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REVISTAS INTERNACIONALES CONSULTADAS

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Artículo Nº1

Revista: AMERICAN JOURNAL OF INDUSTRIAL MEDICINE - 54:300-306, 2011

Título

Cancer incidence and mortality among workers exposed to benzidine *(Incidencia de cáncer y mortalidad entre trabajadores expuestos a bencidina)*

Autores

Shannon Cameron Brown, Risa Alberts and Mark Schoenberg

Antecedentes

Background. A historical cohort study was conducted among 997 individuals employed at a chemical production facility to investigate whether occupational exposures to benzidine and other arylamines were associated with the increased risk of cancer.

Métodos

Methods. Cancers were identified from cancer registries, death certificates, and medical records. Exposures were evaluated using a job-exposure matrix. Workers were categorized into exposure groups to calculate cancer-specific standardized incidence ratios (SIRs) and perform survival analyses.

Resultados

Results. SIRs for cancer of the bladder (SIR = 3.5; CI 1.7, 6.4), small intestine (SIR 18.4; CI 2.2, 66.4), and soft tissue including heart (SIR = 11.9; CI 1.4, 42.8) were elevated among workers with the highest exposures and risk increased with increasing exposures. SIRs for several additional cancers were also elevated.

Conclusiones

Conclusion. Our results support previous findings of increased risk of bladder cancer among individuals exposed to benzidine and other arylamines. Workers may also have been at increased risk for cancers other than cancer of the bladder

Artículo Nº2

Revista: AMERICAN JOURNAL OF INDUSTRIAL MEDICINE - 54:224-231, 2011

Título

Long work hours is associated with suboptimal glycemic control among US workers with diabetes *(Largas jornadas de trabajo se asocian con control glucémico subóptimo en trabajadores diabéticos estadounidenses)*

Autores

Evelyn P. Davila, Hermes Florez, Mary Jo Trepka, Lora E. Fleming, Theophile Niyonsenga, David J. Lee and Jai Parkash

Antecedentes

Background. Increasing numbers of US workers are diabetic. We assessed the relationship between glycemic control and work hours and type of occupation among employed US adults with type 2 diabetes.

Métodos

Methods. Data were obtained from the 1999–2004 National Health and Nutrition Examination Survey (NHANES). A representative sample of employed US adults ≥20 years with self-reported type 2 diabetes (n = 369) was used. Two dichotomous glycemic control indicators, based on various HbA1c level cut-points, were used as dependent variables in weighted logistic regression analyses with adjustment for confounders.

Resultado

Results. Adults working over 40 hr/week were more likely to have suboptimal glycemic control (HbA1c ≥ 7%) compared to those working 20 hr or less (odds ratio = 5.09; 95% confidence interval: [1.38–18.76]).

Conclusiones

Conclusions. Work-related factors, such as number of hours worked, may affect the ability of adults with type 2 diabetes to reach and maintain glycemic control goals. These factors should be considered in the development of workplace policies and accommodations for the increasing number of workers with type 2 diabetes.

Artículo Nº3

Revista: AMERICAN JOURNAL OF INDUSTRIAL MEDICINE – 54:421–427, 2011

Título

Evidence of confounding by smoking of associations between radiation and lung cancer mortality among workers at the Savannah River Site *(Evidencia de confusión por el tabaco de las asociaciones entre radiación y mortalidad por cáncer de pulmón en trabajadores de Savannah River Site)*

Autores

David B. Richardson and Steve Wing

Antecedentes

Background. This study investigates confounding by cigarette smoking of associations between occupational exposure to ionizing radiation and lung cancer mortality among workers at the Savannah River Site (SRS).

Métodos

Methods. Thirteen thousand two hundred sixty-five white males hired at SRS between 1950 and 1986 were followed through 2002 to ascertain causes of death. Estimates of radiation doses from external sources and internal tritium uptakes were derived from dosimetry records. Logistic regression methods were used to derive discrete-time estimates of rate ratios. An indirect approach to control for unmeasured confounding by smoking was employed that involves joint modeling of lung cancer and chronic obstructive pulmonary disease (COPD) mortality.

