



Veille documentaire Médecine du travail du personnel hospitalier

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

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 issues 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 \(http://www.bium.univ-paris5.fr/\)](http://www.bium.univ-paris5.fr/) ou à l'[INIST-CNRS \(http://www.inist.fr/\)](http://www.inist.fr/) .

Août-Septembre 2005

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1. Allergies

- Documents en anglais :

Dermatitis. 2005 Mar;16(1):22-7.

A topical cream containing a zinc gel (allergy guard) as a prophylactic against latex glove-related contact dermatitis.

Modak S, Gaonkar TA, Shintre M, Sampath L, Caraos L, Geraldo I.

College of Physicians and Surgeons of Columbia University, New York, NY.

BACKGROUND: Many health care workers are sensitized to the proteins in natural rubber latex and get contact dermatitis as a result of wearing latex gloves. OBJECTIVE: The aim of the study was to evaluate a topical formulation containing a zinc gel (Allergy Guard) as a prophylactic against latex glove-related contact dermatitis. METHODS: The study was carried out with volunteers who exhibited mild to moderate contact dermatitis (type IV) after wearing latex gloves as per the protocol. RESULTS: Allergy Guard significantly reduced skin irritation in volunteers who exhibited type IV hypersensitivity when exposed to latex gloves. Allergy Guard also exhibited a barrier effect as shown by the permeation of chlorophyllin dye into the skin of volunteers. Allergy Guard prevented dermal irritation induced by sodium lauryl sulfate. CONCLUSION: Topical formulations containing a zinc gel may be used to delay or prevent latex sensitivity, especially among health care professionals.

Publication Types: Clinical Trial - Controlled Clinical Trial

MeSH Terms: Administration, Topical - Dermatitis, Occupational/pathology - Dermatitis, Occupational/prevention & control* - Dermatologic Agents/administration & dosage* - Gels - Hand Dermatoses/pathology - Hand Dermatoses/prevention & control* - Humans - Latex Hypersensitivity/pathology - Latex Hypersensitivity/prevention & control* - Research Support, Non-U.S. Gov't - Treatment Outcome - Zinc/administration & dosage*
Substances: - Dermatologic Agents - Gels - Zinc

Contact Dermatitis. 2005 May;52(5):291-3.

Hand dermatitis among a complete cross-section of Chinese physicians.

Smith DR, Wei N, Zhang YJ, Wang RS.

National Institute of Industrial Health, Kawasaki, Japan.

MeSH Terms: Allergens/adverse effects - China/epidemiology - Comparative Study - Confidence Intervals - Dermatitis, Allergic Contact/diagnosis - Dermatitis, Allergic Contact/epidemiology* - Dermatitis, Allergic Contact/etiology* - Dermatitis, Occupational/diagnosis - Dermatitis, Occupational/epidemiology* - Dermatitis, Occupational/etiology* - Female - Follow-Up Studies - Hand Dermatoses/epidemiology - Hand Dermatoses/etiology - Humans - Incidence - Male - Occupational Exposure/adverse effects - Odds Ratio - Physicians/statistics & numerical data* - Probability - Risk Assessment

Substances: Allergens

Occupational Medicine 2005 55(6):501-503

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

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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.

Contact Dermatitis. 2005 May;52(5):276-81.

Occupational contact allergy to glyoxal.

Aalto-Korte K, Makela EA, Huttunen M, Suuronen K, Jolanki R.

Section of Dermatology, Finnish Institute of Occupational Health, Helsinki, Finland. kristiina.aalto-korte@ttl.fi

Glyoxal is a dialdehyde that is used as a disinfectant in health care and dentistry work. Allergic contact dermatitis from glyoxal has been described in these occupations. We analysed our patient data from 1998 to 2004 for allergic reactions to glyoxal. 20 patients had allergic reactions to glyoxal on patch testing. 5 of these patients worked in dentistry and 4 of them had present exposure to glyoxal. 9 patients were machinists without obvious exposure to glyoxal. A grinder with work-related facial dermatitis is described in detail. The chemical analysis of air samples from his workplace revealed 9.4-21 microg/m³ glyoxal. Glyoxal was also present in the used metal-working fluid, and apparently it had been formed during grinding. The remaining 6 patients worked in miscellaneous occupations and had no present exposure to glyoxal. Glyoxal is irritant on patch testing. Especially, solitary reactions to glyoxal 10% in aq. may be false-positive irritant reactions. 9 (45%) of our patients reacted to formaldehyde or glutaraldehyde. Glyoxal is an important allergen in dentistry and medical care, and we recommend it to be added to the antimicrobial patch test series. It also seems to be a 'hidden' allergen in the metal industry.

MeSH Terms: Adult - Cohort Studies - Dermatitis, Allergic Contact/diagnosis - Dermatitis, Allergic Contact/epidemiology - Dermatitis, Allergic Contact/etiology* - Dermatitis, Occupational/diagnosis - Dermatitis, Occupational/epidemiology - Dermatitis, Occupational/etiology* - Female - Finland/epidemiology - Glyoxal/adverse effects* - Glyoxal/pharmacology - Health Personnel/statistics & numerical data* - Humans - Incidence - Male - Middle Aged - Occupational Health - Patch Tests - Retrospective Studies - Risk Assessment - Severity of Illness Index - Substances: Glyoxal

2. Bonnes pratiques

3. Conditions de travail et santé psychologique

- *Documents en français :*

ANNALES MEDICO-PSYCHOLOGIQUES, 2005/03, n° 163 2, p. 156-160, 15 réf.

Burnout et maltraitance dans la religion soignante.

Burnout and abuse in health care.

DALOZ (L.), BENONY (H.), CHAHRAOUI (K.), et al.

La théorie du burnout fait état de la dépersonnalisation qui relève pour partie d'actes de maltraitance. Pour autant, les personnels le revendiquent et en parlent volontiers, faisant de cet état un mode d'approche aisé de soignants épuisés-maltraitants. La maltraitance s'origine ici dans le quotidien d'institution, sans intention véritable, sans mise en sens, par souffrance psychique où le burnout fait devenir des soignants des auteurs de maltraitance, effectuant leurs actes de manière désincarnée, déshumanisée. La maltraitance liée au burnout se différencierait de la simple incompétence et de la perversion. Les entretiens de recherches relatent une absence de conscience des conséquences subjectives voire objectives de leurs actes. La notion de burnout paraît ainsi susceptible d'être un modèle d'analyse de la maltraitance chez les soignants. Elle introduit en outre à l'étude de "l'auteur" de la maltraitance, plus que de la victime.

Epuisement professionnel, Profession santé, Souffrance, Appareil psychique, Maltraitance, Psychothérapie, Relation soignant soigné, Stress, Violence institutionnelle, Facteur

OBJECTIF SOINS, 2005/05, n° 136, p. 22-23

La distance professionnelle.

MALLEM (Elke)

La distance professionnelle est invoquée lors de situations de débordement, quand le soignant "craque". Mais comment trouver la bonne distance pour ne pas craquer ? (R.A.).

Hôpital, Profession santé, Epuisement professionnel, Distance, Définition, Souffrance, Relation soignant soigné, Psychologie, Communication

- *Documents en anglais :*

Issues Ment Health Nurs. 2005 Jun;26(5):531-56.

Clinical supervision, burnout, and job satisfaction among mental health and psychiatric nurses in Finland.

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This paper presents the findings from a survey of Finnish mental health and psychiatric nurses. The aim of the study was to describe and evaluate the current state of clinical supervision, and ascertain the levels of burnout and job satisfaction experienced by these health care professionals. Clinical supervision was found beneficial for mental health and psychiatric health care professionals in terms of their job satisfaction and levels of stress. The findings seem to demonstrate that efficient clinical supervision is related to lower burnout, and inefficient supervision to increasing job dissatisfaction. MeSH Terms: Adult - Age Distribution - Aged - Attitude of Health Personnel* - Burnout, Professional/epidemiology - Burnout, Professional/prevention & control - Burnout, Professional/psychology* - Clinical Competence* - Efficiency, Organizational - Female - Finland/epidemiology - Health Knowledge, Attitudes, Practice - Humans - Job Satisfaction* - Male - Middle Aged - Nursing Methodology Research - Nursing Staff/education - Nursing Staff/organization & administration - Nursing Staff/psychology* - Nursing, Supervisory/organization & administration* - Occupational Health - Personnel Staffing and Scheduling/organization & administration - Population Surveillance - Psychiatric Nursing/organization & administration* - Questionnaires - Risk Factors - Social Support - Time Factors - Workload

Int J Nurs Stud. 2005 Jul;42(5):549-55.

Daylight exposure and the other predictors of burnout among nurses in a University Hospital.

