Department of Orthopaedic Surgery, Inselspital, University of Berne, Switzerland.

STUDY DESIGN: A prospective case control study design was conducted. OBJECTIVES: The purpose of the current study was to determine the intraoperative radiation hazard to spine surgeons by occupational radiation exposure during percutaneous vertebroplasty and possible consequences with respect to radiation protection. SUMMARY OF BACKGROUND DATA: The development of minimally invasive surgery techniques has led to an increasing number of fluoroscopically guided procedures being done percutaneously such as vertebroplasty, which is the percutaneous cement augmentation of vertebral bodies. METHODS: Three months of occupational dose data for two spine surgeons was evaluated measuring the radiation doses to the thyroid gland, the upper extremities, and the eyes during vertebroplasty. RESULTS: The annual risk of developing a fatal cancer of the thyroid is 0.0025%, which means a very small to small risk. The annual morbidity (the risk of developing a cancer including nonfatal ones) is 0.025%, which already means a small to medium risk. The dose for the eye lens was about 8% of the threshold dose to develop a radiation induced cataract (150 mSv); therefore, the risk is very low but not negligible. The doses measured for the skin are 10% of the annual effective dose limit (500 mSv) recommended by the ICRP (International Commission on Radiologic Protection); therefore, the annual risk for developing a fatal skin cancer is very low. CONCLUSION: While performing percutaneous vertebroplasty, the surgeon is exposed to a significant amount of radiation. Proper surgical technique and shielding devices to decrease potentially high morbidity are mandatory. Training in radiation protection should be an integral part of the education for all surgeons using minimally invasive radiologic-guided interventional techniques.

MeSH Terms: Aged - Aged, 80 and over - Arm/radiation effects - Case-Control Studies - Cataract/etiology - Eye/radiation effects - Female - Fluoroscopy*/adverse effects - Humans - Intraoperative Period - Male - Neoplasms, Radiation-Induced/etiology - Occupational Exposure* -

Orthopedic Procedures* - Physicians* - Prospective Studies - Radiation* - Radiation Dosage - Risk Assessment - Skin Neoplasms/etiology - Spine/surgery* - Surgery, Computer-Assisted* - Surgical Procedures, Minimally Invasive - Thyroid Gland/radiation effects - Thyroid Neoplasms/etiology

Injury. 2005 Dec;36(12):1416-20. Epub 2005 Jul 26.

Radiation protection for your hands.

Back DL, Hilton AI, Briggs TW, Scott J, Burns M, Warren P.

Royal National Orthopaedic Hospital, Orthopaedic, Brockley Hill, Stanmore Middlesex, Stanmore HA7 4LP, UK. diback@hotmail.com

A prospective clinical trial was performed to assess the suitability of a new type of sterilisable, user-friendly radiation protection glove. In a preliminary trial, we showed that the dominant hand of the primary operating orthopaedic surgeon receives the highest dose of radiation. During a 4-month period, 98 procedures were done requiring the use of an image intensifier. The doses of radiation to the dominant hand of the operating surgeon were reduced to less than the doses of radiation to the non-dominant hand. The glove was sterilisable, user-friendly and accepted by the majority of surgeons. It offers greater than 90% attenuation of X-rays and is superior to all other scatter gloves on the market.

MeSH Terms: Gloves, Protective* - Gloves, Surgical* - Humans - Occupational Diseases/prevention & control - Occupational Exposure/prevention & control* - Orthopedics* - Prospective Studies - Radiation Injuries/prevention & control - Radiation Protection/instrumentation* - Radiation Protection/methods - Radiographic Image Enhancement - Scattering, Radiation - Thermoluminescent Dosimetry
Publication Types: Clinical Trial

8.2 Troubles musculo-squelettiques

- Documents en français :

SOINS, n 700, p.55-56, 11/2005

Sécurité des professionnels de santé. 3/4 : prévenir les troubles musculo-squelettiques.

FABREGAS (Bernadette)

Regroupant un ensemble d'affections péri-articulaires, les troubles musculo-squelettiques (TMS) touchent les tissus mous des membres et du dos.

Connaître les risques permet de s'en prémunir et de mettre en place la démarche de prévention préconisée par l'Institut national de recherche et de sécurité (INRS).

hygiène & sécurité, profession santé, maladie professionnelle, lombalgie, arthropathie, prévention, fiche

- Documents en anglais :

J Occup Health. 2005 Nov;47(6):481-9.