Resultado

Results. Prior to indirect adjustment for smoking, there was minimal evidence of association between lung cancer mortality and cumulative radiation dose under a 10-year lag assumption (RR at 100 mSv = 0.90; 90% CI: 0.80–1.01). Subsequent to indirect adjustment for smoking, the association between lung cancer mortality and cumulative radiation dose under a 10-year lag was positive (RR at 100 mSv = 1.33; 90% CI: 1.01–1.77).

Conclusiones

Conclusions. In this cohort, there is evidence of negative confounding of radiation dose–lung cancer mortality associations by cigarette smoking.

Artículo Nº4

Revista: INDIAN JOURNAL OF OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - 2011, 14 (3): 87-90

Título

Comparison of respiratory morbidity between present and ex-workers of quartz crushing units: Healthy workers' effect *(Comparación de la morbilidad entre trabajadores actuales y extrabajadores de sílice: efecto en trabajadores sanos)*

Autores

Tiwari R, Narain R, Sharma Y, Kumar S

Antecedentes

Background. Quartz stone grinders are one such group of workers who are exposed to silica and thereby at risk of developing silicosis. However due to increased campaigning against silicosis the scenario has changed.

Objetivos

Objectives. To compare the respiratory morbidities among the present quartz stone workers and the ex-quartz stone workers who have left the job.

Métodos

Methods. This cross-sectional study included, 134 ex-workers and 182 current workers of quartz grinding units. All these subjects were subjected to chest radiography and pulmonary function tests.

Resultado

Results. For 134 ex-workers, the mean age was 31.77 ± 9.99 years and the mean duration of exposure was found to be 2.74 ± 1.65 years while for the present workers, the mean age was 26.74± 7.12 years while the mean duration of exposure was 1.36 ± 2.68 years. The study revealed silicosis in 24 (17.9%), radiological suspected tuberculosis in 17 (12.7%) and silico-tuberculosis in 33 (24.7%) ex-workers while in present workers, radiological suspected tuberculosis in 10 (5.5%) subjects and silicosis grade 1/1 in one subject were found. Among the ex-workers, 14 (10.4%) had a combined type of pulmonary function impairment while 8 (6.0%) and 28 (20.9%) were having restrictive and obstructive type of pulmonary impairments, respectively. Among the present workers, pulmonary function testing revealed the combined type of functional impairment in 1 (0.5%), restrictive type in 13 (7.1%), and obstructive type of functional impairment in 17 (9.2%) subjects. Conclusion: The high prevalence of respiratory morbidity in ex-workers as compared to current workers can be attributed to the out-of-the-job healthy workers' effect.

Artículo Nº5

Revista: INTERNATIONAL JOURNAL OF HYGIENE AND ENVIRONMENTAL HEALTH - 2011, 214 (3): 231-238

Título

The carcinogenic potential of nanomaterials, their release from products and options for regulating them *(Potencial carcinogénico de los nanomateriales, su liberación a partir de productos y opciones para regularlo)*

Autores

Becker H, Herzberg F, Schulte A, Kolossa-Gehring M

Abstract

A summary of a critical review by a working group of the German Federal Environment Agency and the German Federal Institute for Risk Assessment on the carcinogenic potential of nanomaterials is presented. After a critical review of the available data, we conclude that the potential carcinogenic risk of nanomaterials can currently be assessed only on a case-by-case basis. There is certain evidence that different forms of CNTs (carbon nanotubes) and nanoscale TiO2 particles may induce tumours in sensitive animal models. It is assumed that the mode of action of the inhalation toxicity of asbestos-like fibres and of inhalable fractions of biopersistent fine dusts of low toxicity (nano-TiO2) is linked to chronic inflammatory processes. Existing epidemiological studies on carcinogenicity for these manufactured nanomaterials are not sufficiently conclusive.

Generally speaking, the database is not adequate for an assessment of the carcinogenic potential of nanomaterials. Whereas a number of studies provide evidence of a nano-specific potential to induce tumours, other studies did not. This is possibly due to insufficient characterisation of the test material, difference in the experimental design, the use of different animal models and species and/or differences in dosimetry (both with regard to the appropriate dose metric and the estimated effective dose quantities).

