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 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.

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

Octobre 2005

En une ce mois-ci :

JAMA. 2005 Sep 7;294(9):1025-33.
Neurobehavioral performance of residents after heavy night call vs after alcohol ingestion.
Arnedt JT, Owens J, Crouch M, Stahl J, Carskadon MA.

En page 4.

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1. Allergies

2. Bonnes pratiques

3. Conditions de travail et santé psychologique

- Documents en anglais :


A national study of burnout among American transplant surgeons.
Bertges Yost W, Eshelman A, Raoufi M, Abouljoud MS.
Division of Transplant Surgery, Henry Ford Hospital, Detroit, Michigan
48202-2689, USA.

This study examines burnout in a national sample of transplant surgeons. Data analyses were conducted on a sample of 209 actively practicing transplant surgeons. Measures included the Maslach Burnout Inventory, a demographic survey, and the Surgeon Coping Inventory. Burnout was reflected in 38% of surgeons scoring high on the Emotional Exhaustion dimension, whereas 27% showed high levels of Depersonalization, and 16% had low levels of Personal Accomplishment. Several significant predictors of emotional exhaustion were identified and included questioning one’s career choice, giving up activities, and perceiving oneself as having limited control over the delivery of medical services ($R^2= 0.43$). Those who perceived themselves as having a higher ability to control delivery of medical services and who felt more appreciated by patients had lower levels of depersonalization and were less likely to question their career choice ($R^2= 0.16$). Surgeons with high personal accomplishment experienced greater professional growth opportunities, perceived their institution as supportive, felt more appreciated by patients, and were less likely to question their career ($R^2= 0.24$). The prioritization of goals to reflect both professional and personal values accounted for a significant amount of the variance in predicting both emotional exhaustion and personal accomplishment in separate regression equations. Recommendations to decrease burnout would include greater institutional support, increased opportunities for professional growth, and greater surgeon control over important services to facilitate efficient work. Coping strategies to moderate stress and burnout are also beneficial and should include prioritizing goals to reflect both professional and personal values.

MeSH Terms: Burnout, Professional* - Depersonalization - Emotions - Fatigue - Questionnaires - Research Support, Non-U.S. Gov't - Surgical Procedures, Operative/psychology* - Transplantation/psychology* - United States


Burnout syndrome among Mexican hospital nursery staff.
Cabrera Gutierrez LS, Lopez Rojas P, Salinas Tovar S, Ochoa Tirado JG, Marin Cotonieto IA, Haro Garcia L.

Occupational Health Nursery Coordination, Guanajuato Delegation, Instituto Mexicano del Seguro Social, Mexico City.

OBJECTIVE: To identify frequency and related factors to burnout syndrome in the nursing staff at a specialty hospital in the Mexican state of Guanajuato. MATERIALS AND METHODS: A protective, analytical cross-sectional study was carried out. In 236 randomly selected nurses, a 35-item questionnaire proposed by Cyberia Shink was applied in a blind survey. Seniority, workplace, shift and kind of service, work category, age and marital status were investigated for a link with burnout syndrome. RESULTS: Mean age of nursing personnel was 33+/−11.93 years with 13+/−7.2 years of seniority; 95 (40%) workers showed emotional exhaustion, 78 (32%) felt dehumanized, 148 (63%) had lost interest in their work, and 120 (50%) reported general exhaustion. From the studied nursing personnel, 92 (39%) showed burnout syndrome-compatible data. There were statistical differences with nurses without burnout syndrome age >33 years ($p=0.001$), seniority ($p=0.05$), and workplace
(p=0.05), but not with kind of medical service (p=0.36), shift (p=0.86), and work category (p=0.96). Questionnaire validity in agreement with alpha Cronbach test was 0.7496. Relation between professional attrition and work environment was r=0.738. CONCLUSIONS: The instrument can be relied upon to identify burnout syndrome and is considered as acceptable. Age, seniority, and workplace are factors linked to nursing staff with burnout syndrome-compatible data. Employers, managers, and supervisors of health care services must promote preventive actions for burnout syndrome to synchronize present work conditions in nursing staff with their biologic characteristics. MeSH Terms: - Adult - Burnout, Professional* - Female - Hospitals - Humans - Mexico/epidemiology - Nurses/psychology* - Questionnaires - Risk Factors - Syndrome

Neurology. 2005 Jan 25;64(2):E11-5. Impact of the ACGME work hour requirements: a neurology resident and program director survey. Watson JC. Department of Neurology, Pain Division, Mayo Graduate School of Medicine, 200 First Street SW, Rochester, MN 55905, USA. watson.james@mayo.edu MeSH Terms: - Accreditation/standards - Burnout, Professional/prevention & control - Continuity of Patient Care - Data Collection - Delivery of Health Care - Guideline Adherence - Hospital Administrators/psychology* - Humans - Internship and Residency/standards* - Neurology/education* - Physicians/psychology* - Safety - United States - Work Schedule Tolerance/psychology*

BMJ. 2005 Sep 3;331(7515):515. Junior doctors' shifts and sleep deprivation: "weeks of nights" give the illusion of working fewer hours. Veiraiiah A. MeSH Terms: Humans - Illusions* - Medical Staff, Hospital/psychology* - Sleep Deprivation - Time - Work Schedule Tolerance* Publication Types: Comment - Letter

BMJ. 2005 Sep 3;331(7515):514. Junior doctors' shifts and sleep deprivation: European directive seems not to apply to doctors' hours in rest of European Union. Atkinson JJ MeSH Terms: European Union - Humans - Medical Staff, Hospital* - Sleep Deprivation* - Work Schedule Tolerance* Publication Types: Comment - Letter


BMJ. 2005 Sep 3;331(7515):514. Junior doctors' shifts and sleep deprivation: pendulum is still swinging. Short A.
Junior doctors’ shifts and sleep deprivation: please make on-call rooms available to doctors at night.