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The purpose of the study was to investigate if daylight exposure in work setting could be placed among the predictors of job burnout. The sample was composed of 141 nurses who work in Akdeniz University Hospital in Antalya, Turkey. All participants were asked to complete a personal data collection form, the Maslach Burnout Inventory, the Work Related Strain Inventory and the Work Satisfaction Questionnaire to collect data about their burnout, work-related stress (WRS) and job satisfaction (JS) levels in addition to personal characteristics. Descriptive statistics, parametric and non-parametric tests and correlation analysis were used in statistical analyses. Daylight exposure showed no direct effect on burnout but it was indirectly effective via WRS and JS. Exposure to daylight at least 3h a day was found to cause less stress and higher satisfaction at work. Suffering from sleep disorders, younger age, job-related health problems and educational level were found to have total or partial direct effects on burnout. Night shifts may lead to burnout via work related strain and working in inpatient services and dissatisfaction with annual income may be effective via job dissatisfaction. This study confirmed some established predictors of burnout and provided data on an unexplored area. Daylight exposure may be effective on job burnout.

MeSH Terms: Adaptation, Psychological - Adult - Age Distribution - Attitude of Health Personnel* - Burnout, Professional*/epidemiology - Burnout, Professional*/etiology - Burnout, Professional*/psychology - Environmental Exposure/statistics & numerical data* - Female - Hospitals, University - Humans - Job Satisfaction* - Night Care/manpower - Nursing Methodology Research - Nursing Staff, Hospital/psychology* - Personnel Staffing and Scheduling/organization & administration - Questionnaires - Research Support, Non-U.S. Gov't - Risk Factors - Salaries and Fringe Benefits - Sleep Disorders/etiology - Socioeconomic Factors - Sunlight* - Time Factors - Turkey/epidemiology - Work Schedule Tolerance - Workload

Am Surg. 2005 Jul;71(7):552-5; discussion 555-6.

Effect of the 80-hour work week on cases performed by general surgery residents.

McElearney ST, Saalwachter AR, Hedrick TL, Pruett TL, Sanfey HA, Sawyer RG.

Department of Surgery, University of Virginia Health System, Charlottesville, Virginia 22908, USA.

The Accreditation Council for Graduate Medical Education (ACGME) implemented mandatory work week hours restrictions in 2003. Due to the traditionally long hours in general surgery, the effect of restrictions on surgical training and case numbers was a matter of concern. Data was compiled retrospectively from ACGME logs and operating room (OR) records at a university hospital for 2002 and 2003. Work week restrictions began in January 2003. This data was reviewed to determine resident case numbers, both in whole and by postgraduate year (PGY). Mean case numbers per resident-month in 2002 were 8.8 +/- 8.2 for PGY1s, 16.2 +/- 15.7 for PGY2s, 31.4 +/- 12.9 for PGY3s, 31.5 +/- 17.6 for PGY4s, and 31.5 +/- 17.6 for PGY5s. In 2003, they were 8.8 +/- 5.2 for PGY1s, 16.6 +/- 13.9 for PGY2s, 27.8 +/- 12.5 for PGY3s, 38.2 +/- 18.8 for PGY4s, and 26.1 +/- 9.6 for PGY5s. PGY1s, PGY2s, PGY3s, PGY4s, or all classes were not statistically different. PGY5s did have statistically fewer cases in 2003 (P = 0.03). PGY5s did have statistically fewer cases after the work-hours restriction, which likely represented shifting of postcall afternoon cases to other residents. Comparing other classes and all PGYs, case numbers were not statistically different. Operative training experience does not appear to be hindered by the 80-hour work week.

MeSH Terms: Burnout, Professional/epidemiology* - Comparative Study - Education, Medical, Graduate - Female - Hospitals, University - Humans - Incidence - Internship and Residency/organization & administration* - Job Satisfaction - Male - Registries - Retrospective Studies - Risk Assessment - Surgery/education* - Time Factors - Total Quality Management - Virginia - Work Schedule Tolerance* - Workload*

Health Serv J. 2005 Jul 21;115(5965):35.

Employee well-being. Health and happiness.

MacDonald R.

MeSH Terms: Attitude of Health Personnel* - Great Britain - Happiness - Humans - Job Satisfaction* - Leadership - Occupational Health* - Organizational Culture - State Medicine/organization & administration* - State Medicine/standards - Workplace/psychology

BMJ. 2005 Jun 18;330(7505):1404.

Junior doctors' shifts and sleep deprivation.

Murray A, Pounder R, Mather H, Black DC.

Publication Types: Editorial

MeSH Terms: Europe - Humans - Medical Staff, Hospital* - Risk-Taking - Sleep Deprivation/complications* - Work Schedule Tolerance/physiology*

J Occup Health. 2005 May;47(3):218-25.

Occupational stress in nurses in psychiatric institutions in Taiwan.

Shen HC, Cheng Y, Tsai PJ, Lee SH, Guo YL.

Department of Environmental and Occupational Health, College of Medicine, National Cheng Kung University, Taiwan.

Nurses are known to be exposed to occupational stress. However, occupational stress is not well documented for nurses in psychiatric institutions in Taiwan. A cross-sectional study was conducted to explore the work-related stress and risk factors of nurses in psychiatric institutions in Taiwan. A structured questionnaire was distributed to nurses at five state-owned psychiatric hospitals in Taiwan in 2001. Demographic information, working environment, and personal health status were inquired. Occupational stress was assessed based on the Chinese version of Job Content Questionnaire (JCQ). General health status and mental health were evaluated by the International Quality of Life Assessment Short Form-36 (IQOLA SF-36). A total of 573 questionnaires were disseminated to nurses and 518 (90.4%) were satisfactorily completed by nurses, including 408 female full-time nurses who had been in their current work for more than 6 months. In the past one month, 17.2% of nurses reported being under significant stress often or always. Assault episodes were reported by 45.1% of nurses in the past 6 months. Among the nurses, 16.9%, 25.2%, 50.0%, and 7.8% belong to the "High

strain", "Low strain", "Active", and "Passive" groups, respectively. Perceived occupational stress was associated with young age, widowed/divorced/separated marital status, high psychological demand, low workplace support, and threat of assault at work. Lower general health score was associated with low job control, high psychological demand, and perceived occupational stress. A lower mental health score was associated with low job control, high psychological demand, low workplace support, and perceived occupational stress. We concluded that nurses in psychiatric institutions are under significant stress related to work factors.

MeSH Terms: Adult - Cross-Sectional Studies - Employment/psychology* - Female - Hospitals, Psychiatric* - Humans - Nursing Staff, Hospital/psychology* - Occupational Health - Research Support, Non-U.S. Gov't - Taiwan

Nurs Stand. 2005 Jul 6-12;19(43):71.

Take some time for yourself.

Percival J.

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MeSH Terms: Adaptation, Psychological* - Burnout, Professional/prevention & control* - Burnout, Professional/psychology - Humans - Nurse Administrators/psychology* - Self Care/methods - Self Care/psychology

Rev Saude Publica. 2004 Dec;38 Suppl:26-31. Epub 2004 Dec 13.

The impact of night work on subjective reports of well-being: an exploratory study of health care workers from five nations.

Tepas DI, Barnes-Farrell JL, Bobko N, Fischer FM, Iskra-Golec I, Kaliterna L.

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OBJECTIVE: To carry out a survey data collection from health care workers in Brazil, Croatia, Poland, Ukraine and the USA with two primary goals: (1) to provide information about which aspects of well-being are most likely to need attention when shiftwork management solutions are being developed, and (2) to explore whether nations are likely to differ with respect to the impacts of night work on the well-being of workers involved in health care work. METHODS: The respondents from each nation were sorted into night worker and non-night worker groups. Worker perceptions of being physically tired, mentally tired, and tense at the end of the workday were examined. Subjective reports of perceived felt age were also studied. For each of these four dependent variables, an ANCOVA analysis was carried out. Hours worked per week, stability of weekly work schedule, and chronological age were the covariates for these analyses. RESULTS: The results clearly support the general proposal that nations differ significantly in worker perceptions of well-being. In addition, perceptions of physical and mental tiredness at the end of the workday were higher for night workers. For the perception of being physically tired at the end of a workday, the manner and degree to which the night shift impacts the workers varies by nation. CONCLUSIONS: Additional research is needed to determine if the nation and work schedule differences observed are related to differences in job tasks, work schedule structure, off-the-job variables, and/or other worker demographic variables.

MeSH Terms: Adult - Age Factors - Brazil - Circadian Rhythm/physiology* - Comparative Study - Croatia - Female - Health Personnel/psychology* - Health Status* - Humans - Male - Poland - Quality of Life - Statistics, Nonparametric - Ukraine - United States - Work Schedule Tolerance/physiology - Work Schedule Tolerance/psychology* - Workload/psychology

Int J Ment Health Nurs. 2005 Jun;14(2):142-8.

The phenomenon of resilience in crisis care mental health clinicians.

Edward KL.

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The purpose of this study, undertaken in 2003, was to explore the phenomenon of resilience as experienced by Australian crisis care mental health clinicians working in a highly demanding, complex, specialized and stressful environment. For the purpose of this research, the term 'resilience' was defined as the ability of an individual to bounce back from adversity and persevere through difficult

times. The six participants for this study were drawn from Melbourne metropolitan mental health organizations - the disciplines of nursing, allied health and medicine. A number of themes were explicated from the participants' interview transcripts - Participants identified the experience of resilience through five exhaustive descriptions, which included: 'The team is a protective veneer to the stress of the work'; Sense of self; Faith and hope; Having insight; and Looking after yourself. These exhaustive descriptions were integrated into a fundamental structure of resilience for clinicians in this role. The study's findings have the potential to inform organizations in mental health to promote resilience in clinicians, with the potential to reduce the risk of burnout and hence staff attrition, and promote staff retention and occupational mental health.

