# Nº9 Boletín LADEP Boletín N°9 - 4° Trimestre 2010





# **Boletin LADEP**

Boletín Nº9 - 4º Trimestre 2010 (Octubre - Diciembre)

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# REVISTAS INTERNACIONALES CONSULTADAS

- MERICAN JOURNAL OF INDUSTRIAL MEDICINE
- JOURNAL OF OCCUPATIONAL MEDICINE AND TOXICOLOGY
- INTERNATIONAL JOURNAL OF HYGIENE AND ENVIRONMENTAL HEALTH
- OCCUPATIONAL AND ENVIRONMENTAL MEDICINE
- OCCUPATIONAL MEDICINE
- SCANDINAVIAN JOURNAL OF WORK ENVIRONMENT & HEALTH

# REVISTAS NACIONALES CONSULTADAS

- ARCHIVOS DE PREVENCIÓN DE RIESGOS LABORALES
- MEDICINA Y SEGURIDAD DEL TRABAJO
- REVISTA DE LA SOCIEDAD ESPAÑOLA DE MEDICINA Y SEGURIDAD DEL TRABAJO



Revista: AMERICAN JOURNAL OF INDUSTRIAL MEDICINE - 53:1070-1080, 2010

#### Título

Asbestosis and mesothelioma among British asbestos workers (1971-2005) (Asbestosis y mesotelioma entre trabajadores británicos de asbesto (1971-2005))

#### **Autores**

Harding A-H, Darnton AJ

#### **Antecedentes**

**Background.** Ascertainment of asbestosis and mesothelioma from underlying cause of death underestimates the burden of these diseases. The aims of this study were to estimate the true frequency of asbestosis and mesothelioma among asbestos workers in Great Britain (GB), and to identify factors associated with the risk of death with these diseases.

#### Métodos

**Methods.** The GB Asbestos Survey was established in 1971 to monitor long-term health outcomes among workers covered by regulations to control asbestos at work. Asbestosis and mesothelioma cases were defined by multiple cause of death, and were ascertained by identifying asbestos workers on the GB Asbestosis and Mesothelioma Registers. Standardized mortality ratios (SMRs) were calculated; the risks of asbestosis and mesothelioma were modeled with Poisson regression analysis. Deaths to the end of 2005 were included.

#### Resultados

**Results.** There were 15,557 deaths between 1971 and 2005 among the 98,912 workers. Altogether 477 asbestosis and 649 mesothelioma cases were identified. The SMR for all causes was 1.42, for asbestosis 51.3, and for mesothelioma 13.5. In multiply adjusted analysis, age, sex, job, and birth cohort were significantly associated with asbestosis and mesothelioma. For asbestosis year of first exposure, and for mesothelioma latency, were also statistically significant.

# **Conclusiones**

**Conclusions.** The asbestos workers experienced high mortality from all causes, asbestosis, and mesothelioma. There was some evidence that the risk of asbestosis and mesothelioma was lower in later birth cohorts and among those first occupationally exposed to asbestos more recently. Due to the long latency of both diseases, further follow-up is required to confirm these trends.



Revista: AMERICAN JOURNAL OF INDUSTRIAL MEDICINE - 53:1102-1108, 2010.

# **Título**

Partner smoking characteristics: Associations with smoking and quitting among blue-collar apprentices (Características del compañero fumador: asociaciones con fumar y abandono del hábito de fumar entre aprendices)

#### **Autores**

Okechukwu CA, Nguyen K, Hickman NJ

#### **Antecedentes**

**Background.** Studies suggest that the social context of blue-collar workers contribute to their low smoking cessation rates. However, little is known on the effect of partner smoking and requests to quit on workers' cessation attempts.

# Métodos

**Methods.** Using data from a longitudinal smoking cessation intervention, multivariable logistic regression models were constructed to investigate the association of partner smoking characteristics with cessation among blue-collar apprentices.

# Resultado

**Results.** Smokers were more likely to have partners who smoke (OR 13.06; 95% CI 8.52-20.01). Partner's request to quit was associated with higher odds of smoking cessation at 1 month (OR 3.74; 95% CI 2.49-5.63) and 6 months (OR 1.90; 95% CI 1.06-3.41) post-intervention. Having a partner who smoked was associated with lower odds of smoking cessation at 1 month (OR 0.41; 95% CI 0.27-0.62), but not 6 months post-intervention.