An assessment of the carcinogenic potential and its relevance for humans are currently fraught with uncertainty. Furthermore, the nano-specificity of the carcinogenic effects observed cannot be conclusively evaluated. Specific carcinogenic effects of nanomaterials may be both quantitative and qualitative. In quantitative terms, the carcinogenic effects of nanoparticles are thought to be simply more pronounced compared to the corresponding bulk material (due, for example, to the considerably larger surface area and higher number of particles relative to the mass concentration). On the other hand, certain nano-properties such as small size, shape and reactivity, retention time and distribution in the body after overcoming biological barriers, as well as subcellular and molecular interactions may play a role in determining the toxicity in qualitative terms, i.e. the carcinogenic potential of the nanomaterial and the non-nanoscale comparison substance may be fundamentally different.

All of these factors leave no doubt about the fact that there is a great need for research in this area and that new standardised test methods need to be developed or existing ones adapted at the very least to achieve valid answers regarding the carcinogenic potential of nanomaterials. Global production of nanomaterials is set to increase in the years to come, and new materials with new properties will be developed, so that greater human exposure to them must be anticipated.

No reliable conclusions can currently be drawn about exposure to nanoparticles and their release from products. Firstly, there are substantial deficits in information about the processing of nanomaterials in products and preparations. Secondly, there are only a small number of studies on

nanoparticle release, and reliable techniques for measuring and monitoring nanomaterials in different environmental media are still being developed which is both complex and costly.

Despite the uncertainties, the findings to date on the carcinogenic potential of nanomaterials must be taken seriously, and precautionary measures to minimise exposure should go hand in hand with the development of a comprehensive and conclusive toxicological methodology and testing procedure for nanostructured materials that includes all possible exposure routes.

With regard to possible legal classification of nanomaterials and the transferability of classifications of their non-nanomaterial counterparts, we believe it is necessary to have separate procedures for nano and non-nano forms. Furthermore, criteria for evaluating nano-specific carcinogenic properties should be constantly updated and adapted to the state of knowledge. There is a need here for amendments to be made to EU legislation, as currently nanoforms do not represent a separate category of substance in their own right.

Artículo Nº6

Revista: JOURNAL OF OCCUPATIONAL MEDICINE AND TOXICOLOGY - 2011; 6:17

Título

Characteristic values of the lumbar load of manual patient handling for the application in workers' compensation procedures *(Valores característicos de la carga lumbar por la aplicación de procedimientos de compensación en trabajadores que manipulan manualmente pacientes)*

Autores

Jordan C, Luttmann A, Theilmeier A, Kuhn S, Wortmann N and Jager M

Antecedentes

Background. The human spine is often exposed to mechanical load in vocational activities especially in combination with lifting, carrying and positioning of heavy objects. This also applies in particular to nursing activities with manual patient handling. In the present study a detailed investigation on the load of the lumbar spine during manual patient handling was performed.

Métodos

Methods. For a total of 13 presumably endangering activities with transferring a patient, the body movements performed by healthcare workers were recorded and the exerted action forces were determined with regard to magnitude, direction and lateral distribution in the time course with a "measuring bed", a "measuring chair" and a "measuring floor". By the application of biomechanical model calculations the load on the lowest intervertebral disc of the lumbar spine (L5-S1) was determined considering the posture and action force data for every manual patient handling.

Resultados

Results. The results of the investigations reveal the occurrence of high lumbar load during manual patient handling activities, especially in those cases, where awkward postures of the healthcare worker are combined with high action forces caused by the patient's mass. These findings were compared to suitable issues of corresponding investigations provided in the literature. Furthermore measurement-based characteristic values of lumbar load were derived for the use in statement procedures concerning the disease no. 2108 of the German list of occupational diseases.

Conclusiones

Conclusions. To protect healthcare workers from mechanical overload and the risk of developing a disc-related disease, prevention measures should be compiled. Such measures could include the application of "back-fairer" nursing techniques and the use of "technical" and "small aids" to reduce the lumbar load during manual patient handling. Further studies, concerning these aspects, are necessary.

Artículo Nº7

Revista: JOURNAL OF OCCUPATIONAL MEDICINE AND TOXICOLOGY - 2011; 6:19

Título

Screening for tuberculosis and prediction of disease in Portuguese healthcare workers *(Cribado para tuberculosis y predicción de enfermedad en trabajadores portugueses de cuidados de salud)*

Autores

Torres Costa J, Silva R, Ringshausen F, Nienhaus A

Introducción

Introduction. Results of systematic screening of healthcare workers (HCWs) for tuberculosis (TB) with the tuberculin skin test (TST) and interferon-gamma release assays (IGRA) in a Portuguese hospital from 2007 to 2010 are reported.