MeSH Terms: Adaptation, Psychological* - Attitude of Health Personnel* - Burnout, Professional/etiology - Burnout, Professional/prevention & control* - Burnout, Professional/psychology - Crisis Intervention*/organization & administration - Female - Humans - Interprofessional Relations - Job Satisfaction - Male - Mental Health Services*/organization & administration - Morale - Nursing Methodology Research - Occupational Health - Personal Satisfaction - Personality - Professional Autonomy - Professional Role - Questionnaires - Self Care/methods - Self Care/psychology - Self Efficacy - Social Support - Victoria - Wit and Humor - Workplace/organization & administration - Workplace/psychology

Med Health R I. 2005 Apr;88(4):133-4. Related Articles, Links

Time stresses in the lives of physicians.

Hershkowitz M.

Brown Medical School, USA. DrMel23@cox.net

MeSH Terms: Anecdotes – Family Relations - Humans - Leisure Activities - Physicians/psychology* - Stress, Psychological/etiology* - Time Management* - Workload/psychology*

Crit Care Nurse. 2005 Jun;25(3):11-2, 14.

When your work conditions are sicker than your patients.

Alspach G.

Publication Types: Editorial

MeSH Terms: Burnout, Professional/etiology - Burnout, Professional/prevention & control - Burnout, Professional/psychology - Communication - Cooperative Behavior - Critical Care*/organization & administration - Critical Care*/psychology - Decision Making - Guidelines - Health Facility Environment/organization & administration* - Humans - Interprofessional Relations - Leadership - Nursing Staff, Hospital*/organization & administration - Nursing Staff, Hospital*/psychology - Occupational Health - Personnel Staffing and Scheduling - Workplace*/organization & administration - Workplace*/psychology

4. Hygiène et gestion des risques

- *Documents en français :*

Mémoire ENSP de Directeur d'Hôpital., p. 87+Xlp., réf. 7p.

Améliorer la santé et la sécurité du personnel au Centre Hospitalier d'Avignon : l'élaboration du "document unique", plus qu'une obligation légale, une opportunité managériale.

DAUTEL (Anne-Claude)

Ecole Nationale de la Santé Publique. (E.N.S.P.). Rennes. FRA / com.

Sous l'impulsion d'une Directive du Conseil des Communautés Européennes n°89-391 du 12 juin 1989 relative à la mise en oeuvre de mesures visant à promouvoir l'amélioration de la sécurité et de la santé des travailleurs, le dispositif législatif français impose aux entreprises d'évaluer les risques professionnels. Le décret n° 2001-1016 du 5 novembre 2001 exige la transcription de cette évaluation sous la forme d'un "document unique". Les établissements de santé, par la diversité des métiers et la multiplicité des risques existants sont au coeur du sujet. Le directeur d'hôpital porte la responsabilité juridique, pénale, et morale des actions nécessaires à l'élaboration de ce document. Les enjeux sont

stratégiques, économiques, organisationnels et qualitatifs. L'engagement du Centre hospitalier d'Avignon dans cette démarche et la comparaison avec des méthodologies employées dans d'autres structures permet une vision concrète de cette problématique. La pluridisciplinarité, l'adaptation de la méthodologie, la continuité, l'évaluation et l'adhésion du personnel au projet sont les conditions de sa réussite. L'élaboration du "document unique" constitue une opportunité managériale pour améliorer la santé et la sécurité des personnels hospitaliers. (R.A.).

Hôpital, Amélioration, Prévention santé, Mesure risque, Risque professionnel, Sécurité, Management, Directeur, Directive, Evaluation, Réglementation, Qualité, Condition travail, Document pédagogique, Recueil données, Guide, Système information, Hygiène & sécurité, Personnel hospitalier, France, Gestion risque, Obligation, Projet établissement, Enquête qualitative, Gestion ressources humaines
AVIGNON

Institut syndical européen pour la recherche, la formation et la santé-sécurité (ETUI-REHS)

Italie : la consultation des travailleurs des hôpitaux conditionne l'efficacité de la prévention

La coordination des représentants des travailleurs pour la sécurité des principaux hôpitaux du Piémont a réalisé en 2004 une enquête qui fait le point sur l'organisation de la prévention dans ce secteur.

L'enquête couvre 28 des 34 hôpitaux de cette région du nord de l'Italie. Ces 28 hôpitaux occupent environ 48.000 travailleurs.

<http://hesa.etui-rehs.org/fr/newsevents/newsfiche.asp?pk=376> Résumé en français

- Documents en anglais :

Nurs Econ. 2005 May-Jun;23(3):138, 140.

AACN standards for establishing and sustaining healthy work environments.

Pinkerton S.

sepinkerto@msn.com

MeSH Terms: Attitude of Health Personnel* - Critical Care/organization & administration* - Focus Groups - Guidelines - Health Care Surveys - Health Personnel/statistics & numerical data - Humans - Interviews - Occupational Health* - Organizational Culture* - Societies, Nursing* - United States

Crit Care Nurse. 2005 Jun;25(3):72, 71.

Healthy work environments: enroute to excellence.

Kerfoot KM, Lavandero R.

Clarian Health Partners, Indianapolis, Ind, USA. kkerfoot@clarian.org

MeSH Terms: Evidence-Based Medicine - Guidelines - Health Facility Environment/organization & administration* - Humans - Indiana - Intensive Care Units/organization & administration* - Models, Organizational - Nursing Staff, Hospital/organization & administration - Nursing Staff, Hospital/psychology - Occupational Health* - Organizational Culture - Workload - Workplace/organization & administration* - Workplace/psychology

OR Manager. 2005 Jul;21(7):24-6.

If OSHA knocks, will you be prepared?

[No authors listed]

MeSH Terms: Blood-Borne Pathogens - Documentation - Ethylene Oxide/standards - Guideline Adherence/legislation & jurisprudence* - Hazardous Substances/standards - Humans - Occupational Health/legislation & jurisprudence* - Safety Management/legislation & jurisprudence - Safety Management/standards - Surgicenters/legislation & jurisprudence* - United States - United States Occupational Safety and Health Administration*
Substances: Hazardous Substances - Ethylene Oxide

5. Infections nosocomiales

6. Risques biologiques

6.1 Accident d'exposition au sang

- *Documents en français :*

In Archives des maladies professionnelles et de médecine du travail, Vol 66 - N° 3 - Juin 2005, p.263 – 273

Hépatite B : prévention, réparation.

C. Peyrethon

Résumé :Le virus de l'hépatite B est un virus ubiquitaire qui pose un sérieux problème de santé publique à l'échelle mondiale. Son problème majeur réside dans ses complications tardives et sévères (cirrhose, cancer hépato-cellulaire).

Les populations à risque doivent être identifiées, les professions de santé sont les plus exposées. Le risque de développer une hépatite virale après accident exposant au sang est estimée à 30 % en milieu de soins.

Des moyens de prévention adaptés doivent être mis en place : respect des règles d'hygiène, vaccination, surveillance médicale. La vaccination contre l'hépatite B est la mesure de prévention la plus efficace, elle est obligatoire en France pour toutes les professions de santé exposées à un risque de contamination. Lorsque la vaccination est pratiquée chez une personne âgée de 25 ans ou plus, appartenant à une population à haut risque d'exposition, il est recommandé de pratiquer un dosage des anticorps anti-HBs un à deux mois après la dernière injection vaccinale afin de documenter son statut immunitaire : répondeur ou non.

Tout accident exposant au sang doit être pris en charge immédiatement afin d'évaluer le risque de contamination par le virus de l'hépatite B et de proposer, si besoin, un traitement préventif et/ou un suivi sérologique. Le médecin du travail analyse les circonstances de cet accident dans une perspective de prévention. Les pathologies liées au virus de l'hépatite B peuvent être réparées soit comme complication d'un accident du travail, soit comme maladie professionnelle par le système des tableaux. L'obligation vaccinale chez tous les soignants depuis 1991 s'accompagne d'une très nette diminution du nombre de pathologies reconnues.

Mots-clés : Hépatite B, vaccination, accident exposant au sang, réparation

BULLETIN EPIDEMIOLOGIQUE HEBDOMADAIRE, 2005/04/05,n° 14 ; p. 54-56, 2 tabl., 1 fig., 6 réf.

Évaluation d'un protocole de contrôle des sérologies virales du patient-source (PS) lors des accidents exposant au sang (AES), CHU de Saint-Étienne, 2001-2003.

BERTHELOT (P.), BIRYNCZYK (P.), BOURLET (T.), FASCIA (P.), MOULIN (M.), VITROLLES (B.), CARROT (J.), CABAL (C.), LUCHT (F.), POZZETTO (B.), Chu Saint-Etienne.