Relationships between work-related factors and disorders in the neck-shoulder and low-back region among female and male ambulance personnel.

Aasa U, Barnekow-Bergkvist M, Angquist KA, Brulin C.

Centre for Musculoskeletal Research, University of Gavle, Sweden. uaa@hig.se

This cross-sectional study on a random sample of 1,500 ambulance personnel investigated the relationships between self-reported work-related physical and psychosocial factors, worry about work conditions, and musculoskeletal disorders among female and male ambulance personnel. Three different outcomes, complaints, activity limitation, and sick leave, for the neck-shoulder and low-back region, respectively, were chosen. Among the female personnel, physical demands was significantly associated with activity limitation in the neck-shoulder (OR 4.13) and low-back region (OR 2.17), and psychological demands with neck-shoulder (OR 2.37) and low-back (OR 2.28) complaints. Among the male personnel, physical demands was significantly associated with low-back complaints (OR 1.41) and activity limitation (OR 1.62). Psychological demands and lack of social support were significantly associated with neck-shoulder complaints (OR 1.86 and OR 1.58, respectively) and activity limitation (OR 3.46 and OR 1.71) as well as activity limitation due to low-back complaints (OR 2.22 and OR 1.63). Worry about work conditions was independently associated with activity limitation due to low-back complaints among the female (OR 5.28), and to both neck-shoulder and low-back complaints (OR 1.79 and OR 2.04, respectively) and activity limitation (OR 2.32 and OR 1.95) among the male personnel. In conclusion, the association patterns between physical and psychological demands and MSDs suggest opportunities for intervention.

MeSH Terms: Adult - Ambulances* - Cross-Sectional Studies - Emergency Medical Technicians* - Female - Humans - Low Back Pain/etiology* - Male - Middle Aged - Neck Pain/etiology* - Occupational Diseases/etiology* - Psychology - Shoulder Pain/etiology* - Sweden/epidemiology

Spine. 2005 Oct 15;30(20):2334-41.

Low back pain among nurses: a follow-up beginning at entry to the nursing school.

Videman T, Ojarvi A, Riihimaki H, Troup JD.

University of Alberta, Edmonton, Alberta, Canada. tapio.videman@ualberta.ca

STUDY DESIGN: A prospective cohort. OBJECTIVES: To investigate the prevalence of back pain from entering the nursing school through 5 years in nursing and the determinants and modifiers of back pain and disability. SUMMARY OF BACKGROUND DATA: Physical loading, psychologic characteristics, and several other factors have been associated with back pain at work in earlier studies. Because of the lack of the prework entry morbidity data, the nature of the associations between these exposures and the symptoms is unclear. That previous back pain is a predictor of later pain underlines the importance to have pre-employment data in investigations of the role of exposures at work. METHODS: Female nursing students (n = 174) were followed for 7.5 years. Data on constitutional and behavioral factors, occupational exposures, and back-related symptoms and disability were collected. Back pain was grouped into "sciatic," "sudden," or "other" and related disability. RESULTS: The lifetime cumulative prevalence of back pain increased from 31% at entry to nursing school to 72% at the end of the school and further to 82% after 5 years as a nurse. The 1-year prevalence of any back pain was 54% for the first year in nursing school, 57% for the first year as a nurse, and 64% for the fifth year as a nurse. In multivariate analyses, other back pain and related disability as a nurse were associated with back pain history at the entry to nursing school (odds ratio, 7.1; 95% confidence interval, 1.5-34; and 3.6; 1.2-11, respectively), and working in twisted/bent positions (odds ratio, 6.2; 95% confidence interval, 1.7-23; and 7.5; 2.9-20, respectively). Sudden back pain was not associated with any of the studied risk factors. Sciatic back pain was associated only with working positions (odds ratio, 6.9; 95% confidence interval, 2.1-23). CONCLUSIONS: Lifetime prevalence of back pain increased sharply during nursing school but slowly after that. Back pain at entering the nursing school was a predictor for back-related pain and disability. Self-reported occupational physical work load was associated with back pain and related disability. The nature of the association is unclear, but it is likely that back pain is exacerbated during nursing.