Métodos

Methods. All HCWs are offered screening for TB. Screening is repeated depending on risk assessment. TST and QuantiFERON Gold In-Tube (QFT) are used simultaneously. X-ray is performed when TST is > 10 mm, IGRA is positive or typical symptoms exist.

Resultados

Results. The cohort comprises 2,889 HCWs. TST and IGRA were positive in 29.5%, TST-positive but IGRA-negative results were apparent in 43.4%. Active TB was diagnosed in twelve HCWs - eight cases were detected during screening and four cases were predicted by IGRA as well as by TST. However, the progression rate in IGRA-positive was higher than in TST-positive HCWs (0.4% vs. 0.2%, p-value 0.06).

Conclusiones

Conclusions. The TB burden in this cohort was high (129.8 per 100,000 HCWs). However, the progression to active TB after a positive TST or positive IGRA was considerably lower than that reported in literature for close contacts in low-incidence countries. This might indicate that old LTBI prevails in these HCWs.

Artículo Nº8

Revista: MEDICINA DEL LAVORO - 2011; 102, 2: 174-192

Título

From complexity to simplification: contribution of the EPM Research Unit to producing a toolkit for risk assessment and management of biomechanical overload and WMSDs prevention *(De la complejidad a la simplificación: contribución de la Unidad de Investigación EPM para crear una herramienta para la evaluación de riesgo y gestión de sobrecarga biomecánica y prevención de alteraciones musculares y su relación con las condiciones de trabajo)*

Autores

Occhipinti E, Colombini D

Antecedentes

Background. When studying musculoskeletal disorders and their connection with working conditions (WMSDs), several factors of different nature (mechanical, organizational, psychophysical, individual) and their interrelationship have been considered important in general models for epidemiologic surveys and risk assessment and management. Hence the necessity of a "holistic" (that is to say complex, global, multifactorial and interdisciplinary) approach to MSD prevention, especially when establishing technical norms, guidelines and strategic plans of action at national or international level. On the other hand, considering the widespread presence of these factors and WMSDs in many working contexts, there is a great demand by OSH agencies and operators to develop "simple" tools for risk assessment and management, usable also by non-experts in both developed and developing countries.

Objetivos

Objectives. Both these needs are perfectly justified but are also to a certain extent in conflict. How can we address the problem, i.e., simplify complexity?

Métodos y Criterios

Methods and Criteria. The proposals are based on two essential criteria: 1) Act on a step-by-step approach using basic tools first and more complex tools only when necessary. 2) Take into account the complexity and the presence of multiple influencing factors at every step (even if with different degrees of in-depth analysis). The proposals are mainly developed within the framework of an IEA-WHO collaboration initiative for a "Toolkit for MSD prevention" but they are also derived from other converging issues (i.e. ISO application document of ISO series 11228 on manual handling).

Resultados

Results. The proposals consider: 1) A Basic Step devoted to preliminary occupational hazard identification and priority check by operative "key enter" questions (at this step all potential hazards - including those influencing WMSDs - should be considered). This step also can be carried out by non-experts with limited training. 2) First Step, focused on WMSDs risk factors, consisting of a "quick assessment" and mainly addressed to identifying 3 possible conditions: acceptable/no consequences; high risk present/redesign urgently needed; a more detailed analysis (via tools proposed in second step) is necessary. This step can also be carried out by non-experts with only limited training. 3) Second Step, where recognized tools (i.e. from international standards or guidelines) for risk (of WMSDs) estimation are used as a consequence of the first step outcome. Examples of such tools are "adaptations" of the Revised NIOSH Lifting Equation, Liberty Mutual Psychophysical Tables, OCRA Checklist, etc. These tools should be able to adequately take account of most of the influencing factors. For some particular working sectors (i.e. agriculture) these tools need to be specifically adapted. For particular working sectors a database could be envisaged where the most common tasks (with their "variants") are "intrinsically" evaluated by experts and could

provide non-experts with the relevant knowledge to be applied to the specific work context. This step can be carried out only by persons with some sort of specific training.