En application des circulaires 98/228 du 9 avril 1998 et 2003-165 du 2 avril 2003, le protocole en vigueur au CHU de Saint-Étienne prévoit, lors de tout AES pour lequel un PS est identifié et dont le statut VIH est inconnu, la réalisation d'un bilan sérologique en urgence chez ce dernier, avec son accord. Afin d'améliorer les délais de transmission des examens, un changement de procédure concernant l'acheminement des tubes est intervenu en mai 2003. La présente étude s'est fixée pour objectifs d'évaluer l'application du protocole de contrôle des sérologies virales du PS en cas d'AES, le délai de rendu des résultats sérologiques et l'efficacité du changement de procédure d'acheminement des tubes. (R.A.).

CHU, Malade, VIH, Circulaire, Evaluation, Recueil données, Donnée statistique, Examen sérologique, Profession santé, Accident travail, Enquête épidémiologique, France, Sérologie, Exposition sang, Protocole, Traitement antirétroviral, Traçabilité

InVS Institut de Veille Sanitaire 2005

Surveillance des Accidents avec Exposition au Sang dans les établissements de santé

français, 2003

GERES, Groupe d'étude sur le risque d'exposition des soignants aux agents infectieux
RAISIN (Réseau d'Alerte, d'Investigations et de Surveillance des Infections Nosocomiales)
accidents d'exposition au sang, surveillance, statistiques, distributions statistiques, services,
personnel, circonstances, matériel, prévention, commentaires, 58 pages
mots clés : *agents pathogènes transportés sang ; *contaminations par piqûre d'aiguille /épidémiologie
; distributions statistiques ; *exposition professionnelle ; France ; hôpital ; incidence ; personnel
sanitaire ; transmission maladie malade-personnel médical
type de publication: *rapport technique ; tableau
Accès au texte intégral : http://www.invs.sante.fr/publications/2005/aes_raisin_2003/index.html

- Documents en anglais :

Ann Saudi Med. 2005 May-Jun;25(3):233-8.

Epidemiology of needlestick injuries among health care workers in a secondary care hospital in Saudi Arabia.

Jahan S.

*Preventive Medicine Department, Buraidah Central Hospital, Buraidah, Al-Qassim, Saudi Arabia.
omar25896@hotmail.com*

BACKGROUND: Accidental needlestick injuries sustained by health care workers are a common occupational hazard in health care settings. The aim of this study was to review the epidemiology of needlestick injuries in Buraidah Central Hospital, a 212-bed secondary care hospital in Buraidah, Saudi Arabia. METHODS: We conducted a retrospective survey of all self-reported documents related to needlestick injuries, for the period January 2002 through December 2003. The data was analyzed to determine the age, sex and job category of the health care worker suffering the injury as well as the risk factors responsible for needlestick injuries. RESULTS: During the 2-year period, employees reported 73 injuries from needles and other sharp objects. Nurses were involved in 66% of instances, physicians in 19%, technicians in 10%, and nonclinical support staff in 5.5%. The majority (53.4%) of the injuries occurred after use and before disposal of the objects. Syringe needles were responsible for 63% of all injuries. Most injuries occurred during recapping of used needles (29%), during surgery (19%), and by collision with sharps (14%). Disposal-related (11%) causes as well as injuries by concealed sharps (5%) occurred while handling linens or trash containing improperly disposed needles. CONCLUSION: This data emphasizes the importance of increased awareness, training and education of health care workers for reporting and prevention of needlestick injuries.

J Adv Nurs. 2005 Sep;51(5):449-55.

Needlestick and sharps injuries among nursing students.

Smith DR, Leggat PA.

Researcher, Department of Hazard Assessment, National Institute of Industrial Health, Kawasaki, Japan.

Aims. This paper reports the first investigation of the prevalence and nature of needlestick injuries among Australian nursing students. Background. Needlestick and sharps injuries are the most efficient method of transmitting blood-borne pathogens between patients and healthcare staff. Although nurses are known to be a high-risk subgroup for these events, nursing students may be at even greater risk due to their limited clinical experience. Despite this fact, the epidemiology of needlestick and sharps injuries among nursing students has not been clearly elucidated in Australia. Methods. A questionnaire-based methodology adapted from other international investigations was conducted among nursing students. We recruited a complete cross-section of students from a large university nursing school in North Queensland, Australia, in March 2004, and analysed needlestick and sharps events as a percentage of all students and also as a proportion of all cases. Risk factors were evaluated using logistic regression. Results. From a group of 319 students, 274 successfully completed questionnaires were obtained (overall response rate 85.9%). A total of 38 students (13.9%) reported a needlestick or sharps injury during the previous 12 months. By causative item, 6.2% of students had been injured by a normal hollow-bore syringe needle, 3.6% by a glass item and 3.3% by an insulin syringe needle. Regarding prior usage, 81.6% of all injuring items were unused, 15.8% had been used on a patient and the status of 2.6% was unknown. Most needlestick injuries occurred either

in the nursing laboratory (45%) or the teaching hospital (37%). Opening the needle cap was the most common causative event (28% of all cases). A total of 39.5% of needlestick injuries were not reported. The main reason for non-reporting was that the item was unused (42%). Logistic regression analysis revealed that students in the third year were 14.8 times more likely to have experienced a needlestick injury than their counterparts in other years (odds ratio 14.8, 95% confidence interval 5.2-50.3, $P < 0.01$). These injury rates were higher among Australian nursing students than in other international studies. Conclusions. Although hepatitis B vaccination coverage among the students was excellent, it is important that the principles of infection-control training and reporting of all needlestick and sharps continue to be emphasized throughout undergraduate nursing education.

Trop Med Int Health. 2005 Aug;10(8):773-81.

Needle stick injuries among nurses in sub-Saharan Africa.

Nsubuga FM, Jaakkola MS.

Institute of Occupational and Environmental Medicine, The University of Birmingham, Birmingham, UK.

OBJECTIVES: Despite a heavy burden of HIV/AIDS and other blood borne infections, few studies have investigated needle stick injuries in sub-Saharan Africa. We conducted a cross-sectional study at Mulago national referral hospital in Kampala, Uganda, to assess the occurrence and risk factors of needle stick injuries among nurses and midwives. **METHODS:** A total of 526 nurses and midwives involved in the direct day-to-day management of patients answered a questionnaire inquiring about occurrence of needle stick injuries and about potential predictors, including work experience, work load, working habits, training, and risk behaviour. **RESULTS:** A 57% of the nurses and midwives had experienced at least one needle stick injury in the last year. Only 18% had not experienced any such injury in their entire career. The rate of needle stick injuries was 4.2 per person-year. Multiple logistic regression analysis showed that the most important risk factor for needle stick injuries was lack of training on such injuries (OR 5.72, 95% CI 3.41-9.62). Other important risk factors included working for more than 40 h/week (OR 1.90, 95% CI 1.20-3.31), recapping needles most of the time (OR 1.78, 95% CI 1.11-2.86), and not using gloves when handling needles (OR 1.91, 95% CI 1.10-3.32).

CONCLUSIONS: The study showed a high rate of needle stick injuries among nurses and midwives working in Uganda. The strongest predictor for needle stick injuries was lack of training. Other important risk factors were related to long working hours, working habits, and experience.

MeSH Terms: Adult - Cross-Sectional Studies - Disposable Equipment - Education, Nursing, Continuing - Female - Humans - Male - Middle Aged - Needles/adverse effects - Needlestick Injuries/epidemiology* - Nursing Staff* - Occupational Diseases/epidemiology* - Prevalence - Research Support, Non-U.S. Gov't - Risk Factors - Uganda/epidemiology

Am J Surg. 2005 Aug;190(2):249-54

Occupational blood-borne diseases in surgery.

Fry DE.

Department of Surgery, 1 University of New Mexico, Albuquerque, NM 87131, USA.

BACKGROUND: Human immunodeficiency virus (HIV), hepatitis B (HBV), and hepatitis C (HCV) infections are transmitted by blood exposure. Surgeons have been concerned about the risks of blood exposure in the operating room as a potential source of occupational infections from these viruses. The actual risk and frequency of operating room transmission remains poorly understood by many surgeons. **METHODS:** The pertinent recent literature on the pathophysiology, diagnosis, prevention, and treatment of HIV, HBV and HCV were reviewed to address the current understanding of these viruses as occupational risks to surgeons. **RESULTS:** HIV transmission to surgeons has not been documented in the United States by the Centers for Disease Control. HIV transmission from a surgeon to a patient in the environment of the operating room, as well as transmission from an HIV-infected surgeon to a patient, has not been documented. HBV infection of surgeons has declined with the general acceptance of the HBV vaccine. HCV infection remains a real risk for transmission in the operating room, given that no vaccine is currently available and that the overall number of chronically infected patients remains quite high. **CONCLUSION:** The risk of occupational infection from known viral pathogens for surgeons is low, but it is not zero. Effective barriers, modified patterns of behavior, and prompt responses to blood exposure events are the best methods for prevention.

N Engl J Med. 2005 Aug 25;353(8):757-9.

Occupational hazards.

Louie T.

University of Medicine and Dentistry of New Jersey, New Brunswick, USA.

MeSH Terms: Acquired Immunodeficiency Syndrome/psychology* - Acquired Immunodeficiency Syndrome/transmission - Adult - Anti-Retroviral Agents/therapeutic use - Disease Transmission, Patient-to-Professional/prevention & control - Empathy - Female - Humans - Internship and Residency - Needlestick Injuries/psychology* - Physician-Patient Relations
Substances: - Anti-Retroviral Agents

6.2 Contamination soignant-soigné

- *Documents en anglais :*

Nurs Ethics. 2001 Mar;8(2):133-41.