#### **Conclusiones**

**Conclusions.** Results suggest that smoking cessation interventions that include partner support might improve cessation among blue-collar smokers.



Revista: AMERICAN JOURNAL OF INDUSTRIAL MEDICINE - 53:1088-1101, 2010

# **Título**

**Sedentary work, low physical job demand, and obesity in US workers** (Trabajo sedentario, trabajo con escasa demanda física y obesidad en trabajadores estadounidenses)

#### **Autores**

Choi B, Schnall PL, Yang H, Dobson M, Landsbergis P, Israel L, Karasek R, Baker D

#### **Antecedentes**

**Background.** Little is known about the role of low physical activity at work (sedentary work or low physical job demand) in the increasing prevalence of obesity of US workers.

#### Métodos

**Methods.** This cross-sectional and secondary data analysis included 1,001 male and 1,018 female workers (age range: 32-69) from the National Survey of Midlife Development in the United States (MIDUS) II study (2004-2006). Sedentary work and physical job demand were measured by questionnaire items. Total obesity (based on body mass index) and central obesity (based on waist circumference) were defined using WHO criteria.

# Resultado

**Results.** After controlling for covariates (socio-demographic, psychosocial working conditions, health status, and health behaviors), sedentary work, low physical job demand, or their combination increased the risk for total and central obesity in male workers, particularly when they worked longer than 40 hr per week. Sedentary work marginally increased the risk for total and central obesity in female workers.

#### Conclusiones

**Conclusions.** Low physical activity at work is a significant risk factor for total and central obesity in middle-aged US male workers.



Revista: JOURNAL OF OCCUPATIONAL MEDICINE AND TOXICOLOGY - 2010, 5:29doi:10.1186/1745-6673-5-29

# Título

Dig1 protects against cell death provoked by glyphosate-based herbicides in human liver cell lines (Protección de Dig1 en el hepatocito humano frente a muerte celular por herbicidas de glicofosato)

#### **Autores**

Gasnier C, Benachour N, Clair E, Travert C, Langlois F, Laurant C, Decroix-Laporte C, Séralini GE

#### **Antecedentes**

**Background.** Worldwide used pesticides containing different adjuvants like Roundup formulations, which are glyphosate-based herbicides, can provoke some in vivo toxicity and in human cells. These pesticides are commonly found in the environment, surface waters and as food residues of Roundup tolerant genetically modified plants. In order to know their effects on cells from liver, a major detoxification organ, we have studied their mechanism of action and possible protection by precise medicinal plant extracts called Dig1.

#### Métodos

**Methods.** The cytotoxicity pathways of four formulations of glyphosate-based herbicides were studied using human hepatic cell lines HepG2 and Hep3B, known models to study xenobiotic effects. We monitored mitochondrial succinate dehydrogenase activity and caspases 3/7 for cell mortality and protection by Dig1, as well as cytochromes P450 1A1, 1A2, 3A4 and 2C9 and glutathione-Stransferase to approach the mechanism of actions.

#### Resultado

Results. All the four Roundup formulations provoke liver cell death, with adjuvants having stronger effects than glyphosate alone. Hep3B are 3-5 times more sensitive over 48 h. Caspases 3/7 are greatly activated in HepG2 by Roundup at non-cytotoxic levels, and some apoptosis induction by Roundup is possible together with necrosis. CYP3A4 is specifically enhanced by Roundup at doses 400 times less than used in agriculture (2%). CYP1A2 is increased to a lesser extent together with glutathione-S-transferase (GST) down-regulation. Dig 1, non cytotoxic and not inducing caspases by itself, is able to prevent Roundup-induced cell death in a time-dependant manner with an important efficiency of up to 89%, within 48 h. In addition, we evidenced that it prevents Caspases 3/7 activation and CYP3A4 enhancement, and not GST reduction, but in turn it slightly inhibited CYP2C9 when added before Roundup.