Varughese GI.

Neurobehavioral performance of residents after heavy night call vs after alcohol ingestion.

Arnedt JT, Owens J, Crouch M, Stahl J, Carskadon MA.
Department of Psychiatry and Human Behavior, Brown Medical School, Providence, RI, USA.

New strategies for monitoring the health of Canadian nurses: results of collaborations with key stakeholders.

Kerr MS, Laschinger HK, Severin CN, Almost JM, Shamian J.
School of Nursing, Faculty of Health Sciences, University of Western Ontario, London, ON.

The aim of this descriptive study was to help policy- and decision-makers enhance the health of the Canadian nursing workforce by highlighting key factors of concern and exploring options for collecting...
and utilizing nurses' health data. This paper describes the views of 62 nursing stakeholders from a
diversespectrum of professional, labour, management and government perspectives from across
Canada, regarding key factors contributing to work-related health problems in the nursing profession,
particularly those relating to the work environment and hospital restructuring. The results were
combined with a synthesis of existing information sources about the health of nurses in Canada. With
respect to the key concerns, musculoskeletal conditions/injuries and stress and burnout were identified
as nurses' major work-related health problems. An examination of the data synthesis inventory
revealed that no existing data sources can adequately profile nurses' health, especially in relation to
the components of the Conceptual Model of Nurses' Health developed in the study. Three strategies for
monitoring nurses' health are proposed.

MeSH Terms: - Age Factors - Algorithms - Canada - Data Collection - Health Status* - Humans -
Interviews - Job Satisfaction - Nurses* - Research Support, Non-U.S. Gov't - Stress/prevention &
control

Publication Types: Review

Nurse moral distress and ethical work environment.
Corley MC, Minick P, Elswick RK, Jacobs M.
Virginia Commonwealth University, Richmond, USA. mccorley@mail2.vcu.edu
This study examined the relationship between moral distress intensity, moral distress frequency and
the ethical work environment, and explored the relationship of demographic characteristics to moral
distress intensity and frequency. A group of 106 nurses from two large medical centers reported
moderate levels of moral distress intensity, low levels of moral distress frequency, and a moderately
positive ethical work environment. Moral distress intensity and ethical work environment were
correlated with moral distress frequency. Age was negatively correlated with moral distress intensity,
whereas being African American was related to higher levels of moral distress intensity. The ethical
work environment predicted moral distress intensity. These results reveal a difference between moral
distress intensity and frequency and the importance of the environment to moral distress intensity.
MeSH Terms: - Adult - Age Factors - Attitude of Health Personnel* - Burnout, Professional/prevention
& control - Burnout, Professional/psychology* - Conflict (Psychology) - Deception - Ethics, Nursing*
- Factor Analysis, Statistical - Health Facility Environment/ethics - Health Facility Environment/organization & administration - Health Knowledge, Attitudes, Practice - Humans - Mid-Atlantic Region - Morals* - Nurse's Role/psychology - Nursing Methodology Research - Nursing Staff, Hospital/ethics* - Nursing Staff, Hospital/organization & administration - Nursing Staff, Hospital/psychology* - Organizational Culture - Patient Advocacy/ethics - Patient Advocacy/psychology - Personnel Turnover - Power (Psychology) - Professional Autonomy - Questionnaires - Research Support, Non-U.S. Gov't - Risk Factors - Social Responsibility - Workplace/organization & administration - Workplace/psychology*

Physician suicide.
Rakatansky H.
MeSH Terms: Humans - Mood Disorders/therapy - Occupational Health Services - Physicians/psychology* - Substance-Related Disorders/therapy - Suicide/prevention & control*

Publication Types: Comment - Letter

Recovery, health, and job performance: effects of weekend experiences.
Fritz C, Sonnentag S.
Institute of Psychology, Work, Organizational, and Social Psychology Unit, Technical University of Braunschweig, Braunschweig, Germany. c.fritz@tu-bs.de
This study extended research on respites by examining the extent to which experiences during the
weekend contribute to health and job performance after the weekend. Longitudinal data including 3
measurement occasions from 87 emergency service workers indicated that nonwork hassles, absence
of positive work reflection, and low social activity during the weekend predicted burnout and poor
general well-being after the weekend. Weekend experiences also predicted different aspects of job
performance after the weekend. The results reveal practical implications for individual and
organizational optimization of recovery processes. Suggestions for future research on specific recovery processes and their effects on individual health and performance are discussed.

MeSH Terms: Adult - Burnout, Professional* - Emergency Medical Technicians/psychology* - Female - Health Care Surveys - Humans - Longitudinal Studies - Male - Mental Health - Personnel Staffing and Scheduling* - Recreation - Social Behavior - Stress, Psychological - Task Performance and Analysis

European Foundation for the Improvement of Living and Working Conditions, report, February 2005

Work-related stress
Houtman, Irene L.D.
Changes in the content and organisation of work in recent decades have resulted in an intensification of work, which is commonly regarded as a cause of stress. This report presents trends in the risks and consequences of work-related stress, and identifies how these can be prevented. The analysis is based on national surveys and research information available in the EU, as well as recent research findings.

4. Hygiène et gestion des risques

- Documents en français :

Société Française d'Hygiène Hospitalière, 2005
XVIème Congrès de la SFHH, Reims 2 et 3 juin 2005
http://www.sfhh.net/
Résumés et diaporamas : http://www.sfhh.net/main32.htm

- Documents en anglais :

Creation of a safety culture: reducing workplace injuries in a rural hospital setting.
Hooper J, Charney W.
Physical Therapy Department, Valley General Hospital, Monroe, WA, USA.
A newly organized employee safety program, with an 11-step design, has been introduced at Valley General Hospital in Monroe, Washington, with the intention of changing the "culture of safety." A 1-year report of the results indicates that the overall incidence of injury claims, lost-time injuries, and needlestick injuries were reduced after the program was implemented and timely reporting of claims within 24 hours was increased. The hypothesis, that by creating more visibility for the employee safety program a decrease in injury rates would occur, was confirmed.