Should screening of student and qualified nurses for bloodborne infections be compulsory and infected individuals excluded from work?

Leung WC.

Epidemiology and Public Health, 1st floor, Milvain Building, Newcastle General Hospital, Newcastle upon Tyne NE4 6BE, UK.

Policies on whether student and qualified nurses should be screened for bloodborne infections and whether infected individuals should be excluded from work must be based on sound ethical principles. Patients have rights, and nurses and employers have duties to respect these rights. However, nurses also have rights that must be respected by their employers and the State. Balancing these competing rights and duties is a complex procedure. In this article, these rights and duties are discussed and applied to a selection of issues.

Publication Types: Review - Review, Tutorial

MeSH Terms: Blood-Borne Pathogens* - Ethics, Nursing* - Great Britain - HIV Infections/diagnosis - HIV Infections/prevention & control - Hepatitis B/diagnosis - Hepatitis B/prevention & control - Hepatitis C/diagnosis - Hepatitis C/prevention & control - Humans - Infection Control/methods - Infection Control/standards* - Mass Screening/ethics* - Mass Screening/standards - Nursing Staff, Hospital/ethics* - Nursing Staff, Hospital/standards - Patient Rights* - Students, Nursing*

6.3 Transmission aérienne

6.4 Transmission de contact

6.5 Vaccination

- Documents en français :

In Archives des maladies professionnelles et de médecine du travail, Vol 66 - N° 3 - Juin 2005, p. 274 – 275

CAS CLINIQUE : Vaccination contre le virus de l'hépatite B et aptitude

L. Bensefa, C. Peyrethon, J.-F. Gehanno

Résumé : MMme T., 40 ans, est infirmière dans un service d'hépatogastroentérologie. L'évaluation des risques concernant son poste de travail montre une exposition potentielle au virus de l'hépatite B (VHB) (réalisation de prélèvements biologiques, pose de sondes naso-gastriques...).

In Archives des maladies professionnelles et de médecine du travail, Vol 66 - N° 3 - Juin 2005, p.263 – 273

Hépatite B : prévention, réparation.

C. Peyrethon

Résumé :Le virus de l'hépatite B est un virus ubiquitaire qui pose un sérieux problème de santé publique à l'échelle mondiale. Son problème majeur réside dans ses complications tardives et sévères (cirrhose, cancer hépato-cellulaire).

Les populations à risque doivent être identifiées, les professions de santé sont les plus exposées. Le risque de développer une hépatite virale après accident exposant au sang est estimée à 30 % en milieu de soins.

Des moyens de prévention adaptés doivent être mis en place : respect des règles d'hygiène, vaccination, surveillance médicale. La vaccination contre l'hépatite B est la mesure de prévention la plus efficace, elle est obligatoire en France pour toutes les professions de santé exposées à un risque de contamination. Lorsque la vaccination est pratiquée chez une personne âgée de 25 ans ou plus, ou appartenant à une population à haut risque d'exposition, il est recommandé de pratiquer un dosage des anticorps anti-HBs un à deux mois après la dernière injection vaccinale afin de documenter son statut immunitaire : répondeur ou non.

Tout accident exposant au sang doit être pris en charge immédiatement afin d'évaluer le risque de contamination par le virus de l'hépatite B et de proposer, si besoin, un traitement préventif et/ou un suivi sérologique. Le médecin du travail analyse les circonstances de cet accident dans une perspective de prévention. Les pathologies liées au virus de l'hépatite B peuvent être réparées soit comme complication d'un accident du travail, soit comme maladie professionnelle par le système des tableaux. L'obligation vaccinale chez tous les soignants depuis 1991 s'accompagne d'une très nette diminution du nombre de pathologies reconnues.

Mots-clés : Hépatite B, vaccination, accident exposant au sang, réparation

- Documents en anglais :

Ann Allergy Asthma Immunol. 2005 Jun;94(6):682-5.

Absence of oropharyngeal vaccinia virus after vaccinia (smallpox) vaccination.

Klote MM, Ludwig GV, Ulrich MP, Black LA, Hack DC, Engler RJ, Martin BL.

Department of Allergy Immunology, Walter Reed Army Medical Center, Washington, DC, USA.

Mary.Klote@amedd.army.mil

BACKGROUND: With the resumption of the vaccinia (smallpox) vaccination, questions regarding transmission risk prompted this study to determine whether vaccinia virus could be detected in the oropharynx of adults recently vaccinated with vaccinia (smallpox) vaccine. German, Russian, and American studies on the oropharyngeal presence of vaccinia virus revealed conflicting results in different age groups. **OBJECTIVE:** To measure vaccinia viral particle or antigen presence in the oropharynx of adult health care workers after vaccination with vaccinia (smallpox) vaccine using viral culture and high-sensitivity assays (polymerase chain reaction [PCR] and electrochemiluminescence) and to determine whether there is an association between the presence of vaccinia virus and adverse reactions. **METHODS:** A total of 155 adults (primary vaccinees and revaccinees) were enrolled for 1 baseline and 5 subsequent throat swabs. The swabs were evaluated using viral culture, PCR, and electrochemiluminescence. **RESULTS:** Of the 155 participants, 144 had more than 2 throat swabs in the 2 weeks after vaccination. Of the 801 specimens evaluated, there were no positive results by culture, PCR, or electrochemiluminescence except in the control samples (n = 6), which were positive by all 3 methods. **CONCLUSIONS:** Based on the absence of detectable vaccinia virus in this study population, one can be 95% certain that the true rate of vaccinia virus in the oropharynx of adults

during the 2 weeks after vaccination with vaccinia (smallpox) vaccine is 0% to 3.3%. These data should be reassuring to the medical community and support the Advisory Committee on Immunization Practice guidelines that respiratory precautions are not necessary after vaccinia (smallpox) vaccination in healthy adults.

MeSH Terms: Adolescent - Adult - Female - Humans - Male - Middle Aged - Mouth/virology* - Pharynx/virology* - Research Support, Non-U.S. Gov't - Smallpox Vaccine* - Vaccination - Vaccinia/prevention & control* - Vaccinia virus/isolation & purification*
Substances: Smallpox Vaccine

Emerg Infect Dis. 2005 Jul;11(7):1158-9. Related Articles, Links

Avian influenza H5N1 and healthcare workers.

Schultsz C, Dong VC, Chau NV, Le NT, Lim W, Thanh TT, Dolecek C, de Jong MD, Hien TT, Farrar J.

Publication Types: Letter - MeSH Terms: Adult - Disease Transmission, Patient-to-Professional* - Female - Health Personnel* - Humans - Infection Control - Influenza, Avian/transmission* - Male - Middle Aged

Vaccine. 2005 Jul 15

Cost-effectiveness of varicella vaccination of healthcare workers.

Chodick G, Ashkenazi S, Livni G, Lerman Y.

Department of Epidemiology and Preventive Medicine, Sackler Faculty of Medicine, Tel-Aviv University, P.O. Box 39040, Tel-Aviv 69978, Israel; Schneider Children's Medical Centre, 14 Kaplan Street, Petach-Tiqva, Israel.

OBJECTIVE:: Although transmission of VZV is recognized as an important cause for morbidity in health care workers (HCWs), there is no general agreement on the recommended immunization policy. This study aimed to evaluate several of such prevention policies in economic terms.

SETTINGS:: Analysis of the cost per avoided future varicella cases among HCWs in Israel.

METHODS:: A cost-effectiveness analysis was performed by comparing the cost per avoided case of varicella among a theoretical cohort of 63,353 physician and nurses aged less than 45 years in Israel. Four policies were examined: (a) do nothing (status quo); (b) vaccination of susceptible workers using VZV serotesting; with (c) or without anamnestic history of chickenpox; and (d) presumptive mass vaccination of all eligible workers. A Markov-based model was developed using data from our recent seroepidemiological study in target population and from the literature. RESULTS:: Screening and vaccination of susceptible workers using anamnestic selection is expected to reduce future cases, within 20 years since vaccination, from 58.3 to 33.0 with an incremental cost of US\$ 23,713 per avoided cases. Using only serological tests to detect susceptible workers would prevent additional 5.7 cases with an incremental cost of US\$ 206,692 per avoided case. Vaccinating all HCWs without serotesting, raises the costs markedly, with almost identical effectiveness, resulting in an incremental cost of US\$ 10.4 million per avoided case. Sensitivity analyses do not alter the ranking of the options. CONCLUSION:: From the employer's perspective, routine varicella vaccination program for HCWs with or without selection of susceptible workers is extremely expensive compared to other high-cost practiced approaches. Substantial reduction in cost of vaccination may alter this conclusion.

Occupational Medicine 2005 55(6):474-479

Factors affecting influenza vaccine uptake among health care workers.

O'reilly FW, Cran GW, Stevens AB.

Rolls Royce plc, Derby, UK.