# **Conclusiones**

**Conclusions.** Roundup is able to provoke intracellular disruption in hepatic cell lines at different levels, but a mixture of medicinal plant extracts Dig1 can protect to some extent human cell lines against this pollutants. All this system constitutes a tool for studying liver intoxication and detoxification.



Revista: INTERNATIONAL JOURNAL OF HYGIENE AND ENVIRONMENTAL HEALTH - 2010;213 (6):475-488

#### **Título**

Isocyanate and total inhalable particulate air measurements in the European wood panel industry (Medida de isocianato y de partículas inhalables totales en la industria europea de los paneles de madera)

#### **Autores**

E. Vangronsveld, S. Berckmans, K. Verbinnen, C. Van Leeuw, C. Bormans

#### Introducción

Introduction. It is well known that the use of MDI (methylene diphenyldiisocyanate) as an alternative for formaldehyde-based resins is seen as a responsible option to reduce formaldehyde emissions for CWP (Composite Wood Products) in buildings. However, there are concerns raised regarding the exposure risk of workers. The purpose of this article is to provide the reader with factual information to demonstrate that the use of MDI compared to other agents used in CWP production processes does not pose increased inhalation exposure risks for workers. Personal and area air measurements were carried out at nine Composite Wood Panel plants throughout Europe to assess potential inhalation exposures to MDI and wood dust as Total Inhalable Particulates (TIP). In total, 446 pairs of samples were collected for MDI and TIP of which 283 pairs were personal samples and the remaining 163 pairs were area samples collected at key locations along the production line. This data together with published formaldehyde exposure data has been used to evaluate the exposure safety margin opposite what are considered relevant occupational exposure limits.

# Material y Métodos

**Material and methods.** The methods used for sampling and analysing MDI and TIP are based on internationally accepted methods, i.e. MDHS 25/3 (or ISO 16702) for MDI, and MDHS 14/3 for TIP.

# Resultados

**Results.** The job functions with an increased exposure profile for TIP were the cleaners, drying operators and quality control staff, and for MDI, the cleaners and quality control staff. The areas with an increased exposure profile for TIP are the conveyor area from OSB blender to former area and the OSB press infeed, and for MDI the OSB weigh belt and OSB former bin area.

#### Conclusiones

Conclusions. The exposure safety margin opposite the selected exposure limits can be ranked as MDI > TIP > formaldehyde (high margin of safety to low margin of safety), indicating that the use of MDI also reduces the exposure risks to workers during production of CWP compared to formaldehyde.

By reducing the airborne TIP concentrations, a respiratory sensitiser, MDI workplace concentrations in general can be reduced further. This can be achieved by improving design and/or maintenance and testing programmes of existing control measures, which should be in place already to effectively control exposure to TIP and formaldehyde. The airborne concentration of MDI at workstations situated after pressing (curing) is regarded as extremely low and likely mainly constituted by workplace emissions from elsewhere in the plant.



Revista: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - 2010;67:664-672

#### Título

Occupational exposure to organic solvents and lymphoid neoplasms in men: results of a French case-control study (Exposición laboral a disolventes orgánicos y neoplasias linfoides en hombres: resultados de un estudio francés de casos y controles)

#### **Autores**

Orsi L, Monnereau A, Dananche B, Berthou C, Fenaux P, Soubeyran P

# **Objetivos**

**Objectives.** Investigating the role of occupational exposure to solvents in the occurrence of lymphoid neoplasms (LNs) in men.

#### Métodos

Methods. The data were generated by a French hospital-based case-control study, conducted in six centres in 2000-2004. The cases were incident cases aged 18-75 years with a diagnosis of LN. During the same period, controls of the same age and gender as the cases were recruited in the same hospitals, mainly in the orthopaedic and rheumatological departments. Exposure to solvents was assessed using standardised occupational questionnaires and case-by-case expert assessment. Specific quantification of benzene exposure was attempted. The analyses included 491 male patients (244 cases of non-Hodgkin's lymphoma (NHL), 87 of Hodgkin's lymphoma, 104 of lymphoproliferative syndrome and 56 of multiple myeloma) and 456 male controls. Unconditional logistic regressions were used to estimate OR and 95% CI.