Injection Safety Practice among Health Workers in Static Immunisation Centres in an Urban Community of Nigeria.
Musa OI.
Department of Epidemiology and Community Health, University of Ilorin, P.M.B. 1515, Ilorin.
Background: Immunisation injection accounts for less than one-tenth of the global total injections, and it is believed to be safer than therapeutic injections. However, reports have it that about one-third of immunisation injections are unsafe in many countries of the world including Africa. Objectives: This study was conducted to determine the practice of safe immunisation injection among health workers in static immunisation centres in a urban community in Nigeria with a view to assessing the safety of immunisation injection services in the area. Study design/methods: Pre-tested semi-structured
questionnaires were administered to 102 consenting staff and observation checklist was completed for each of the 13 fixed immunisation centres in the study area. Results: Most of the subjects 82(80.4%) had poor knowledge of safe immunisation injection and about the same number were not aware of any policy on injection safety. Injection abscess was the main health hazard of unsafe injection reported by majority 71(69.9) of the subjects while as few as 10(9.8%) mentioned needle prick as a health hazard. The common infections associated with unsafe injection listed by the subjects were abscess, HIV and Hepatitis in that order of frequency. Also, most of them 69(67.5%) felt that open burning is the ideal method of disposal of injection waste, while the actual method of disposal practised in most health facilities were mainly open burning (48%) and open dumping into an insecure pit (24%). Up to 83% of the subjects preferred the use of standard disposable syringes and needles for vaccination, but most of them (75/73.5%) confirmed that they use both sterilisable and disposable syringes and needles for vaccination in their health centres. BCG vaccine was exclusively administered using sterilised needles and syringes, while tetanus toxoid was given using disposable syringes and needles in virtually all the centres. Re-use of syringe for vaccine withdrawal and re-capping of used needles before discard were common practices observed while accidental needle stick injury was reported by about half (49%) of the subjects. Conclusion: Staff re-training, adequate supplies of injection equipment and provision of appropriate facilities for disposal of injection waste would go a long way to enhance safe immunisation injection practice in the area. Key words: immunisation, injection practice, injection safety.

5. Infections nosocomiales

- Documents en français :

"Evitons" les infections nosocomiales...
Carbone A.
Publication Types: Editorial

- Documents en anglais :

A hospital outbreak of Legionella from a contaminated water supply.
Division of Internal Medicine, University Medical Center, Ljubljana, Slovenia. marjeta.tercelj@kclj.si
The authors performed a cross-sectional epidemiological survey to investigate the source of a hospital Legionella outbreak originating in contaminated water. Water temperature and air humidity were measured around possible contamination sources. A dead-end pipe was found to contain Legionella pneumophila serogroup 1. All individuals who acquired legionellosis had spent at least 30 min within 2 m of the contamination source. Among staff, 41 of 71 were exposed, and 31 of these fell ill. All 7 patients exposed to the contaminated water acquired legionellosis. None of the 94 bed-ridden patients from the same units developed the disease. An aerosol with 60% relative air humidity was formed near the suspect water faucets, but the humidity fell rapidly farther from the water source, suggesting that desiccation decreased the risk of infection. The healthy personnel and patients closest to the source acquired legionellosis, suggesting that risk was related less to compromised patients than to exposure.
6. Risques biologiques

- Documents en français :

INRS, 01/08/2005
Grippe aviaire : risques en milieu professionnel et perspectives en cas de pandémie
Depuis la fin de l’année 2003, une épidémie de grippe aviaire sévit dans les pays du Sud-Est asiatique. Des cas humains sont maintenant rapportés : certains pourraient être dus à une contamination inter-humaine. L’Organisation mondiale de la santé (OMS) pense que les risques d’épidémie à l’échelle du monde (pandémie) se précisent. Ce dossier tient compte de ce contexte, y compris le risque de pandémie avec ses conséquences possibles pour les entreprises.

- Documents en anglais :

An exploratory study of nurses suffering from severe acute respiratory syndrome (SARS).
Mok E, Chung BP, Chung JW, Wong TK.
School of Nursing, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong. hsemok@net.polyu.edu.hk
In 2003, severe acute respiratory syndrome (SARS) came to be recognized as a newly emergent form of disease that is highly contagious. The aim of this study was to describe the perceptions of nurses with SARS in Hong Kong, as the perceptions of nurses who have suffered from SARS have not been studied. Ten nurses who had suffered from SARS were interviewed, either face-to-face or by telephone, about their subjective experiences. These interviews provided in-depth, descriptive data, which were analysed using content analysis. Nine broad categories were identified: uncertainty, information control, feelings of anger and guilt, lack of preparation and fear of death, feelings of isolation and loneliness, physical effects, support, change of perspective of life, and change of perspective of nursing. Although the dreaded disease affected the nurses tremendously, both physically and psychologically, it has also had its positive side. As a result of experiencing the illness, the participants came to treasure relationships, health and everyday life more. In caring for patients, they came to see the world more from the perspective of the patients. They found that they need to take the time to reassure patients and families and to seriously listen to all of their concerns.
MeSH Terms: Adaptation, Psychological* - Adult - Anger - Attitude of Health Personnel* - Attitude to Health* - Boredom - Disease Transmission, Patient-to-Professional - Fear - Female - Guilt - Hong Kong - Humans - Loneliness - Male - Middle Aged - Nursing Methodology Research - Nursing Staff, Hospital/psychology* - Patient Education - Patient Isolation/psychology - Qualitative Research - Questionnaires - Severe Acute Respiratory Syndrome/diagnosis - Severe Acute Respiratory Syndrome/psychology* - Severe Acute Respiratory Syndrome/transmission - Social Isolation - Uncertainty