Background In 2000, the UK Departments of Health recommended influenza immunization to employees directly involved in patient care. Uptake of this immunization had tended to be variable and usually low. Aims To assess personal and organizational factors associated with influenza immunization uptake among Health Care Workers (HCWs). Methods A cross-sectional survey of all HCWs within the Health and Social Care Trusts in Northern Ireland and a parallel-group study of nursing staff within Elderly Care using self-administered questionnaires. Results Of 203 nurses working in elderly care units 76(37%) were immunized and 127(63%) declined. Almost 70% of those not immunized perceived themselves to be 'healthy' and gave this reason for declining immunization.

Nurses were more likely to be immunized by a factor of four if they believed there was benefit for healthy HCWs, three if they felt at-risk of contracting influenza and nine on a recommendation from the occupational health (OH) unit. Fifteen OH units participated in a survey of HCWs at the time of immunization. Five thousand two hundred and thirty (9.7%) HCWs were immunized. Increased uptake was correlated with immunization in area of work ($r=0.74$, $P=0.02$) and when provided out of hours ($r=0.83$; $P<0.001$) and by a factor of two with individual targeting of availability ($P<0.001$) and when individuals had been previously immunized ($P<0.001$). Conclusion Uptake of influenza immunization is low. Attitudes to one's health and to the value of influenza immunization affect the uptake as does the delivery of the immunization programme.

Am J Infect Control. 2005 Aug;33(6):315-9.

Monitoring health care workers after smallpox vaccination: findings from the Hospital Smallpox Vaccination-Monitoring System.

Klevens RM, Kupronis BA, Lawton R, Joseph D, Richards C Jr, Abshire J, Barnes M, Cardo D, Curtis A, Edwards J, Gaines Y, Horan T, Jernigan J, Pearson M, Skaggs R, Sinkowitz-Cochran R, Solomon S, Stein G, Tokars J, Tolson J, Wages J;Hospital Smallpox Vaccination-Monitoring System Team.

Centers for Disease Control and Prevention, National Center for Infectious Diseases, Division of Healthcare Quality Promotion, Atlanta, Georgia 30333, USA. rmk2@cdc.gov

BACKGROUND: The Advisory Committee on Immunization Practices and the Healthcare Infection Control Practices Advisory Committee recommended that hospitals establish on-site, daily assessments of health care workers vaccinated with smallpox vaccine. The Hospital Smallpox Vaccination Monitoring System (HSVMS) was 1 component of the smallpox vaccination plan to monitor adverse events on-site in hospitals. This report presents findings from February to August 2003. **METHODS:** All US institutions participating in the smallpox vaccination program were eligible to enroll in and use HSVMS through the Internet-based Centers for Disease Control Secure Data Network. **RESULTS:** Of the 730 enrolled vaccinees, 341 (47%) were nurses; 122 (17%) physicians; 75 (10%) laboratory, patient care, radiology, or other technicians; 39 (5%) administrators; 22 (3%) housekeepers; 21 (3%) physical or respiratory therapists; 20 (3%) infection control professionals; 19 (3%) safety or security staff; and 17 (2%) epidemiologists; and 54 (7%) were workers in other job categories. Most (86%) vaccinees had been previously vaccinated. Postvaccination signs and symptoms were frequent: itching (75.2%), pain at the vaccination site (31.6%), swollen or tender lymph nodes (26.4%), fatigue (26.2%), and headache (20.8%). Symptoms were highest during the first week after vaccination; symptoms were more frequently reported among vaccinees without previous vaccination. Adherence to recommended vaccination site care was reported in 2732 of 3091 (88.4%) follow-up visits among workers with patient contact. Of the 4379 days workers planned to work, during 31 (0.7 per 100) days, workers performed restricted activities, and, in 60 (1.4 per 100) days, workers were absent. **CONCLUSIONS:** Findings from HSVMS indicate that adherence to post-smallpox vaccination site care was high and that the number of days of work affected was low.

MMWR Recommendations and Reports, July 29, 2005 / Vol. 54 / No. RR-8

Prevention and Control of Influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP)

Each year, the Advisory Committee on Immunization Practices provides updated recommendations on influenza vaccination. This year, the recommendations include information regarding vaccination of persons with conditions leading to compromise of the respiratory system; vaccination of health-care workers; clarification of the role of live, attenuated influenza vaccine in vaccine shortage situations; 2005–06 trivalent vaccine virus strains; and assessment of vaccine supply, timing of influenza vaccination, and prioritization of inactivated vaccine in shortage situations.

Full text: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5408a1.htm>

MMWR, Recommendations and Reports, May 27, 2005 / 54(RR07);1-21

Prevention and Control of Meningococcal Disease. Recommendations of the Advisory Committee on Immunization Practices (ACIP)

Prepared by Oleg O. Bilukha, MD, PhD, Nancy Rosenstein, MD

Division of Bacterial and Mycotic Diseases, National Center for Infectious Diseases

Summary. In January 2005, a tetravalent meningococcal polysaccharide-protein conjugate vaccine ([MCV4] Menactra,™ manufactured by Sanofi Pasteur, Inc., Swiftwater, Pennsylvania) was licensed for use among persons aged 11--55 years. CDC's Advisory Committee on Immunization Practices (ACIP) recommends routine vaccination of young adolescents (defined in this report as persons aged 11--12 years) with MCV4 at the preadolescent health-care visit (at age 11--12 years). Introducing a recommendation for MCV4 vaccination among young adolescents might strengthen the role of the preadolescent visit and have a positive effect on vaccine coverage among adolescents. For those persons who have not previously received MCV4, ACIP recommends vaccination before high-school entry (at approximately age 15 years) as an effective strategy to reduce meningococcal disease incidence among adolescents and young adults. By 2008, the goal will be routine vaccination with MCV4 of all adolescents beginning at age 11 years. Routine vaccination with meningococcal vaccine also is recommended for college freshmen living in dormitories and for other populations at increased risk (i.e., military recruits, travelers to areas in which meningococcal disease is hyperendemic or epidemic, microbiologists who are routinely exposed to isolates of *Neisseria meningitidis*, patients with anatomic or functional asplenia, and patients with terminal complement deficiency). Other adolescents, college students, and persons infected with human immunodeficiency virus who wish to decrease their risk for meningococcal disease may elect to receive vaccine.

Full text: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5407a1.htm>

7. Risques chimiques

8. Risques physiques

8.1 Rayonnements ionisants

- Documents en français :

In Environnement risques et santé, Volume 4, Numéro 4, juillet-août 2005
Editorial : L'évaluation du risque des faibles doses : l'exemple des rayonnements ionisants en pratique médicale

André Aurengo, Maurice Tubiana

- Documents en anglais :

Mutat Res. 2005 Aug 1;585(1-2):184-92.

Effect of ionizing radiation on the pteridine metabolic pathway and evaluation of its cytotoxicity in exposed hospital staff.

Engin AB, Ergun MA, Yurtcu E, Kan D, Sahin G.

Hacettepe University, Faculty of Pharmacy, Department of Toxicology, Sıhhiye, Ankara, Turkey.

Investigations carried out to estimate the effect of long-term occupational exposure to low levels of external ionizing radiation indicated that exposed hospital staff showed an increase in chromosome aberrations. The purpose of this study was to evaluate whether genomic instability or an alteration in pteridine synthesis could be used as a marker of the potential hazard of ionizing radiation in hospital workers. Twenty gamma-radiation- and 33 X-ray-exposed technicians working in radiotherapy and radio-diagnostic units were included in this study, along with 22 healthy matched individuals. Plasma concentrations of nitrite plus nitrate (NO(x)) were measured to estimate reactive nitrogen species. Urinary neopterin, biopterin and creatinine concentrations were measured by high-performance liquid chromatography to determine metabolic activity along the pteridine pathway. Sister chromatid exchange was used as a measure of mutagenicity. Apoptosis was evaluated morphologically and also with a DNA-fragmentation test. The plasma NO(x) levels of both gamma-radiation- and X-ray-exposed technicians were significantly higher than those of the healthy controls ($p < 0.05$). While the urinary biopterin concentrations were significantly higher in radiation-exposed groups compared with the healthy subjects ($p < 0.05$), urinary neopterin concentrations remained unchanged. The apoptosis rates of gamma-radiation- and X-ray-exposed workers were significantly elevated in comparison with those in the control group (both $p < 0.05$). Also, the increase in sister chromatid exchange frequency was significant in each of the radiation-exposed groups (exposed groups versus controls; $p < 0.05$). These results indicate that long-term exposure to low-dose ionizing radiation, even below the permitted

levels, could result in increased oxidative stress, which may lead to DNA damage and mutagenicity.
MeSH Terms: Adult - Apoptosis/radiation effects - Case-Control Studies - Dose-Response Relationship, Radiation - Female - Gamma Rays - Humans - Lymphocytes/physiology - Lymphocytes/radiation effects - Macrophages/physiology - Macrophages/radiation effects - Male - Nitrates/blood - Nitrites/blood - Occupational Exposure* - Personnel, Hospital* - Pteridines/metabolism* - Pteridines/urine - Radiation, Ionizing* - Sister Chromatid Exchange - Toxicity Tests - X-Rays - - Substances: - Nitrates - Nitrites - Pteridines

Occupational Medicine 2005 55(6):498-500

Increased cancer risk among surgeons in an orthopaedic hospital

Giuseppe Mastrangelo¹, Ugo Fedeli¹, Emanuela Fadda¹, Angelo Giovanazzi², Luca Scoizzato¹ and Bruno Saia¹

1 Department of Environmental Medicine and Public Health, Section of Occupational Medicine, University of Padua, Italy² Unit of Prevention and Safety in Workplaces, Provincial Health Authority, Trento, Italy

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.