#### Resultados

**Results.** Solvent exposure, all solvents considered together, was marginally associated with NHL (OR=1.4 (1.0 to 2.0) p=0.06), but not with other LNs. No association with the main chemical series of solvents was observed. There was no trend with the average intensity or frequency of exposure. Exposure to pure benzene was not significantly related to NHL (OR=3.4 (0.8 to 15.0)). The highest maximum intensities of benzene exposure were associated with diffuse large cell lymphoma (OR=2.1 (1.0 to 4.6))).

# **Conclusiones**

**Conclusions.** The results of the present study provide estimates compatible with the hypothesis that exposures to pure benzene and high benzene intensities may play a role in some NHL. There was no evidence for a role of other organic solvents in the occurrence of LN.



Revista: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - 2010;67:722-729

#### **Título**

**Occupational exposure to organic solvents and breast cancer in women** (Exposición laboral a disolventes orgánicos y cáncer de mama en mujeres)

#### Autores

Peplonska B, Stewart P, Szeszenia N, Lissowska J

#### **Antecedentes**

**Background.** Although studies in rodents suggest possible associations between exposure to organic solvents and breast cancer, the evidence in humans is limited.

#### Métodos

Methods. We evaluated job histories of 2383 incident breast cancer cases diagnosed during 2000-2003, and 2502 controls who participated in a large population-based case-control study in Poland. Industrial hygienists reviewed occupational histories and developed exposure metrics for total organic solvents and benzene. Unconditional logistic regression analyses estimated ORs and 95% CIs as the measure of association with breast cancer, controlling for breast cancer risk factors. Stratified analyses examined the potential modification by known breast cancer risk factors. Associations were also evaluated by oestrogen and progesterone receptor status and by other clinical characteristics of the tumours using polytomous regression analyses.

#### Resultados

**Results.** Women who ever worked at jobs with organic solvents exposure had a small, non-significant increase in breast cancer risk (OR=1.16; 95% CI 0.99 to 1.4). A significant association was present for oestrogen receptor- and progesterone receptor-negative tumours (OR 1.40; 95% CI 1.1 to 1.8), but there was no association with tumours with both positive receptors (OR 0.97; 95% CI 0.8 to 1.2 (p heterogeneity: 0.008)). We did not observe trends with increasing level of exposure. Known breast cancer risk factors did not modify the association between organic solvents and breast cancer risk. No association with breast cancer was found for benzene exposure (OR 1.00; 95% CI 0.8 to 1.3).

#### Conclusiones

**Conclusions.** Our study provides weak evidence for a possible association between occupational exposure to organic solvents as a class and breast cancer risk. The association might be limited to hormone receptor-negative tumours.



Revista: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - 2010;67:816-822

#### Título

**Work-related mortality in England and Wales, 1979-2000** (Mortalidad relacionada con el trabajo en Inglaterra y Gales: 1979-2000)

#### **Autores**

Coggon D, Harris EC, Brown T, Rice S, Palmer KT1

#### **Antecedentes**

**Background.** To explore time trends in deaths attributable to work in England and Wales, and identify priorities for prevention, we conducted a proportional analysis of mortality by occupation over a 22-year period.

#### Métodos

**Methods.** Analysis was based on deaths in men aged 20-74 years during 1979-1980 and 1982-2000 with a recorded occupation. Proportional mortality ratios, standardised for age and social class, were calculated for pre-specified combinations of occupation and cause of death, for which excess mortality could reasonably be attributed to work. Differences between observed and expected numbers of deaths by cause and occupation were expressed as annual excess death rates.

# Resultados

**Results.** Mortality attributable to work declined substantially over the period of study, with total excess death rates of 733.2 per year during 1979-1990 and 471.7 per year during 1991-2000. The largest contributing hazards were chronic obstructive pulmonary disease and pneumoconiosis in coal miners, pleural cancer from asbestos, and motor vehicle accidents in lorry drivers. In contrast to most other hazards, there was no clear decline in excess mortality attributable to asbestos, or in deaths from sino-nasal cancer associated with exposure to wood dust.