Does hospital work constitute a risk factor for Helicobacter pylori infection?
Mastromarino P, Conti C, Donato K, Strappini PM, Cattaruzza MS, Orsi GB.
Department of Public Health Sciences, University La Sapienza, Piazzale A. Moro 5, I-00185, Rome, Italy. paola.mastromarino@uniroma1.it
The aim of this study was to assess whether clinical work constitutes a risk factor for Helicobacter pylori infection among employees in hospitals. The prevalence of H. pylori infection was analysed in 249 individuals employed in a university teaching hospital according to three categories of hospital workers: (A) personnel from gastrointestinal endoscopy units (N=92); (B) personnel from other hospital units with direct patient contact (N=105); and (C) staff from laboratories and other units with no direct patient contact (N=52). Stool samples from each subject were examined with a validated enzyme-linked immunosorbent assay for the presence of H. pylori antigens. A questionnaire inquiring about
sociodemographic and occupational characteristics was completed by each participant. The prevalence of H. pylori infection was 37.0% in group A, 35.2% in group B and 19.2% in group C (P<0.05). Among the different healthcare categories, nurses had a significant higher prevalence of H. pylori infection (P<0.01). No significant association was found between the length of employment or exposure to oral and faecal secretions, and H. pylori infection. Hospital work involving direct patient contact seems to constitute a major risk factor for H. pylori infection compared with hospital work not involving direct patient contact.


Substances: Antigens, Bacterial

Rapid awareness and transmission of severe acute respiratory syndrome in Hanoi French Hospital, Vietnam.
Nishiura H, Kuratsuji T, Quy T, Phi NC, Van Ban V, Ha LE, Long HT, Yanai H, Keicho N, Kirikae T, Sasazuki T, Anderson RM.
The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association, Tokyo, Japan.
A case-control study was conducted to examine the relationship between severe acute respiratory syndrome (SARS) and the time-dependent precautionary behaviors taken during an outbreak of SARS in Hanoi French Hospital (HFH), Vietnam. Masks (odds ratio [OR] = 0.3; 95% confidence interval [CI]: 0.1, 0.7) and gowns (OR = 0.2; 95% CI: 0.0, 0.8) appeared to prevent SARS transmission. The proportion of doctors and nurses who undertook each measure significantly improved (chi(2) = 9.8551, P = 0.043) after the onset of secondary cases. The impact of individual behaviors on an outbreak was investigated through mathematical approaches. The reproduction number decreased from 4.1 to 0.7 after notification. The basic reproduction number was estimated, and the use of masks alone was shown to be insufficient in containing an epidemic. Intuitive results obtained by means of stochastic individual-based simulations showed that rapid improvements in behavior and isolation would increase the probability of extinction.

MeSH Terms: Analysis of Variance - Case-Control Studies - Clothing - Cross Infection/prevention & control - Cross Infection/transmission - Cross Infection/virology* - Disease Outbreaks - Handwashing - Humans - Hygiene - Models, Statistical - Research Support, Non-U.S. Gov't - SARS Virus - Severe Acute Respiratory Syndrome/epidemiology - Severe Acute Respiratory Syndrome/prevention & control* - Severe Acute Respiratory Syndrome/transmission* - Vietnam/epidemiology

Transmission of Avian Influenza Viruses to and between Humans.
Hayden F, Croisier A.
Health Sciences Center, University of Virginia, Charlottesville, USA. fgh@virginia.edu.

6.1 Accident d'exposition au sang

- Documents en anglais :

J Hosp Infect. 2005 Jul;60(3):276-82.
A descriptive, retrospective study of 567 accidental blood exposures in healthcare workers in three West African countries.
Departement International et Tropical, Institut de Veille Sanitaire, Saint-Maurice Cedex, France.
We conducted a multi-centre study in West African hospital wards to document accidental blood exposure (ABE) risks in these settings, and assessed the incidence of ABE in participating healthcare workers (HCWs) retrospectively. In total, 1241 HCWs participated in the survey from 43 hospital wards. Among them, 567 (45.7%) had sustained at least one ABE with an estimated incidence of 0.33 percutaneous injuries (PCIs) and 0.04 mucocutaneous contacts (MCCs)/HCW/year in medical or intensive care personnel and 1.8 PCIs/HCW/year in surgeons. The ABE was a needlestick in 454 (80.1%) of 567 cases, a cut in 19 cases (3.4%), a splash or contact with non-intact skin in 87 cases (15.3%), and was undocumented in seven cases (1.2%). The source patient's human immunodeficiency virus (HIV) serostatus was positive in 74 cases (13.1%), negative in 65 cases (11.5%), and unknown in 416 cases (73.4%). The ABE was not notified in the ward in 392 cases (69.1%). Healthcare structures can improve HCWs’ safety and reduce the stigma against HIV-infected patients by improving access to training, information, primary prevention (ABE prevention equipment) and secondary prevention (postexposure prophylaxis) of occupational infection risks.

**MeSH Terms:** Adult - Africa, Western/epidemiology - Blood-Borne Pathogens* - Female - Health Personnel* - Humans - Incidence - Male - Middle Aged - Needlestick Injuries/blood* - Needlestick Injuries/epidemiology - Questionnaires - Retrospective Studies

Publication Types: Multicenter Study

**East Afr Med J. 2003 May;80(5):227-34.**

**Accidental injuries and cutaneous contaminations during general surgical operations in a Nigerian teaching hospital.**

Adesunkanmi AK, Badmus TA, Ogunlusi JO.