8.2 Troubles musculo-squelettiques

- *Documents en français :*

In Archives des maladies professionnelles et de médecine du travail, Vol 66 - N° 3 - Juin 2005
p. 236 - 243

Facteurs associés à la prévalence des troubles musculo-squelettiques en milieu hospitalier Recherche des éléments à prendre en compte pour l'évaluation des risques

S. Maumet, R. De Gaudemaris, S. Caroly, F. Balducci

Objectif : Estimer, avec un autoquestionnaire simple, la prévalence des troubles musculo-squelettiques (TMS) dans le personnel hospitalier et étudier les facteurs liés aux TMS, plus particulièrement les contraintes psycho-sociales et organisationnelles (CPO), afin de proposer les bases d'une méthodologie d'évaluation des risques.

Méthode : Etude transversale, menée sur 403 agents venus en visite médicale systématique de médecine du travail au CHU de Grenoble. Recueil : caractéristiques socioprofessionnelles, localisation des épisodes douloureux au cours des 12 derniers mois, contraintes physiques (3 items) et CPO (latitude de décision, demande psychologique, soutien social et reconnaissance). Le risque de TMS est étudié par régression logistique ajustée sur le sexe, la fonction et, quand cela était possible, sur l'ancienneté au CHU.

Résultat : La prévalence des TMS déclarés était entre 52 % et 20,6 % selon la localisation anatomique. La prévalence des TMS, est significativement plus élevée chez les soignants que dans les autres groupes professionnels ($p \ll 0,05$). Pour les agents ayant moins de 15 ans d'ancienneté au sein de l'établissement, les facteurs significativement liés aux TMS ($p \ll 0,05$) étaient la fonction soignant (OR = 3,16 [1,46 ; 6,84]), le niveau élevé de contrainte physique (OR = 4,03 [1,89 ; 8,62]) et de demande psychologique (OR = 3,11 [1,45 ; 6,70]). Pour les agents ayant 15 ans et plus d'ancienneté au sein de l'établissement, les facteurs significativement liés aux TMS ($p \ll 0,05$) étaient le faible niveau de soutien social au travail (OR = 2,61 [1,00 ; 6,80]) et l'absence de reconnaissance

professionnelle du travail effectué (OR = 2,67 [1, 12 ; 6, 37]).

Conclusion : Cette étude met en évidence la forte prévalence des TMS au sein de la population des professionnels hospitaliers. Cette étude montre que, pour évaluer les risques de TMS, il est possible de prendre en compte avec un questionnaire simple les contraintes physiques mais aussi les CPO.
Mots-clés : TMS, hôpital, contraintes psycho-sociales et organisationnelles

- Documents en anglais :

Rehab Manag. 2005 Jul;18(6):30, 32-3, 50.

Watch your back.

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MeSH Terms: Back Injuries/epidemiology - Back Injuries/prevention & control* - Female - Health Personnel - Humans - Lifting - Male - Obesity, Morbid - Occupational Diseases/etiology - Occupational Diseases/prevention & control* - Occupational Health* - Patient Transfer - Risk Management - Sensitivity and Specificity - United States - United States Occupational Safety and Health Administration

9. Violence

- Documents en anglais :

Occupational Medicine 2005 55(6):480-486

Violence toward mental health staff and safety in the work environment.

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Background An increasing number of violent episodes toward staff were noted at a university department of psychiatry. A multidisciplinary committee was formed consisting of psychiatrists, biostatisticians, psychologists, nurses, administrators, data managers, social workers, security services, educators on personal safety and an attorney to address the problem. **Aim** To determine the prevalence of violence toward mental health staff, clinicians and non-clinicians, the trend of violence over time, gather more detail about the violent events, the personal struggle of staff affected and establish suggestions for intervention. **Methods** A workplace violence survey was designed to query staff experiences of endangerment, threats, assaults, age, sex and discipline, years in the field, treatment setting, sense of safety and proclivity to press charges. **Results** Of 742 surveys distributed, respondents returned 380 (response rate 51%). Forty-three percent of respondents reported being threatened and 25% assaulted. Threats and assaults increased significantly ($P < 0.001$) over all the time periods queried based on Poisson regression analysis. Work experience was a protective factor ($P < 0.001$), but not a guarantee against violent events. **Conclusion** Threats and assaults on mental health staff have a substantial prevalence and are increasing in our psychiatric population. Practical recommendations derived from our study but in need of further research for confirmation are: (1) multidisciplinary personal safety training to enhance team-building, improve communication and help prevent violent events and (2) establishment of post-event protocols to assist staff-victims and administrators navigate through complex issues occurring after violent events.

J Psychiatr Ment Health Nurs. 2005 Jun;12(3):347-58.

Work stress and physical assault of nursing aides in rural nursing homes with and without dementia special care units.

Morgan DG, Stewart NJ, D'Arcy C, Forbes D, Lawson J.

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PURPOSE: This study compared nursing aides (NAs) employed in rural nursing homes with and without dementia special care units (SCUs) on (1) exposure to and distress from disruptive behaviours exhibited by residents, (2) job strain and (3) physical assault. **DESIGN AND METHODS:** The data

were drawn from a larger study conducted in Saskatchewan, Canada, in which all rural nursing homes of < or = 100 beds that had an SCU were matched to same-sized rural facilities with no SCU. Nursing aides (n = 355) completed a mailed survey questionnaire. RESULTS: Nursing aides employed in nursing homes with an SCU reported significantly less frequent exposure to disruptive behaviours (including aggressive and aversive behaviours) than NAs in non-SCU facilities, less distress when these behaviours were directed toward them, less exposure to aggressive behaviour during caregiving, lower job demands and lower job strain. There was a trend toward increased risk of being assaulted in the last year associated with being in a non-SCU facility. Having a permanent position, increased job strain, and feeling inadequately prepared for dementia care were significantly associated with higher risk of being assaulted. In the SCU facilities, NAs who worked more time on the SCU reported more assaults but less distress from disruptive behaviour, lower psychological job demands, lower job strain and greater work autonomy. IMPLICATIONS: Providing more dementia care training and reducing job demands and job strain may help to reduce work-related stress and physical assault of nursing aides employed in nursing homes.

MeSH Terms: Adult - Aged - Aggression/psychology* - Cross-Sectional Studies - Dementia/nursing* - Female - Health Facility Size/statistics & numerical data - Homes for the Aged* - Humans - Long-Term Care/statistics & numerical data - Male - Middle Aged - Nurse-Patient Relations - Nurses' Aides/psychology* - Nursing Homes* - Personal Autonomy - Questionnaires - Research Support, Non-U.S. Gov't - Risk Assessment - Rural Population* - Saskatchewan - Social Environment - Statistics - Stress, Psychological/complications - Stress, Psychological/nursing* - Violence/psychology* - Violence/statistics & numerical data - Workload/psychology*

Nurs Econ. 2005 May-Jun;23(3):119-24, 107.

Workplace violence and corporate policy for health care settings.

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Incidents of workplace violence have been of significant concern to health care employers and the public at large. Many employers now find themselves confronted with sentinel events in the workplace, such as assault; property damage; racially, ethnically, or religiously motivated violence; sexual assault; employee suicide; or homicide. Regardless of a health care agency's size or mission, when employees are unexpectedly confronted with workplace violence, they are typically overwhelmed with shock and multiple questions surrounding how the event could have occurred in the safety of the workplace. It is difficult to imagine returning to work only minutes after hearing such news and, yet, in this modern era of corporate health care, this is what usually happens. Awareness of the dynamics and issues related to workplace violence can guide policy development and related interventions to promote safety, stability, and provide a platform for adapting to the devastation of such a disturbing event.

Publication Types: Review - Review, Tutorial

MeSH Terms: Adaptation, Psychological - Health Facilities/organization & administration* - Health Facilities/statistics & numerical data - Humans - Incidence - Mental Healing - Occupational Exposure/prevention & control* - Occupational Exposure/statistics & numerical data - Occupational Health* - Organizational Policy* - Personnel, Hospital/statistics & numerical data - Risk Factors - United States/epidemiology - Violence/prevention & control* - Violence/statistics & numerical data

10. Autres

- Documents en français :

In Archives des maladies professionnelles et de médecine du travail, Vol 66 - N° 3 - Juin 2005, p. 244 – 251

Déroulement des grossesses du personnel d'un établissement hospitalier Évolution en vingt ans

S. Fanello, B. Ripault, S. Drüker, S. Moisan, E. Parot, D. Fontbonne

Objectifs de l'étude : Analyser le déroulement des grossesses du personnel hospitalier et comparer les résultats actuels avec ceux d'une enquête effectuée il y a vingt ans dans le même hôpital.