# Conclusiones

**Conclusions.** The overall decline in mortality attributable to work is likely to reflect reduced employment in more hazardous occupations, as well as improvements in working conditions. It is imperative to ensure that occupational exposures to asbestos and wood dust are now adequately controlled. Further research is needed on accidents involving lorries with the aim of developing more effective strategies for the prevention of injury.



Revista: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - 2010;67:845-852

#### **Título**

The impact of ill health on exit from paid employment in Europe among older workers (El impacto de problemas de salud al salir de un empleo remunerado en Europa entre los trabajadores de edad)

#### **Autores**

Van den Berg T, Schuring M, Avendano M, Mackenbach J, Burdorf A

# **Objetivos**

**Objectives.** To determine the impact of ill health on exit from paid employment in Europe among older workers.

#### Métodos

**Methods.** Participants of the Survey on Health and Ageing in Europe (SHARE) in 11 European countries in 2004 and 2006 were selected when 50-63 years old and in paid employment at baseline (n=4611). Data were collected on self-rated health, chronic diseases, mobility limitations, obesity, smoking, alcohol use, physical activity and work characteristics. Participants were classified into employed, retired, unemployed and disabled at the end of the 2-year follow-up. Multinomial logistic regression was used to estimate the effect of different measures of ill health on exit from paid employment.

# Resultados

**Results.** During the 2-year follow-up, 17% of employed workers left paid employment, mainly because of early retirement. Controlling for individual and work related characteristics, poor self-perceived health was strongly associated with exit from paid employment due to retirement, unemployment or disability (ORs from 1.32 to 4.24). Adjustment for working conditions and lifestyle reduced the significant associations between ill health and exit from paid employment by 0-18.7%. Low education, obesity, low job control and effort-reward imbalance were associated with measures of ill health, but also risk factors for exit from paid employment after adjustment for ill health.

#### Conclusiones

**Conclusions.** Poor self-perceived health was strongly associated with exit from paid employment among European workers aged 50-63 years. This study suggests that the influence of ill health on exit from paid employment could be lessened by measures targeting obesity, problematic alcohol use, job control and effort-reward balance.



Revista: SCANDINAVIAN JOURNAL OF WORK ENVIRONMENT & HEALTH - 2010;36(5):373-383

#### Título

Mortality from circulatory system diseases and low-level radon exposure in the French cohort study of uranium miners, 1946-1999 (Mortalidad por enfermedades del sistema circulatorio y exposición de bajo nivel de radón en el estudio de cohorte francés de los mineros de uranio, 1946-1999)

# **Autores**

Nusinovici S, Vacquier B, Leuraud K, Metz-Flamant C, Caër-Lorho S, Acker A, Laurier D

# **Objetivos**

**Objective.** The few studies examining the risk of circulatory system diseases (CSD) associated with ionizing radiation have reported inconsistent results. Radon, a known pulmonary carcinogen, emits ionizing radiation. The aim of this study was to examine CSD mortality in a French cohort of uranium miners and evaluate the plausibility of an association with radon exposure.

#### Métodos

Methods. The cohort included men employed as uranium miners for ≥1 year between 1946-1990. We obtained vital status and cause of death from national registers and reconstructed radon exposure for each year. Exposure¬-risk relations were estimated with a linear excess relative risk (ERR) model using a 5-year lag time.

# Resultados

Results. The cohort comprised 5086 miners, followed up for a mean duration of 30.1 years. The average cumulative exposure of the radon-exposed miners was 36.6 working level months (WLM). A total of 1411 deaths were observed, including 319 deaths due to CSD. No excess risk was found for this overall cause of death. A significant positive trend was observed between deaths from cerebrovascular diseases (CeVD) and cumulative radon exposure, together with a significant ERR per 100 WLM [ERR per 100 WLM 0.49, 95% confidence interval (95% CI) 0.07-1.23)]. Hard physical activity was identified as a potential modifying factor of the exposure-risk relation.

#### Conclusiones

**Conclusion**. For the first time in a cohort of uranium miners, our results suggest an association between CeVD mortality and cumulative radon exposure. Due to a lack of data, which limited our ability to assess possible confounding by cardiovascular risk factors, these findings should be interpreted with caution.