Artículo Nº9

Revista: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - 2011; 68:250-256

Título

Associations of low-level urine cadmium with kidney function in lead workers. *(Asociaciones de bajo nivel de cadmio urinario y función renal en trabajadores expuestos a plomo)*

Autores

Weaver VM, Kim N-S, Jaar BG, Schwartz BS, Parsons PJ, Steuerwald AJ, Todd AC, Simon D, Lee B-K

Objetivos

Objectives. Low-level cadmium exposure, resulting in, for example, urinary cadmium <2.0 µg/g creatinine, is widespread; recent data suggest nephrotoxicity even at these low levels. Few studies have examined the impact of low-level cadmium exposure in workers who are occupationally exposed to other nephrotoxicants such as lead.

Métodos

Methods. We evaluated associations of urine cadmium, a measure of cumulative dose, with four glomerular filtration measures and N-acetyl-ß-D-glucosaminidase (NAG) in lead workers. Recent and cumulative lead doses were assessed via blood and tibia lead, respectively.

Resultados

Results. In 712 lead workers, mean (SD) blood and tibia lead values, urine cadmium values and estimated glomerular filtration rate (eGFR) using the Modification of Diet in Renal Disease equation were 23.1 (14.1) µg/dl, 26.6 (28.9) µg Pb/g bone mineral, 1.15 (0.66) µg/g creatinine and 97.4 (19.2) ml/min/1.73 m2, respectively. After adjustment for age, sex, body mass index, urine creatinine, smoking, alcohol, education, annual income, diastolic blood pressure, current or former lead worker job status, new or returning study participant, and blood and tibia lead, higher ln-urine cadmium was associated with higher calculated creatinine clearance, eGFR (ß=8.7 ml/min/1.73 m2; 95% CI 5.4 to 12.1) and ln-NAG but lower serum creatinine.

Conclusiones

Conclusions. Potential explanations for these results include a normal physiological response in which urine cadmium levels reflect renal filtration, the impact of adjustment for urine dilution with creatinine in models of kidney outcomes, and cadmium-related hyperfiltration.

Artículo Nº10

Revista: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - 2011; 68:332-338

Título

Relationships between occupational history and serum concentrations of organochlorine compounds in exocrine pancreatic cancer *(Relación entre historia laboral y concentraciones séricas de compuestos organoclorados en cáncer de páncreas exocrino)*

Autores

Bosch M, Porta M,Alguacil J, Puigdomènech E, Gasull M, Garrido JA, López T

Antecedentes

Background. Previous studies investigating associations between occupational history and risk of exocrine pancreatic cancer (EPC) did not use biomarkers of exposure. The only two studies that measured internal concentrations of organochlorine compounds (OCs) in EPC did not analyse their relationship with occupation.

Objetivos

Objective. To analyse the relationship between occupational history and blood concentrations of seven OCs in patients with EPC.

Métodos

Methods. Incident cases of EPC were prospectively identified, and during hospital admission were interviewed face-to-face on occupational history and life-style factors (n=135). Occupations were coded according to the International Standard of Occupations 1988. Some occupational exposures were also assessed with the Finnish job-exposure matrix (Finjem). Serum concentrations of OCs were analysed by high-resolution gas chromatography with electron-capture detection.

Resultados

Results. Craftsmen and related trades workers had significantly higher concentrations of polychlorinated biphenyl (PCB) congeners 138, 153 and 180. Years worked in agriculture did not influence concentrations of p,p'-DDT, p,p'-DDE, hexachlorobenzene or ß-hexachlorocyclohexane. Subjects who ever worked in agriculture had lower concentrations of PCBs (all $p<0.05$). Occupational exposure to lead, nickel and low frequency magnetic fields was significantly associated with higher concentrations of PCBs.

Conclusiones

Conclusions. Certain occupations were associated with higher concentrations of PCBs, suggesting that these compounds may account for some increased risks found in previous studies. The lack of association between work in agriculture and concentrations of OC pesticides is consistent with occupation playing a lesser role than diet in influencing OC concentrations. Occupational studies on the relationships among exposure to industrial agents and EPC risk may need to consider adjusting for exposure to PCBs.

Artículo Nº11

Revista: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - 2011; 68:400-407

Título

Prevention of long-term sickness absence and major depression in high-risk employees: a randomised controlled trial *(Prevención de las bajas laborales de larga duración y depresión mayor en empleados de alto riesgo: un ensayo aleatorio controlado)*

Autores

Lexis, M, Jansen N, Huibers M, Amelsvoort L, Berkouwer A, Tjin G, Van den Brandt P, Kant I

Objetivos

Objectives. To examine the efficacy of early intervention on the prevention of long-term sickness absence and major depression among employees at high risk of future sickness absence and with mild to severe depressive complaints.