MeSH Terms: Adult - Cohort Studies - Disabled Persons - Female - Follow-Up Studies - Human Engineering - Humans - Low Back Pain/epidemiology* - Low Back Pain/physiopathology - Nurses/statistics & numerical data* - Occupational Health* - Prevalence - Prospective Studies - Questionnaires - Research Support, Non-U.S. Gov't - Schools, Nursing* - Severity of Illness Index - Time Factors - Workload

NIOSH 2006 Feb; :1-20

Safe lifting and movement of nursing home residents

Collins-JW; Nelson-A; Haley-JA; Sublet-V

This guide is intended for nursing home owners, administrators, nurse managers, safety and health professionals, and workers who are interested in establishing a safe resident lifting program. Research conducted by the National Institute for Occupational Safety and Health (NIOSH), the Veterans' Health Administration (VHA), and the University of Wisconsin, Milwaukee has shown that safe resident lifting programs that incorporate mechanical lifting equipment can protect workers from injury, reduce workers' compensation costs, and improve the quality of care delivered to residents. This guide also presents a business case to show that the investment in lifting equipment and training can be recovered through reduced workers' compensation expenses and costs associated with lost and restricted work days.

KW: Ergonomics; Musculoskeletal-system-disorders; Health-care-facilities; Health-care-personnel; Injury-prevention; Engineering-controls; Control-technology

9. Violence

- Documents en anglais :

Accid Emerg Nurs. 2006 Jan;14(1):49-55. Epub 2005 Oct 4.

Violence and aggression in the emergency department: factors impinging on nursing research.

Ferns T, Stacey C, Cor k A.

School of Health and Social Care, Department of Acute and Continuing Care, University of Greenwich, Grey Building, Southwood Site, Avery Hill Rd, London SE9 2UG, United Kingdom. T.Ferns@gre.ac.uk

This paper examines issues involved in the debate regarding the role of research in nursing. The authors take the example of violence and aggression in the emergency field to discuss methodological, philosophical, professional, logistical, power differentials and leadership theory that influence and explain the process of conducting research surrounding violence and aggression experienced by nurses working in emergency departments. The paper examines the importance of research and discusses practical issues that impinge or frustrate clinical nursing staff who wish to

conduct original research.

MeSH Terms: Attitude of Health Personnel - Data Collection - Emergency Nursing/organization & administration* - Great Britain - Health Knowledge, Attitudes, Practice - Health Services Needs and Demand - Humans - Leadership - Nurse's Role/psychology - Nursing Research/education - Nursing Research/organization & administration* - Nursing Staff, Hospital*/education - Nursing Staff, Hospital*/organization & administration - Nursing Staff, Hospital*/psychology - Occupational Health - Philosophy, Nursing - Power (Psychology) - Qualitative Research - Research Design - Research Personnel/education - Research Personnel/organization & administration - Research Personnel/psychology - Security Measures/organization & administration - Self Concept - Time Management - Violence*/prevention & control - Violence*/psychology - Violence*/statistics & numerical data - Workplace/organization & administration - Workplace/psychology - Workplace/statistics & numerical data - World Health
Publication Types: Review

Health & Safety Executive, 2006

Violence and aggression management training for trainers and managers: a national evaluation of the training provision in healthcare settings

The delivery of workplace violence management training constitutes a central part of the Healthcare sectors strategy for combating work-related violence and aggression. Given the priority which is thereby accorded to violence management training, there is an urgent need to carry out a rigorous and systematic evaluation of its impact and effectiveness. Without such an evaluation Healthcare organisations will have little, if any, reliable and valid evidence as to the effects and value of the training they invest in. In addition to its ability to contribute towards an organisation's legal requirement to monitor and evaluate the effectiveness of any actions taken to prevent exposure to violence at work, evidence that is gathered from training evaluations is also fundamental to improving the content and delivery of such training. The training evaluation research that is herewith described set out both to directly assess the usefulness of violence management training and, on the basis of such evidence, to offer, in the opinion of the authors, clear guidance on good practice in the content and delivery of such training. A complementary practitioner report containing tools and guidance for violence management training is provided in Part 2.

This report and the work it describes were co-funded by the Health and Safety Executive (HSE). Its contents, including any opinions and/or conclusions expressed, are those of the authors alone and do not necessarily reflect HSE policy.

<http://www.hse.gov.uk/research/rrhtm/rr440.htm>

<http://www.hse.gov.uk/research/rrpdf/rr440.pdf>

J Nurs Adm. 2006 Jan;36(1):22-7; discussion 27-8.

Workplace incivility: state of the science.

Hutton SA.