Revista: SCANDINAVIAN JOURNAL OF WORK ENVIRONMENT & HEALTH - 2010; 36(5):384-393

# **Título**

The natural course of carpal tunnel syndrome in a working population (Evolución natural del síndrome del túnel carpiano en población laboral)

#### **Autores**

Silverstein BA, Fan ZJ, Bonauto DK, Bao S, Smith CK, Howard N, Viikari-Juntura E

# **Objetivos**

**Objective.** The aim of this study was to assess prevalence, incidence, and persistence of carpal tunnel syndrome (CTS) and associated symptoms over a one-year period in a working population.

#### Métodos

**Methods.** We conducted a one-year prospective study of 418 active workers in 12 worksites. Detailed health interviews, psychosocial questionnaires, and electrophysiological studies [ie, nerve conduction velocity (NCV) tests] were conducted at baseline and one-year follow-up. Individual-observed exposure assessments of wrist posture, hand activity, and hand forces were conducted.

#### Resultados

Results. Prevalence of CTS cases at baseline was 10.8% [95% confidence interval (95% CI) 7.8-13.7%] on the dominant side and 6.0% (95% CI 3.7-87.3%) on the non-dominant side; CTS symptoms were 14.1% (95% CI 10.8-17.5%) and 11.0% (95% CI 8.0-14.0%), respectively. Incidence of CTS cases were 7.5% (95% CI 4.8-10.2%) and 5.6% (95% CI 3.3-7.9%), respectively. Higher proportions of subjects with current symptoms or positive electrophysiological test findings at baseline became CTS cases at one year compared to those with neither (28.6% and 13.9%, respectively, versus 0.5%). One-year persistence of CTS case status was 44.4% (95% CI 29.9-59.0%) for the dominant hand and 52.0% (95% CI 32.4-71.6) for non-dominant hand. There were significant differences at baseline between asymptomatic subjects and CTS cases with respect to higher job demands (P=0.027), lower job satisfaction (P=0.036), lower general health (P=0.0009), higher exposure to vibrating hand tool use (P=0.039), and greater time using a forceful power grip (P=0.035) among cases.

#### Conclusiones

**Conclusion.** CTS symptoms more than positive NCV test results alone appear to predict CTS at one year. Persistence of CTS at one year is high.



Revista: SCANDINAVIAN JOURNAL OF WORK ENVIRONMENT & HEALTH - 2010;36(5):413-421

#### Título

Maternal concentrations of perfluorooctanesulfonate (PFOS) and perfluorooctanoate (PFOA) and duration of breastfeeding (Concentraciones de perfluorooctanosulfonato (PFOS) y perfluorooctanoato (PFOA) y duración de la lactancia)

#### **Autores**

Fei C, McLaughlin JK, Lipworth L, Olsen J

# **Objetivos**

**Objective.** Perfluorooctanoate (PFOA) has been associated with impaired lactation in mice. We examined whether maternal perfluorooctanesulfonate (PFOS) and PFOA concentrations correlated with duration of breastfeeding among women.

# Métodos

**Methods.** We randomly selected 1400 pregnant women from the Danish national birth cohort (1996-2002) and measured PFOS and PFOA concentrations in early pregnancy by using high performance liquid chromatography/tandem mass spectrometry. Self-reported data on the duration of any and exclusive breastfeeding were collected twice during telephone interviews around 6 and 18 months after the birth of the child.

# Resultados

**Results.** The duration of breastfeeding decreased with increasing concentrations of pregnancy PFOS and PFOA among multiparous women, for whom the adjusted odds ratios (OR) for weaning before 6 months of age were 1.20 (95% CI 1.06-1.37) per 10 ng/ml increase in PFOS concentrations and 1.23 (95% CI 1.13-1.33) per 1 ng/ml increase in PFOA concentrations. No consistent association was found for primiparous women.

# Conclusiones

**Conclusion.** These findings suggest that PFOA and PFOS may reduce the ability to lactate, but could equally reflect reverse causation since no association was seen in primiparous women.