Matériel et méthode : 174 sur 181 grossesses ont été suivies durant une année par les médecins du

travail du personnel hospitalier. Les données socio-professionnelles, le déroulement de la grossesse, l'accouchement et les suites de couches, l'absentéisme et les conditions de reprise du travail ont fait l'objet d'un questionnement individualisé (56 items).

Résultats : L'âge moyen des femmes enceintes était de 30 ± 4 ans ; une sur deux était primipare, un tiers avait un enfant et une sur cinq plus de deux enfants. L'indice de fécondité était de 1,78. Elles travaillaient majoritairement à plein temps. La moitié d'entre-elles estimaient avoir des contraintes de port de charge ; 20 sur 33, exposées aux rayonnements ionisants, et 6 sur 12 aux antimétaboliques, avaient bénéficié d'une éviction. 43 % avaient obtenu « une heure en moins » à partir du troisième mois de grossesse, 16 % des travailleuses de nuit étaient passées de jour et 30 % avaient bénéficié d'une réduction du port de charge. 70 % étaient suivies par leur médecin traitant. Un tiers avaient pris plus de 12 kilos et 44 % avaient présenté un problème médical durant leur grossesse. On relevait 3,4 % d'accouchements prématurés, 5,7 % d'hypotrophie, 6,8 % de macrosomie et 15,3 % de complications maternelles (hémorragies ou infections).

Si les pathologies au décours de la grossesse ont peu évolué en vingt ans, en revanche on notait une nette réduction du taux de prématurité (3,4 % contre 11,6 %) ; ce taux ainsi que celui de l'hypotrophie étaient désormais comparables à ceux de la population générale.

Cette amélioration des données pédiatriques s'était cependant accompagnée d'une nette inflation de l'absentéisme, qui passait de 21,4 semaines en 1982 à 26,8 semaines en 2002.

Conclusion : Les aménagements des postes de travail sont restés modestes ; afin de préserver le bon déroulement de leur grossesse, les femmes enceintes semblent avoir choisi de s'arrêter de travailler. Leurs revendications sont légitimes et parfaitement intégrées à la législation actuelle.

Mots-clés : Grossesse, personnel hospitalier

SOINS. CADRES, 2005/05, n° 54n, p. 32-35, 42 réf.

L'accès au pouvoir dans une organisation, une question de santé.

DALLAIRE (Clémence)

La santé des infirmières au travail a attiré l'attention au cours des dernières années. La question a généralement été élaborée à partir de cadres d'analyse cherchant à identifier des facteurs explicatifs attribuant la responsabilité de la situation à la vulnérabilité individuelle. Un cadre théorique portant l'attention sur la relation entre l'organisation et la personne, mettant cette fois-ci l'accent sur des facteurs non directement sous le contrôle de la personne, mais appartenant davantage à l'organisation, pourrait ajouter à la compréhension des problèmes de santé des infirmières. Ainsi, l'accès au pouvoir dans une organisation, en l'occurrence le manque d'accès au pouvoir, pourrait être un facteur jouant un rôle dans la santé des employé(e)s de cette organisation, telles les infirmières. (R.A.).

Infirmier, Autonomie, Santé physique, Milieu professionnel, Encadrement, Pouvoir

Annales Françaises d'Anesthésie et de Réanimation, Volume 24, Issue 5, Mai 2005, Pages 471-479.

Prévalence et facteurs de risque de l'addiction aux substances psychoactives en milieu anesthésique : résultats de l'enquête nationale

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Objectif. – Les comportements addictifs en milieu médical et notamment parmi les anesthésistes-réanimateurs, sont connus et reconnus comme un sujet de préoccupation. La plupart de données disponibles sur la prévalence du phénomène proviennent des pays anglo-saxons.

Méthodes. – Une enquête nationale a donc été conduite en s'appuyant sur l'envoi d'un questionnaire dont l'objectif était de préciser l'état de la consommation de substances psychoactives parmi les médecins anesthésistes-réanimateurs français. L'enquête a porté sur la consommation de tabac, d'alcool, de tranquillisants et d'hypnotiques, et d'autres agents tels que cannabis, opiacés et agents anesthésiques. Les répondants ont été classés en deux catégories : (non consommateurs et consommateurs) et (abuseurs et dépendants). Une analyse univariée puis multivariée a permis de déterminer les facteurs de risque d'abus ou de dépendance vis-à-vis des substances étudiées.

Résultats. – Au total, 3 476 réponses ont été obtenues soit un taux de réponse de 38 % ; 22,7 % des répondants était des fumeurs quotidiens, 10,9 % étaient abuseurs ou dépendants à au moins une substance autre que le tabac : soit l'alcool (59,0 %), les tranquillisants et les hypnotiques (41,0 %), le cannabis (6,3 %), les opiacés (5,3 %), et les stimulants (1,9 %). Les sujets souffrant d'addiction

avaient plus souvent une perception négative de leurs conditions de travail et souffraient plus souvent de perturbations du sommeil.

Conclusion. – L'alcool apparaît donc comme la principale cause d'addiction chez les médecins anesthésistes-réanimateurs français, mais la consommation de substances psychoactives recouvre un large éventail de produits. Les sujets souffrant d'addiction expriment plus fréquemment des difficultés vis-à-vis de leur environnement au travail qui ont pu éventuellement contribuer au développement de leur pathologie.

MeSH Terms: Adult - Aged - Alcoholism/epidemiology - Anesthesiology/statistics & numerical data* - Attitude of Health Personnel - Central Nervous System Stimulants/adverse effects - Cocaine-Related Disorders/epidemiology - English Abstract - Female - Health Surveys - Humans - Hypnotics and Sedatives/adverse effects - Male - Marijuana Abuse/epidemiology - Middle Aged - Occupational Diseases/epidemiology* - Occupational Diseases/psychology - Opioid-Related Disorders/epidemiology - Prevalence - Questionnaires - Research Support, Non-U.S. Gov't - Risk Factors - Sleep Disorders/epidemiology - Stress, Psychological/epidemiology - Substance-Related Disorders/epidemiology* - Tobacco Use Disorder/epidemiology - Tranquilizing Agents/adverse effects - Workload
Substances: Central Nervous System Stimulants - Hypnotics and Sedatives - Tranquilizing Agents

- Documents en anglais :

J Appl Toxicol. 2005 May-Jun;25(3):184-92.

Investigation into possible DNA damaging effects of ultrasound in occupationally exposed medical personnel—the alkaline comet assay study.

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In the present paper the possible DNA damaging effects of ultrasound in occupationally exposed medical personnel were investigated using the alkaline comet assay. The extent of DNA migration in peripheral blood leucocytes was measured. Parameters of the comet assay were studied in 30 medical workers occupationally exposed to ultrasound and in 30 corresponding unexposed control subjects. It was found that the subjects who were occupationally exposed to ultrasound for various periods of time showed a highly significant increase in levels of DNA damage compared with the control. The results obtained have confirmed the usefulness of the alkaline comet assay as a sensitive biodosimetric method, reflecting the current level of DNA damage and/or repair in peripheral blood leucocytes of ultrasound-exposed subjects. In spite of their limitations, the results of the present investigation indicate that individuals occupationally exposed to ultrasound may experience an increased genotoxic risk, emphasizing the need for more research into the nature and extent of the biological consequences to medical personnel working with ultrasonic equipment. Copyright 2005 John Wiley & Sons, Ltd

MeSH Terms: Adult - Case-Control Studies - Comet Assay/methods* - DNA Damage* - Female - Humans - Leukocytes/ultrasonography* - Male - Medical Staff* - Middle Aged - Occupational Exposure/adverse effects* - Ultrasonics/adverse effects*

Am J Epidemiol 2005 Jun; 161(11)(Suppl):S127

Shift work and risk of spontaneous abortion in nurses

Whelan-EA; Lawson-CC; Hibert-E; Grajewski-B; Spiegelman-D; Rich-Edwards-J

Evidence suggests that work schedule, including rotating work and night work, may have an adverse effect on reproductive outcome, but results from these studies are ambiguous, and there are few studies of U.S. health care workers. We examined this question among 7,683 female participants of the Nurses Health Study II, a prospective cohort established in 1989. In 2001, detailed information about specific exposures during pregnancy was collected from participants for the most recent pregnancy they had experienced since 1993. Participants reported 6,897 live births and 786 (10%) spontaneous abortions (SA). Log binomial regression was used to estimate the relative risk (RR) for SA, adjusting for potential confounders. Compared to women who reported usually working "days only" during their first trimester of pregnancy, women who reported working more than 40 hours per week during the first trimester were also at increased risk of SA (RR=1.5, 95% CI 1.3-1.8) compared

to women who reported working 21-40 hours per week, even after adjustment for work schedule. Hormonal disturbances, either as a direct effect of circadian rhythm disruption or indirectly through work-related stress and altered sleep patterns, may be a possible interpretation of these findings.
KW: Shift-workers; Shift-work; Risk-factors; Risk-analysis; Nurses; Nursing; Health-care-personnel; Medical-personnel; Workers; Worker-health; Reproductive-effects; Reproductive-hazards; Reproductive-system-disorders; Demographic-characteristics; Sex-factors; Pregnancy

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