*Department of Surgery, College of Health Sciences, Obafemi Awolowo University, Ile-Ife, Nigeria*

**OBJECTIVE:** To determine the prevalence of accidental injuries and body contaminations among the operating personnel during general surgical operation, those involved, the circumstances surrounding the injuries or body contaminations and the factors affecting the prevalence in a unit of a teaching hospital in Nigeria. **DESIGN:** Patients operated for general surgical conditions in a unit of a Teaching Hospital Complex during a period of two years (1997-1998) were studied. A proforma was designed to enter personal biodata, preoperative and intra-postoperative clinical information of all the patients. **SETTING:** Wesley Guild Hospital a unit of teaching hospital complex serving the large agrarian rural and semi-urban Nigerians. **PATIENTS:** Five hundred and eighty nine consecutive general surgical patients. All types of general surgical operations were included, emergency or elective, major or minor, carried out during the day or at night. **INTERVENTION:** All the patients were operated and operating personnel observed for sharp injuries and body contamination. **MAIN OUTCOME MEASURES:** Incidence of sharp injuries and cutaneous contamination and personnel at risk determined. **RESULTS:** Operating personnel sustained 62 sharp injuries (10.5%), these were caused by suture needle in 57 cases (92.0%), towel clips in three (4.8%), knife cut in two (3.2%). Operating physicians sustained 56 cases of sharp injuries (90.3%) and Scrub Nurses in six (9.7 %). Self-inflicted sharp injuries in 49 (79 %) and in 12 cases (21%) injuries were inflicted by the surgeons or their assistants. Left hand was injured in 39 cases (63%) and right in 23 (37%). Cutaneous or mucosa membrane contamination with blood or body fluid occurred in 232 cases (39.4 %). These were made up of wet gown contamination in 124(53.5 %), glove failure in 72(31%) and splashing of blood or fluids into the face or eyes in 36 cases (15.5 %). Contamination occurred in more than one operating personnel in more than half of the cases. Operating surgeons were affected in 211 cases (91%). The risks of accidental injuries and blood and body fluid contamination were significant, if the duration of the operation was more than one hour, among the operating surgeons and if the operation was major (p<0.05). **CONCLUSION:** This study has demonstrated that cutaneous, percutaneous, and mucous membrane exposure to patients blood and body fluids are common events during general surgical operations. Most accidental injuries were due to solid suture needle-sticks, mostly injured personnel were the primary operating surgeons, injuries occurred predominantly on the left hand. This may poses a significant risk of infection with blood borne pathogens when operating on infected patients.

**J Hosp Infect. 2005 Sep 12; [Epub ahead of print]**

**Passive safety devices are more effective at reducing needlestick injuries.**


*Department of Clinical Laboratory Medicine, Kyoto University Hospital, 54 Shogoin Kawahara-cho, Sakyo-ku, Kyoto 606-8507, Japan; Department of Infection Control and Prevention, Kyoto University*
Hospital, 54 Shogoin Kawahara-cho, Sakyo-ku, Kyoto 606-8507, Japan.
Publication Types: LETTER

**Saskatchewan: new regulations designed to reduce needle-stick injuries.**
Garmaise D.
Publication Types: Newspaper Article

6.2 Contamination soignant-soigné

- *Documents en français* :

Avis du conseil supérieur d'hygiène publique de France, section maladies transmissibles
Relatif à la prévention de la transmission du virus de l’immunodéficience humaine (VIH) aux patients par les professionnels de santé (séance du 17 juin 2005)
http://www.sante.gouv.fr/htm/dossiers/cshpf/a_mt_170605_VIHsoignantssoignes.pdf

- *Documents en anglais* :

**Anesthetist to patient transmission of hepatitis C virus associated with non exposure-prone procedures.**
Mawdsley J, Teo CG, Kyi M, Anderson M.
Barts and Royal London Hospital, Queen Mary College of Medicine and Dentistry, London, United Kingdom. J.E.D.Mawdsley@qmul.ac.uk
A 44-year-old lady was diagnosed with acute hepatitis C virus (HCV) infection 8 weeks after hysterectomy at which the attending anesthetist was known to be hepatitis C seropositive. Comparative nucleotide sequence analysis and phylogenetic comparison proved that transmission had occurred from the anesthetist to the patient. The patient had received general anesthesia with endotracheal intubation and peripheral intravenous cannulation. No exposure-prone anesthetic procedures had been performed. This is the first case described in UK involving transmission from an anesthetist to a patient during anesthesia where no exposure prone procedures were carried out. It is the first example in which the anesthetist was known to be seropositive for hepatitis C prior to the operation. 2005 Wiley-Liss, Inc.
Publication Types:Case Reports
6.3 Transmission aérienne

- Documents en anglais :

Low prevalence of subclinical severe acute respiratory syndrome-associated coronavirus infection among hospital healthcare workers in Hong Kong.
Lai TS, Keung Ng T, Seto WH, Yam L, Law KI, Chan J.
Department of Medicine, Princess Margaret Hospital, Lai Chi Kok, Kowloon, Hong Kong SAR, China.
laist@ha.org.hk
We recruited 688 hospital healthcare workers who cared for patients with severe acute respiratory syndrome (SARS) and did not develop the disease in the Hong Kong outbreak in 2003. A questionnaire survey was conducted and serum samples were collected for SARS-associated coronavirus (SARS-CoV) antibody. The high-risk procedures performed and the types of unprotected exposures were recorded for analysis. Only 1 asymptomatic nurse had positive serological test. The result demonstrates the low rate of subclinical SARS-CoV infection in hospital healthcare workers and that the infection control practice against SARS in Hong Kong's hospitals during the outbreak was highly effective.
MeSH Terms: Antibodies, Viral/blood - Disease Outbreaks - Disease Transmission, Patient-to-Professional - Health Personnel* - Hong Kong/epidemiology - Humans - Prevalence - Retrospective Studies - Risk Factors - Severe Acute Respiratory Syndrome/epidemiology* - Severe Acute Respiratory Syndrome/transmission*
Substances: Antibodies, Viral

6.4 Transmission de contact

- Documents en français :

Avis du conseil supérieur d'hygiène publique de France, section maladies transmissibles
Relatif au rappel de vaccination anti-diphtérique chez l'adulte (Séance du 18 mars 2005)
http://www.sante.gouv.fr/htm/dossiers/cshpf/a_mt_180305_rappeldiphterie.pdf

