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Boletín LADEP

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REVISTAS INTERNACIONALES CONSULTADAS

- AMERICAN JOURNAL OF INDUSTRIAL MEDICINE
- ARCHIVES BELGES
- INDIAN JOURNAL OF OCCUPATIONAL AND ENVIRONMENTAL MEDICINE
- INDUSTRIAL HEALTH
- INTERNATIONAL JOURNAL OF HYGIENE AND ENVIRONMENTAL HEALTH
- JOURNAL OF OCCUPATIONAL HEALTH
- JOURNAL OF OCCUPATIONAL MEDICINE AND TOXICOLOGY
- MEDICINA DEL LAVORO
- OCCUPATIONAL AND ENVIRONMENTAL MEDICINE
- OCCUPATIONAL MEDICINE
- SCANDINAVIAN JOURNAL OF WORK ENVIRONMENT & HEALTH
- THE NEW ENGLAND JOURNAL OF MEDICINE

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

Artículo Nº1

REVISTA: AMERICAN JOURNAL OF INDUSTRIAL MEDICINE - AM. J. IND. MED. 55:25-36, 2012

Título

Cause-specific mortality among a cohort of U.S. flight attendants (Mortalidad por causa específica en una cohorte de tripulantes aéreos de cabina en los Estados Unidos de América)

Autores

Pinkerton L, Waters M, Hein M

Antecedentes

Background. We evaluated mortality among 11,311 former U.S. flight attendants. The primary a priori outcomes of interest were breast cancer and melanoma.

Métodos

Methods. Vital status was ascertained through 2007, and life table analyses was conducted. Cumulative exposure to cosmic radiation and circadian rhythm disruption were estimated from work history data and historical published flight schedules.

Resultados

Results. All-cause mortality was less than expected among women but was elevated among men, primarily due to elevated HIV-related disease mortality. Mortality from breast cancer among women and melanoma was neither significantly elevated nor related to metrics of exposure. Mortality was elevated for non-Hodgkin's lymphoma among men; for alcoholism, drowning, and intentional self-harm among women; and for railway, water, and air transportation accidents.

Conclusiones

Conclusions. We found no evidence of increased breast cancer or melanoma mortality. Limitations include reliance on mortality data and limited power resulting from few melanoma deaths and relatively short employment durations (No se encontraron pruebas de aumento de cáncer de mama ni mortalidad por melanoma. Las limitaciones incluyen la dependencia en los datos de mortalidad y el poder limitado por pocas muertes por melanoma y que la duración en los puestos de trabajo es relativamente corta).

Artículo Nº2

REVISTA: AMERICAN JOURNAL OF INDUSTRIAL MEDICINE - AM. J. IND. MED. 55:136-142, 2012

Título

Predictors of early cessation of dairy farming in the French Doubs province: 12-year follow-up (Predictores de abandono precoz del trabajo en granjeros de producción láctea en Doubs (Francia): seguimiento de 12 años)

Autores

Mouchetrou I, Monnet E, Laplante JJ

Antecedentes

Background. A healthy worker effect due to respiratory disability has been noted in the farming population, but other factors may also interfere. Little has been published about factors influencing the early cessation of work in self-employed dairy farmers.

Métodos

Methods. Two hundred and nineteen dairy farmers were included from a cohort constituted in eastern France in 1993-1994 with a 12-year follow-up. Spirometric data, personal, and farm characteristics were registered. Cox models with delayed entry in which age was the time-scale were applied to identify the baseline predictive factors of the early cessation of dairy farming.

Resultado

Results. Working in a modern farm was protective against early cessation of dairy farming (hazard ratio: 0.36 [95% CI: 0.16-0.81]), especially in men. Having asthma was a predictive factor of early cessation, especially in women (hazard ratio: 16.12 [95% CI: 3.28-79.12]).

Conclusiones

Conclusions. The most predictive factors of early cessation of dairy farming were health related in women and farm related in men. (El factor más predictivo en el cese temprano de las actividades agrícolas diarias fueron relacionados en mujeres con su salud y en hombre con las actividades agrícolas).

Artículo Nº3

REVISTA: AMERICAN JOURNAL OF INDUSTRIAL MEDICINE - Am. J. IND. MED. 55:353-360, 2012

Título

Occupational contact allergens: Are they also associated with occupational asthma? (Alergenos laborales de contacto: se asocian también con asma laboral?)

Autores

Arrandale V, Liss G, Tarlo S, Pratt M

Antecedentes

Background. Workplace exposures that can potentially cause both allergic occupational contact dermatitis (AOCD) and occupational asthma (OA) are not clearly identified.