Métodos

Methods. Randomised controlled trial conducted among employees working in an office environment. 139 employees were identified both at high risk of future sickness absence and with mild to severe depressive complaints through screening. Subsequently, they were randomly assigned to the intervention group (n=69) or the control group (n=70). Objective sickness absence was analysed at 12 and 18 months of follow-up. Depressive complaints were assessed by the Beck Depression Inventory (BDI-II) at baseline, and at 6 and 12 months of follow-up.

Resultados

Results. Intention-to-treat analyses showed a significant difference in total sickness absence duration between the intervention (27.5 calendar days (SD 44.7)) and control group (50.8 days (SD 75.8)) over 12 months of follow-up, a reduction of 46% (p=0.017). The intervention group showed a non-significantly lower proportion of long-term sickness absence spells compared with the control group (p=0.127). Statistically significant and clinically relevant differences in depressive complaints were found after both 6 months (p=0.001) and 12 months (p=0.005) of follow-up, in favour of the intervention group. Relative risk reductions (RRR) were 19.2% and 19.8% respectively. Sickness absence data were available for all participants over 18 months of follow-up. Questionnaire data were available for 99 (at 6 months) and 90 participants (at 12 months). No adverse events or side effects occurred.

Conclusiones

Conclusions. Early intervention in employees with mild to severe depressive complaints and high risk of future long-term sickness absence proved to be effective in preventing/reducing both sickness absence and depressive complaints.

Artículo Nº12

Revista: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - 2011; 68:391-399

Título

The relationship between multiple myeloma and occupational exposure to six chlorinated solvents *(Relación entre mieloma múltiple y exposición laboral a seis disolventes clorados)*

Autores

Gold L, Stewart P, Miliken K, Purdue M, Severson R, Seixas N, Blair A, Hartge P, Davis S, De Roos A

Objetivos

Objectives. Few studies have examined whether exposure to chlorinated solvents is associated with multiple myeloma. We evaluated associations between multiple myeloma and occupational exposure to six chlorinated solvents: 1,1,1-trichloroethane, trichloroethylene (TCE), methylene chloride (DCM), perchloroethylene, carbon tetrachloride and chloroform.

Métodos

Methods. In-person interviews obtained occupational histories and information on jobs with likely solvent exposure. We assigned exposure metrics of probability, frequency, intensity and confidence using job-exposure matrices modified by job-specific questionnaire information. We used logistic regression to estimate ORs and 95% CIs for associations between multiple myeloma and ever exposure to each, and any, chlorinated solvent and analysed whether associations varied by duration and cumulative exposure. We also considered all occupations that were given the lowest confidence scores as unexposed and repeated all analyses.

Resultados

Results. Risk of multiple myeloma was elevated for subjects ever exposed to 1,1,1-trichloroethane (OR (95% CI): 1.8 (1.1 to 2.9)). Ever exposure to TCE or DCM also entailed elevated, but not statistically significant, risks of multiple myeloma; these became statistically significant when occupations with low confidence scores were considered unexposed (TCE: 1.7 (1.0 to 2.7); DCM: 2.0 (1.2 to 3.2)). Increasing cumulative exposure to perchloroethylene was also associated with increasing multiple myeloma risk. We observed non-significantly increased multiple myeloma risks with exposure to chloroform; however, few subjects were exposed.

Conclusiones

Conclusions. Evidence from this relatively large case-control study suggests that exposures to certain chlorinated solvents may be associated with increased incidence of multiple myeloma; however, the study is limited by relatively low participation (52%) among controls.

Artículo Nº13

Revista: SCANDINAVIAN JOURNAL OF WORK ENVIRONMENT & HEALTH - 2011; 37(3):186-195

Título

Effects of a stress management intervention on absenteeism and return to work - results from a randomized wait-list controlled trial *(Efectos de una intervención de gestión del estrés sobre el absentismo laboral y el retorno al trabajo - resultados de un ensayo aleatorio controlado de lista de espera)*

Autores

Willert MV, Thulstrup AM, Bonde JP

Objetivos

Objective. High levels of work-related stress are associated with increased absenteeism from work and reduced work ability. In this study, we investigated the effects of a stress management intervention on absenteeism and return to work.