6.5 Vaccination

- Documents en anglais :

MMWR 2005 Sep; 54(RR-9):1-24
Updated U.S. Public Health Service guidelines for the management of occupational exposures to HIV and recommendations for postexposure prophylaxis
Panlilio-AL; Cardo-DM; Grohskopf-LA; Heneine-W; Ross-CS
This report updates U.S. Public Health Service recommendations for the management of health-care personnel (HCP) who have occupational exposure to blood and other body fluids that might contain human immunodeficiency virus (HIV). Although the principles of exposure management remain unchanged, recommended HIV postexposure prophylaxis (PEP) regimens have been changed. This report emphasizes adherence to HIV PEP when it is indicated for an exposure, expert consultation in management of exposures, follow-up of exposed workers to improve adherence to PEP, and monitoring for adverse events, including seroconversion. To ensure timely postexposure management and administration of HIV PEP, clinicians should consider occupational exposures as urgent medical concerns.
http://www.cdc.gov/mmwr/PDF/rr/rr5409.pdf
Vaccinated but not immunized: healthcare personnel in developing countries.
Arya SC, Agarwal N.
MeSH Terms: Developing Countries* - Hepatitis B/immunology* - Hepatitis B Vaccines* - Humans - Jordan - Medical Staff, Hospital* - Nursing Staff, Hospital*
Substances: - Hepatitis B Vaccines
Publication Types: Comment - Letter

7. Risques chimiques

- Documents en anglais :

A Case Study: Surface Contamination of Cyclophosphamide due to Working Practices and Cleaning Procedures in Two Italian Hospitals.
Acampora A, Castiglia L, Miraglia N, Pieri M, Soave C, Liotti F, Sannolo N.
Dipartimento di Medicina Pubblica e della Sicurezza Sociale, Universita degli Studi di Napoli, Naples, Italy;
The efficacy of preventive and organisational measures implemented in Italy to prevent the contamination of cytotoxic drug preparation rooms has been investigated, and oncologic wards of two Italian hospitals were examined. The sampling strategy was based not only on potential sources of contamination but also on responses to detailed questionnaires on workplace practices and work organisation. Wipe samples were taken from different surfaces of preparation rooms, before and after the work shift, over a span of a month. Cyclophosphamide was taken as the marker drug that reflects exposure to cytotoxic drugs, being measurable by GC/MS. In one of the two hospitals (Hospital A), a large amount of cyclophosphamide was found, both before and after shift, on the workbench (median value, 2.55 mug dm(-2), before shift), on the floor between the operator working position and the waste bin (>10 mug dm(-2), after shift), as also on door handles and storage shelves. No quantifiable levels of cytotoxic drug were detected in the second hospital investigated (Hospital B). These results could be attributed to the efficacy of cleaning procedures and working practices. In fact, both hospitals were provided with vertical-laminar airflow hoods and the (male) nurses had attended special training courses; but in Hospital A, cleaning procedures were carried out without substances used specifically for the cleaning of surfaces contaminated by cytotoxic drugs such as sodium hypochlorite. Working practices did not include Luer Lock devices. Cyclophosphamide concentrations found in both hospitals, compared with the quantities of drug handled, gave evidence of the importance of the correct handling of cytotoxic agents as a major tool in reducing contamination levels. The results reveal the insufficiency of the risk management measures which do not take into account working practices that are prevailing, and stress the necessity for periodic environmental monitoring, indispensable for evolving effective procedures to prevent antineoplastic drug exposure.

Environmental contamination with cytotoxic drugs in healthcare using positive air pressure isolators.
Crauste-Manciet S, Sessink PJ, Ferrari S, Jomier JY, Brossard D.
University of Pharmacy Paris 5 Rene Descartes, Pharmacie Galenique, 4 avenue de l'Observatoire 75006 Paris, France;
Occupational exposure to cytotoxic drugs of hospital personnel involved in their preparation and administration is a major issue: ever since the introduction of protective measures in recent decades, the handling of these drugs has always been referred to as an occupational health hazard. Isolator technology was one of the protective equipments aimed at providing safe handling, but it has not yet been studied regarding contamination. The present study evaluates surface contamination with four cytotoxic drugs [cyclophosphamide (CP), ifosfamide (IF), 5 fluorouracil (5FU) and methotrexate (MTX)] by wipe sampling in two hospital pharmacies. Wipe samples were taken from work surfaces both located inside and outside the isolators. In addition, working gloves, the surface of infusion bags filled with 5FU or CP, and gloves used in simulation of drug administration were analyzed. Contamination
was routinely found inside the isolators but rarely outside the isolators, indicating that the isolator technology is offering good protection of the cytotoxic drug handlers as well as the environment during preparation. On the other hand, contamination was found on the surfaces of infusion bags and gloves in contact with infusion bags filled with cytotoxic drugs. Consequently, personal protective equipment is still recommended during the manipulation and administration of the drugs because of potentially contaminated drug vials and final products.