Revista: SCANDINAVIAN JOURNAL OF WORK ENVIRONMENT & HEALTH - 2010;36(6):488-498

#### Título

Return to work and occupational physicians' management of common mental health problems - process evaluation of a randomized controlled trial (Reincorporación laboral y gestión de los médicos especialistas en medicina del trabajo en trastornos comunes de salud mental: proceso de evaluación de un ensayo aleatorio controlado)

#### **Autores**

Rebergen DS, Bruinvels DJ, Bos CM, van der Beek AJ, van Mechelen W

# Objetivos

**Objective.** The aim of this study was to examine the adherence of occupational physicians (OP) to the Dutch guideline on the management of common mental health problems and its effect on return to work as part of the process evaluation of a trial comparing adherence to the guideline to care as usual. The first hypothesis was that guideline adherence among the "guideline group" will be higher compared to the "usual care group". The second hypothesis was that better guideline adherence by the occupational physician will be associated with earlier return to work.

# Métodos

Methods. In a randomized controlled trial, five participating OP had to provide care based on the Dutch guideline to 240 police workers with common mental health problems (the "guideline group"). The same OP had to provide usual care to the participants in the control group (the "usual care" group), including minimal involvement and easy access to a psychologist. In evaluating the process, we assessed guideline adherence via an audit of medical files, using 20 guideline-based performance indicators. Mean rates of guideline adherence were related to the duration until first and full return to work, using a Cox proportional hazards model.

#### Resultados

**Results.** The mean rate of the sum score of guideline adherence was 10 in a range of 0-20 [standard deviation (SD) 1.8] and did not significantly differ between the intervention and control group. Mean better guideline adherence showed a statistically significant association with a shorter time to first and full return to work [hazard ratio 1.1; 95% confidence interval (95% CI) 1.0-1.2], which was explained by keeping more regular contact with the worker and the work system and better monitoring of stagnation or return to work.

# **Conclusiones**

Conclusion. No contrast in guideline adherence was found between guideline-based versus usual care. This can be explained by contamination between the guideline and usual care group. Even though guideline adherence was only average, better adherence predicted earlier return to work. Guidelines for management of common mental health problems and return to work should focus on regular contact with the worker and the work organisation.



Revista: SCANDINAVIAN JOURNAL OF WORK ENVIRONMENT & HEALTH - 2010;36(6):484-487

# **Título**

Searching for high-quality articles about intervention studies in occupational health - what is really missed when using only the Medline database? (Búsqueda de artículos de alta calidad sobre estudios de intervención en medicina del trabajo: lo que se pierde empleando solamente Medline)

# **Autores**

Rollin L, Darmoni S, Caillard J-F, Gehanno J-F

# **Objetivos**

**Objective.** Most occupational health physicians access electronic databases to obtain reliable medical information. Although it has been demonstrated that the use of Medline alone does not ensure comprehensiveness, many experts rely solely on this database. Our study aimed to discover to what extent the physician who limits his/her search to Medline misses studies of high quality.

# Métodos

**Methods.** We constructed a "gold standard" database of high-quality intervention studies gathering all the references included in the systematic reviews of the Cochrane Library and indexed under the topic "occupational health field". We then searched all these references, one by one, in Medline.

#### Resultados

**Results.** Overall, 88.8% [95% confidence interval (95% CI) 86.1-91.5] of the high quality studies included in our gold standard database were indexed in Medline. References included in reviews on psychiatric or psychological topics were significantly less often indexed in Medline [81.7% (95% CI 75.9-88.5)] than references included in reviews on other topics [92.2% (95% CI 89.5-95.0)] (P=0.001).

#### **Conclusiones**

**Conclusion.** The recall ratio of Medline for high-quality intervention studies is close to 90%. For occupational health practitioners who aim to find reliable answers to their daily practice questions, searching Medline only is more cost-effective than previously thought.



Revista: ARCHIVOS DE PREVENCIÓN DE RIESGOS LABORALES - 2010; 13 (4): 180-187

# **Título**

Duración de la incapacidad temporal por contingencia común por grupos diagnósticos

#### **Autores**

Delclós J, García S, López JC, Samperea M

# **Objetivos**

Describir la duración de los episodios de incapacidad temporal por contingencia común (ITcc) por grupos diagnósticos.