Métodos

Methods. We randomized 102 participants into either the intervention or wait-list control (WLC) group. The intervention group received the intervention in weeks 1–16 from baseline, and the WLC group received the intervention in weeks 17–32. Self-reported data on absenteeism (number of days full- or part-time absent from work within the previous three months) were obtained at 16, 32, and 48 weeks follow-up. Register-based data on long-term absence from work were drawn from the Danish public transfer payments (DREAM) database from baseline and 48 weeks onwards. The DREAM database contains weekly information on long-term sickness absence compensation. The threshold to enter DREAM is sick leave for two consecutive weeks.

Resultados

Results. At follow-up in week 16, self-reported absenteeism in the intervention group [median 11 days (range 3–25)] was lower (P=0.02) than in the WLC group [median 45 days (range 19–60)], corresponding to a 29% [95% confidence interval (95% CI) 5–52] reduction. On register-based data (cumulated weeks in DREAM, weeks 1–16), the intervention group median [6 weeks (range 0–11)] was lower than that of the WLC group [median 12 weeks (range 8–16)], though not significantly (P=0.06), corresponding to a 21% (95% CI 0–42) reduction. For return to work, a hazard ratio of 1.58 (95% CI 0.89–2.81) favoring the intervention group was found (P=0.12).

Conclusiones

Conclusion. The intervention reduces self-reported absenteeism from work. A similar trend was found from register-based records. No conclusive evidence was found for return to work.

Artículo Nº14

Revista: SCANDINAVIAN JOURNAL OF WORK ENVIRONMENT & HEALTH - 2011; 37(3):237-243

Título

Lens opacities among physicians occupationally exposed to ionizing radiation - a pilot study in Finland *(Cataratas entre médicos expuestos laboralmente a radiaciones ionizantes - un estudio piloto en Finlandia)*

Autores

Mrena S, Kivelä T, Kurttio P, Auvinen A

Objetivos

Objective. The aim of this study was to estimate the prevalence of lens opacities among physicians occupationally exposed to radiation – overall and by occupational factors – and to assess the feasibility of a large-scale study for risk assessment.

Métodos

Methods. Based on a nationwide registry of 1312 physicians, mostly radiologists with occupational exposure to ionizing radiation, 120 subjects were invited to participate, of which 59 (49%) consented. The inclusion criteria included (i) age 45–70 years, (ii) cumulative recorded radiation dose >10 mSv, and (iii) duration of work with dose monitoring >15 years. The participants completed a questionnaire regarding occupational history and other risk factors for lens opacities. A full ophthalmological examination was performed. Lenticular changes were graded using the Lens Opacities Classification System, version II (LOCS II), and the Nidek EAS-1000 Scheimpflug slit-imaging videophotography system.

Resultados

Results. Lens opacities were detected in 42% [95% confidence interval (95% CI) 29–55] of the 57 physicians without prior cataract surgery. Nuclear opacities were found in 14% (95% CI 6–26), cortical in 7% (95% CI 2–19), and posterior subcapsular in 5% (95% CI 1–15) of the subjects. The prevalence of lens opacities increased with age, smoking, and cumulative recorded radiation dose. After controlling for age, gender, and smoking, the excess odds ratio for any lens opacity was 0.13 (95% CI -0.02–0.28) per 10 mSv of cumulative radiation dose.

Conclusiones

Conclusion. Our preliminary results show cortical and posterior subcapsular lens opacities among physicians exposed to occupational radiation, consistent with recent studies on low dose radiation exposure. A full study with an unexposed reference group for risk estimation is warranted.

Artículo Nº15

Revista: SCANDINAVIAN JOURNAL OF WORK ENVIRONMENT & HEALTH - 2011;37(3):219-226

Título

Low mortality and myocardial infarction incidence among flying personnel during working career and beyond *(Baja mortalidad e incidencia de infarto de miocardio en personal de vuelo durante la atención de medicina del trabajo y posteriormente.)*

Autores

Linnersjö A, Brodin L-Å, Andersson C, Alfredsson L, Hammar N

Objetivos

Objective. The aim of this study was to evaluate mortality and acute myocardial infarction (AMI) incidence among commercial and military flying personnel in Sweden.