Exposure to Antineoplastic Drugs in Two UK Hospital Pharmacy Units.
Mason HJ, Blair S, Sams C, Jones K, Garfitt SJ, Cuschieri MJ, Baxter PJ.
Health and Safety Laboratory, Buxton UK;
Study objectives: To carry out an environmental and biological monitoring study in two UK hospital pharmacy units involved in the preparation of antineoplastic drugs. Participants and methods: The two units studied used isolators for drug preparation. One used isolators operating at positive pressure relative to external atmospheric pressure, whereas the other used negative pressure isolators. Monitoring utilized the measurements of methotrexate, ifosfamide, cyclophosphamide and platinum reflecting the platino-coordinated drugs, such as cisplatin and carboplatin. Personal and static atmospheric and floor wipe samples were collected together with preshift and post-shift urine samples over a 4-day consecutive monitoring period. During the study period both units operated to their normal procedures. RESULTS: Measurable amounts of cytotoxic drugs were detected on the floors of both units and on the disposable gloves worn by staff preparing the drugs. There was also evidence in both units of some very low-level drug absorption from urine measurements, using the most sensitive analytical technique of platinum analysis. The absorption of platinum containing drugs in the unit using negative-pressure isolators was significantly higher, even though less platinum containing drug was prepared per day. Urine measurements in both units were below the detection limit for the other measured drugs. Although the unit using positive-pressure isolators handled daily approximately five times the drug quantities handled with the negative pressure unit, the general levels of external contamination and urine measurements did not reflect this difference. Comparison of the relative levels of glove and floor contamination between the two units was not clear-cut and appeared to depend on the specific cytotoxic drug being monitored. CONCLUSIONS: The levels of external contamination on the floor and gloves, and absorbed dose from urine measurements found in this study showed considerable improvement over many earlier, non-UK studies using comparable exposure measurements. These earlier studies were in facilities using laminar flow/microbiological safety cabinets and where staff were likely to be involved in both drug preparation and administration. Our data did not suggest that the differential pressure of the isolator to the pharmacy atmosphere was an overarching factor in the risk of operator exposure under normal operation. There remains a need to investigate the sources of the low-level drug contamination found in the pharmacies even when using isolators to prepare cytotoxic drugs. This study, and related studies of hospital oncology ward staff, appear to be the only recent UK studies of occupational cytotoxic drug exposure using environmental and biological monitoring techniques.

Surface contamination of cyclophosphamide packaging and surface contamination with antineoplastic drugs in a hospital pharmacy in sweden.
Hedmer M, Georgiadi A, Bremberg ER, Jonsson BA, Eksborg S.
Division of Occupational and Environmental Medicine, Department of Laboratory Medicine, University Hospital, SE-221 85 Lund, Sweden;
Workplaces, e.g. hospital pharmacies and hospital departments, where antineoplastic drugs are handled might be contaminated with these drugs, and pharmacy personnel and health care workers may be exposed. In this study potential sources for exposure of antineoplastic drugs were investigated. Unbroken drug vials and tablet blister packages, both containing cyclophosphamide (CP) and their outer packaging were wipe sampled. Analysis was performed by liquid chromatography combined with tandem mass spectrometry (LC-MS/MS). The result showed that almost every part of the primary packaging was contaminated with CP and ifosfamide (IF). However, the amounts of CP and IF were low, and most likely not harmful for the personnel handling these packaging in association with drug preparation. The contamination must originate from the pharmaceutical manufacturer.
Different surfaces in the preparation unit of a Swedish hospital pharmacy were also investigated at two different occasions by wipe sampling. In the preparation unit CP and IF were found as contaminants on the majority of the investigated surfaces. After the first measurement the hospital pharmacy improved its routines. Lower amounts of CP and IF were detected at the second measurement. A low degree of contamination with CP and IF was also detected on the floor outside the preparation unit and this indicated a small distribution of antineoplastic drugs to the surroundings.

8. Risques physiques

8.1 Rayonnements ionisants

- Documents en anglais :

Radiation exposure and the urologist: what are the risks?  
Hellawell GO, Mutch SJ, Thevendran G, Wells E, Morgan RJ.  
Department of Urology, The Royal Free Hospital, London, United Kingdom.  
gileshallawell@hotmail.com  
PURPOSE: Endourology is established in urology practice with routine use of fluoroscopic guidance. Medical personnel are rarely exposed to direct radiation exposure but secondary exposure occurs via radiation scatter. There are few reports on scatter radiation exposure and the subsequent risk to medical personnel involved in urological fluoroscopic procedures. We review the risks of scatter radiation exposure to medical personnel with reference to the routine use of fluoroscopic imaging in urological practice. MATERIALS AND METHODS: We measured staff radiation exposure during a series of ureteral endourological procedures using LiF:Mg,Ti thermoluminescent dosimeters placed at the extremities of the operating surgeon, the assistant and the scrub nurse. Doses for percutaneous nephrolithotomy (PCNL) procedures were calculated by extrapolating from the ureteral procedure thermoluminescent dosimeter data. Theoretical scattered radiation dose rates were also calculated.  
RESULTS: The average ureteral procedure fluoroscopy time was 78 seconds with an exposure rate of 71 kV, 2.4 mA. The surgeon received the highest radiation exposure with the lower leg (11.6 +/- 2.7 microGy) and foot (6.4 +/- 1.8 microGy) receiving more radiation than the eyes (1.9 +/- 0.5 microGy) and hands (2.7 +/- 0.7 microGy). For a predicted annual caseload of 50 ureteral cases, the dose received does not exceed 0.12% of the Ionising Radiations Regulations 1999 annual dose limit for adult workers. Radiation exposure during PCNLs is higher but does not exceed 2% of the annual dose limits even if 50 PCNLs are performed annually. CONCLUSIONS: Fluoroscopic screening results in radiation exposure of medical personnel. The estimate of maximum scatter radiation exposure to the surgeon for 50 PCNL procedures a year did not exceed 10 mGy. This amount is less than 2% of permissible annual limits of equivalent dose to the extremities. Medical personnel should be aware of scatter radiation risks and minimize radiation exposure when involved in fluoroscopic screening procedures.  