# Métodos

Cohorte retrospectiva de 258.751 episodios de ITcc de duración prolongada (>15 días en trabajadores del régimen general, >3 días en trabajadores autónomos) iniciados entre 2002 y 2006, gestionados por una mutua de ámbito estatal en España, y seguidos hasta su alta. Se examinó la distribución de los episodios por el diagnóstico médico al alta, según la duración mediana (DM), los percentiles 25 y 75, la media y desviación estándar.

#### Resultados

La DM fue de 73 días para aquellos casos en los que constaba un diagnóstico clínico (n=148.588, 57,4%), los percentiles 25 y 75 fueron de 41 y 143 días, respectivamente. Las patologías más frecuentes fueron las osteoarticulares (22,2%), seguidas por las traumatológicas (16,7%) y psiquiátricas (12,3%). Las neoplasias presentaron la mayor DM (201días), seguidas por los trastornos psiquiátricos (117 días), reumatológicos (103 días) y neurológicos (102 días), aumentando ésta con el sexo femenino, una mayor edad y ser trabajador autónomo.

#### **Conclusiones**

En las ITcc de duración prolongada hay importantes diferencias en la duración de los procesos según la patología. Duración que se ve modulada por el sexo, la edad y el régimen de la seguridad social. Estos datos pueden servir de guía para mejorara la gestión clínica de los procesos que conllevan una incapacidad temporal por contingencia común.



Revista: MEDICINA Y SEGURIDAD DEL TRABAJO - 2009; 4(4): 200-203

#### Título

Asma ocupacional en una fábrica de detergentes: la importancia de las medidas preventivas

#### **Autores**

Pérez-Formoso JL

# Introducción

El empleo de enzimas en la industria de los detergentes supuso un paso adelante muy importante en el sector. Las enzimas más utilizadas como aditivos en los detergentes son los Bacillus subtilis y licheniformis.

# Objetivo

Presentamos el caso de una trabajador de la industria de detergentes desde hacía 25 años, que presenta clínica de asma bronquial de 2 años de evolución.

# Material y Métodos

Se realizaron Prick-test y pruebas de provocación bronquial específica. Resultados: Se objetivó la positividad en las pruebas de Prick y provocación bronquial específica con B. subtilis proporcionado por el trabajador.

#### Conclusión

Se ponen en entredicho las medidas preventivas, así como la vigilancia de la salud realizada a los trabajadores en contacto con este tipo de sustancias sensibilizantes.



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# **Título**

Prestación de riesgo durante el embarazo en atención primaria.

#### **Autores**

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# **Objetivos**

- 1) Valorar el conocimiento de la prestación de riesgo durante el embarazo por parte de los médicos de Atención Primaria encuestados;
- 2) Describir la percepción de los facultativos de la proyección real de la prestación en la población a la que atienden;
- 3) Valorar las vías de información;
- 4) Describir la percepción de utilidad de la prestación.

#### Métodos

Estudio cuantitativo y análisis bivariante mediante encuesta anónima que se envió en junio de 2007 a los 23 centros de salud y 309 médicos de familia del Distrito de Málaga, recibiendo 99 encuestas de 13 centros de salud. Algunos siguen remitiendo a las pacientes a la Seguridad Social, probablemente porque desconocen la reforma de marzo de 2007. Muchos actúan correctamente interesándose por la profesión de las embarazadas y realizan un informe si procede. Reconocen la prestación como de alta utilidad, no valorándola ninguno como apenas o nada útil. La vía de conocimiento mayoritaria es la inspección, que es la vía que comprende más sujetos con una percepción de tener un conocimiento suficiente. Aquellos que aprecian tener un conocimiento suficiente no lo demostraron al diferenciar situaciones susceptibles de la prestación o de incapacidad temporal.

#### **Conclusiones**

La existencia de embarazadas con un riesgo potencial de tipo laboral es una realidad, que no pasa desapercibida por la mayoría de los encuestados que reconocen que existe una prestación distinta a la incapacidad temporal, aunque muchos perciben no conocerla bien. Un porcentaje no desdeñable protege mediante incapacidad temporal. Menos de la mitad conoce el trámite actual.

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