Métodos

Methods. Flying personnel, employed at the Swedish part of Scandinavian Airlines and the Swedish Armed Forces at some point between 1957–1994, were included. The cohort was followed regarding mortality and AMI incidence using national registers of hospital discharges and deaths. The observed mortality and AMI incidence was compared with the expected rate in the general Swedish population through standardized mortality ratios (SMR) and standardized incidence ratios (SIR) taking age, gender, and calendar year into account.

Resultados

Results. Swedish flying personnel, except male cabin crew, had a lower-than-expected all-cause mortality (SMR ranging from 0.57 among female cabin crew to 0.79 among navigators and mechanics; male cabin crew 0.89) and cardiovascular mortality (SMR from 0.31 among female cabin crew to 0.79 among navigators and mechanics). We observed an elevated mortality in aircraft accidents (SMR ranging from 23.87 among commercial pilots to 165.68 among military pilots). Male cabin attendants had a higher-than-expected mortality for alcohol-related death causes and acquired immunodeficiency syndrome (AIDS). AMI incidence was reduced in all groups and across the lifespan (SIR between 0.13 among female cabin crew and 0.61 among navigators and mechanics).

Conclusiones

Conclusion. Swedish flying personnel have a low all-cause mortality. This is mostly due to a reduced cardiovascular mortality reflecting a low AMI incidence during the working life as well as after retirement.

Artículo Nº16

Revista: THE NEW ENGLAND JOURNAL OF MEDICINE - 2011; 364:1334-1348

Título

The Gulf Oil Spill *(La contaminación petrolífera del golfo)*

Autores

Goldstein BD, Osofsky J, Lichtveld MY

Abstract

The 2010 Gulf Oil spill was an occupational, environmental, and community health disaster. This review summarizes the contaminants of concern, toxicologic consequences for humans and the ecosystem, lessons for worker safety, and mental health consequences in the community.

Acceso a artículo completo

http://www.nejm.org/doi/full/10.1056/NEJMra1007197

Artículo Nº17

Revista: ARCHIVOS DE PREVENCIÓN DE RIESGOS LABORALES - 2011; 14 (2): 88-95

Título

Asociación entre la exposición laboral a polvo de tiza y patología respiratoria en maestros de escuelas

Autores

Ramada JM, Haara R, Serra C et al.

Objetivos

El objetivo de este estudio fue evaluar la asociación entre la exposición a polvo de tiza y trastornos respiratoriosen un colectivo de maestros.

Métodos

Estudio transversal realizado entre enero y mayo de 2010 a una muestra de 420 maestros de siete colegios de las provincias de Barcelona, Girona, Navarra y Valencia que contestaron un cuestionario auto-cumplimentado sobre factores determinantes de la exposición a polvo de tiza y trastornos respiratorios. Se evaluaron las asociaciones entre seis variables indicadoras de exposición a polvo de tiza y siete variables relacionadas con efectos adversos sobre el aparato respiratorio. Se calcularon odds ratio de prevalencia (ORP) e intervalos de confianza del 95% (IC95%) mediante regresión logística multivariada, ajustando por las variables sexo, edad, hábito tabáquico e índice de masa corporal.

Resultados

La tasa de respuesta fue del 96,7%. El 68% de los maestros usaban tiza durante al menos una hora al día y un 24% sacudía el borrador en clase. Los trastornos más prevalentes fueron afonía, sintomatología frecuente de vías altas (SFRS) y bronquitis crónica. Sacudir y/o usar frecuentemente el borrador y/o usar tiza en clase se asoció significativamente a una mayor prevalencia de sibilancias (ORPa=4,04; IC95%=1,73-9,42), infecciones respiratorias frecuentes (IRF) (ORPa=5,64; IC95%=1,32-24,04), SFRS (ORPa=2,42; IC95%=1,33-4,43) y afonía (ORPa=1,75; IC95%=1,01-3,04). Para sibilancias, IRF, SFRS y afonía la prevalencia disminuyó con la edad.

Conclusiones

Los trastornos respiratorios se asocian a la exposición al polvo de tiza. La relación inversa con la edad para sibilancias, IRF, SFRS y afonía sugiere un efecto de selección, debiéndose investigar si hay maestros que abandonan la profesión por motivos de salud respiratoria.