X-ray dose training: are we exposed to enough?  
McCoubrie P.  
MeSH Terms: Education, Medical, Continuing* - Great Britain - Humans - Medical Staff, Hospital/education* - Occupational Health* - Radiologic Health/education* - Radiologic
8.2 Troubles musculo-squelettiques

- **Documents en français** :

  Actes du 1er congrès francophone sur les TMS, Nancy 30 mai 2005, site éditeur INRS
  In Session 6 TMS : facteurs psychosociaux et compréhension du geste
  **Intervenir sur le travail collectif des soignants à l’hôpital**
  Sandrine Caroly
  Laboratoire Cristo - Université de Grenoble
  Actes :
  Session 6 :

9. Violence

- **Documents en anglais** :

  **Personal safety in the accident and emergency department.**
  Ferns T, Cork A, Rew M.
  School of Health and Social Care, University of Greenwich, UK.
  Violence and aggression continues to be a significant problem for staff practising in accident and emergency (A&E) areas. In recent years the number of articles examining factors related to violence and aggression in the A&E department have steadily increased, allowing for a more in-depth examination of data. This article considers the characteristics of individuals who assault A&E staff, introducing the reader to the "recreational fighter", an individual who enjoys and is attracted to violent confrontations. The article goes on to consider the role of gender, alcohol, age and social history in relation to the characteristics of individuals who assault nursing staff practising in A&E and offers a number of strategies for nursing staff to consider when attempting to minimize the risk of personal physical assault.

  MeSH Terms: Emergency Service, Hospital/organization & administration* - Health Facility Environment/organization & administration - Humans - Nurse-Patient Relations - Nursing Staff, Hospital/organization & administration - Nursing Staff, Hospital/psychology - Occupational Health* - Personality - Professional Competence/standards - Risk Factors - Safety Management/organization & administration* - Security Measures/organization & administration* - Violence

  Publication Types: Review - Review, Tutorial

  AAOHN J. 2005 Sep;53(9):399-406.
  **Reporting violence to a health care employer: a cross-sectional study.**
  Findorff MJ, McGovern PM, Wall MM, Gerberich SG.
  Fall Evaluation and Prevention Program, School of Nursing, University of Minnesota, Minneapolis, MN, USA.
  The purpose of this cross-sectional study was to identify individual and employment characteristics associated with reporting workplace violence to an employer and to assess the relationship between
reporting and characteristics of the violent event. Current and former employees of a Midwest health care organization responded to a specially designed mailed questionnaire. The researchers also used secondary data from the employer. Of those who experienced physical and non-physical violence at work, 57% and 40%, respectively, reported the events to their employer. Most reports were oral (86%). Women experienced more adverse symptoms, and reported violence more often than men did. Multivariate analyses by type of reporting (to supervisors or human resources personnel) were conducted for non-physical violence. Reporting work-related violence among health care workers was low and most reports were oral. Reporting varied by gender of the victim, the perpetrator, and the level of violence experienced.

10. Autres

- Documents en français :

Arrêté du 28 juin 2005 modifiant l’arrêté du 30 avril 2003 modifié
relatif à l'organisation et à l'indemnisation de la continuité des soins et de la permanence pharmaceutique dans les établissements publics de santé et dans les établissements publics d'hébergement pour personnes âgées dépendantes
L'arrêté du 28 juin 2005 publié au JO du 14 juillet prévoit la possibilité pour un praticien âgé de 60 ans et plus d'être exclu de la liste des gardes. Il en est de même pour les femmes enceintes.

INVS, 2005
Projet Cosmop : Cohorte pour la surveillance de la mortalité par profession
Premiers résultats de l'étude de faisabilité à partir de l'Échantillon démographique permanent
B. Geoffroy-Perez, E. Imbernon, M. GoldbergDépartement santé travail - Institut de veille sanitaire, Saint-Maurice
Peu d'informations sur le poids des facteurs professionnels sur la santé de la population au travail sont actuellement disponibles en France. Afin de pallier en partie cette carence, le Département santé travail (DST) de l'Institut de veille sanitaire développe divers systèmes de surveillance épidémiologique de la santé au travail, destinés à fournir régulièrement des indicateurs diversifiés concernant les risques professionnels dans la population française. C’est dans ce cadre que le DST a mis en place une analyse systématique et permanente de la mortalité par profession, par secteur d’activité et par cause de décès, dont les premiers résultats sont présentés ici.

- Documents en anglais :

Evaluation of a Telephone Dictation System (C-Phone) used by Medical Transcriptionists for Excessive Noise Exposures Through Their Headsets
The NIOSH investigators determined that a potential for excessive noise exposure exists with the dictation equipment used by the medical transcriptionists at Kaiser Permanente. Excessive noise is delivered through the headsets when the manual volume control on the telephone dictation system is left in the maximum position. If the volume control is placed in the middle position or lower, the noise exposures through the headsets are at a safe level for an 8-hour work shift. Recommendations are offered to the employees and management at Kaiser Permanente to maintain the noise levels from the headsets at a safe level and to improve the clarity of medical dictations.
Keywords: NAICS Code 622110 (General medical and surgical hospitals), medical transcriptionists, medical records, dictation, hearing loss, noise, telephone headsets, room noise, hearing conservation program

Smoke-free nurses: leading by example.
Halcomb KA.
Eastern Kentucky University, Richmond, KY, USA.

Occupational health nurses’ scope of practice includes health promotion and restoration of health from environmental hazards (American Association of Occupational Health Nurses, n.d.). Because the nursing profession is the largest constituent of health care providers, it is essential that occupational health nurses tackle the smoking epidemic among the nursing profession. By encouraging smoking cessation among nurses, occupational health nurses reduce the environmental hazard of second-hand smoke and improve the health of nurses who smoke. When occupational health nurses take an active role in encouraging smoking cessation among nurses, they become leaders in reducing smoking within their communities. Members of the nursing profession are also role models. Occupational health nurses must help nurses become healthy role models and credible educators in the battle against smoking.

MeSH Terms: Cardiovascular Diseases/etiology - Gastrointestinal Diseases/etiology - Humans - Lung Diseases/etiology - Neoplasms/etiology - Nicotine/adverse effects - Nicotine/therapeutic use - Nicotinic Agonists/adverse effects - Nicotinic Agonists/therapeutic use - Nurses* - Smoking/adverse effects* - Smoking/economics - Smoking Cessation/economics
Substances: Nicotinic Agonists - Nicotine
Publication Types: Review

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