VA Healthcare, Cincinnati, Ohio, USA. huttonsa@email.uc.edu

The financial cost of workplace violence is 4.2 billion dollars a year. Workplace incivility may initiate a spiral that for 1,000 people a year ends in death at work. If an initial minor incident such as incivility could be mitigated, then the financial and human capital that could be realized by the healthcare organization is immense. This article is an in-depth look at the literature and theoretical frameworks related to workplace incivility.

MeSH Terms: Aggression/psychology - Coercion - Health Personnel - Humans - Models, Psychological - Occupational Exposure/prevention & control* - Risk Factors - Social Behavior* - Violence/legislation & jurisprudence - Violence/prevention & control* - Violence/psychology* - Workplace*

Publication Types: Review

10. Autres

- *Documents en français* :

Rev Infirm. 2006 Jan;(117):25-8.

Dermatoses professionnelles en milieu hospitalier.

Barbaud A.

Service de dermatologie, hôpital Fournier, Nancy.

MeSH Terms: Dermatitis, Allergic Contact/etiology - Dermatitis, Irritant/etiology - Dermatitis, Occupational*/epidemiology - Dermatitis, Occupational*/etiology - Dermatitis, Occupational*/prevention & control - Hand Dermatoses*/epidemiology - Hand Dermatoses*/etiology - Hand Dermatoses*/prevention & control - Humans - Occupational Health - Personnel, Hospital* - Prevalence - Primary Prevention - Risk Factors

ANMTEPH, 13/01/2006

Un nouveau site web pour l'Association ANMTEPH

association, formations, annuaire, forum, travaux, annonces, documentation, liens utiles

http://www.anmtph.fr/pages/actualite/fiche.php?s_code=membre_glxvl

<http://www.anmtph.fr/>

- Documents en anglais :

Healthc Manage Forum. 2005 Winter;18(4):6-16.

Implementing information technology to improve workplace health: a web-based information needs assessment of managers in Fraser Health, British Columbia.

Sandhu JS, Anderson K, Keen D, Yassi A.

Sandhu Consulting & Research. *phc-jags@telus.net*

A web-based questionnaire-survey was administered primarily to determine what information is useful to managers in Fraser Health, of British Columbia to support decision-making for workplace health and safety. The results indicated that managers prefer electronic quarterly reports, with targets, goals, and historical trends rated as "very important." Over 85.7% "agree" that if information was readily available in the "most beneficial" format, they would be able to improve workplace health. Recommendations include that managers be presented with clear and concise workplace health reports that facilitate analysis for decision-making.

MeSH Terms: Administrative Personnel/psychology* - Attitude of Health Personnel* - British Columbia - Database Management Systems* - Decision Making, Organizational* - Delivery of Health Care, Integrated/organization & administration* - Humans - Internet - Needs Assessment* - Occupational Health* - Organizational Objectives - Pilot Projects - Program Development - Questionnaires - Records/standards* - Regional Health Planning - Research Support, Non-U.S. Gov't - Workplace/standards*

J Occup Environ Med. 2005 Dec;47(12):1268-75.

Twenty-four-hour light exposure and melatonin levels among shift workers.

Borugian MJ, Gallagher RP, Friesen MC, Switzer TF, Aronson KJ.

Cancer Control Research Program, British Columbia Cancer Research Centre, Vancouver, British Columbia, Canada. *mborugian@bccrc.ca*

OBJECTIVES: We sought to measure melatonin levels and 24-hour light intensity exposure in health care workers over a 7-day period in natural occupational and residential settings. METHODS: Five office workers and 17 nurses working either days or rotating night and day shifts wore a device to record light intensity exposure for one or two 7-day periods, completed a questionnaire, and provided three saliva samples for melatonin. RESULTS: Rotating shift workers had irregular light exposure patterns and abnormal melatonin levels compared with those working days. In addition to lower-than-normal melatonin levels during sleep periods, rotating shift workers exhibited higher-than-normal melatonin levels on arising and during work. Self-reported years of shift work were correlated with measured melatonin and light. CONCLUSIONS: Rotating shift work is supported as a surrogate for exposure to light-at-night and circadian disruption.

MeSH Terms: Adult - Female - Health Personnel - Humans - Light* - Male - Melatonin/analysis* - Middle Aged - Occupational Exposure* - Research Support, Non-U.S. Gov't - Saliva/chemistry - Time Factors

Substances: Melatonin