Métodos

Methods. Occupational contact allergens (OCAs) were identified using North American Contact Dermatitis Group (NACDG) data. Reference documents and systematic reviews were used to determine whether each OCA had been reported to potentially cause OA. The presence or absence of a sensitizer notation in occupational hygiene reference documents was also examined.

Resultado

Results. The 10 most common OCAs were: epoxy resin*, thiuram, carba mix, nickel sulfate*, cobalt chloride*, potassium dichromate*, glyceryl thioglycolate, p-phenylenediamine*, formaldehyde* and glutaraldehyde*. Seven (indicated by *) were determined to be possible causes of OA. Information on sensitizing potential from OH reference materials contained conflicting information.

Conclusiones

Conclusions. Several common OCAs can also potentially cause OA. Inhalation and dermal exposures to these agents should be controlled and both OA and AOCD should be considered as possible health outcomes. Increased consistency in sensitizer notations is needed. (Algunos contactos ocupacionales con alérgicos, comunes también pueden potencialmente causar asma ocupacional. La inhalación y exposición dérmica a estos agentes debe ser controlada, y tanto el asma ocupacional como la alergia ocupacional por contacto dérmico deben ser considerados como posibles consecuencias a la salud. Se necesitaría incrementar notaciones sensibilizadoras)

Artículo Nº4

REVISTA: INDIAN JOURNAL OF OCCUPATIONAL AND ENVIRONMENTAL MEDICINE: 2011; 15, 3: 120-126

Título

Study of the effects of hydrogen cyanide exposure in Cassava workers (Estudio de los efectos de la exposición de cianuro de hidrógeno en los trabajadores de yuca)

Autores

Dhas P, Chitra P, Jayakumar S

Antecedentes

Background. Hydrogen cyanide is the chemical responsible for tissue hypoxia. Chronic exposure to HCN may cause neurological, respiratory, cardiovascular and thyroid defects. Onset of symptoms depends on dose and duration of exposure. Large scale of Cassava processing could be disastrous due to discharge of hydrocyanic acid into the air. Cassava processing is the major industrial work in and around Salem. Hence the present study is taken to assess the effects of HCN exposure in Cassava workers.

Métodos

Methods. Thirty-nine workers from a Cassava processing unit at Salem and age-matched controls of the same economic status were taken up for this study. Clinical history was obtained with a questionnaire and their Blood sugar, lipid profile, serum total protein, urea, creatinine, AST, ALT and T 3 , T 4 , TSH were estimated using a fasting blood sample and AIP was calculated. Statistical analysis was done by student t test.

Resultados

Results. Our study reveals a significant increase in triglyceride in Cassava workers when compared to the control. Atherogenic index of plasma (AIP) is statistically highly significant. A significant decrease was seen in T 4.

Conclusiones

Conclusions. An increase in TGL and AIP shows a higher degree of cardiovascular risk. A decrease in T4 suggests an insufficient iodine uptake by thyroid gland. Hence a periodic medical evaluation should be done on such workers for their safety and to prevent the health hazard. (Un aumento de la TGL y AIP muestra un mayor grado de riesgo cardiovascular. Una disminución de la T4 sugiere una absorción insuficiente de yodo por la glándula tiroides. Por lo tanto, por su seguridad y para evitar riesgos para su salud, una evaluación médica periódica se deberá realizar a los trabajadores).

Artículo Nº5

REVISTA: JOURNAL OF OCCUPATIONAL MEDICINE AND TOXICOLOGY - 2012, 7:3

Título

EFFECT OF EDUCATION AND HEALTH LOCUS OF CONTROL ON SAFE USE OF PESTICIDES: A CROSS SECTIONAL RANDOM STUDY (EFECTO DE LA EDUCACIÓN Y LOCUS DE SALUD SOBRE EL USO SEGURO DE LOS PLAGUICIDAS: UN ESTUDIO ALEATORIO SECCIONAL CRUZADO)

Autores

GABER S, ABDEL-LATIF S

Antecedentes

BACKGROUND. IN EGYPT, MANY PESTICIDES ARE USED TO CONTROL PESTS IN AGRICULTURAL FARMS. OUR STUDY AIMED TO INVESTIGATE KNOWLEDGE AND BEHAVIORS OF FARMERS RELATED TO PESTICIDE USE AND THEIR RELATION TO EDUCATIONAL LEVEL AND HEALTH LOCUS OF CONTROL. HEALTH LOCUS OF CONTROL IS THE DEGREE TO WHICH INDIVIDUALS BELIEVE THAT THEIR HEALTH IS CONTROLLED BY INTERNAL OR EXTERNAL FACTORS.

Métodos

Methods. A CROSS-SECTIONAL RANDOMIZED APPROACH WAS USED TO COLLECT DATA FROM 335 FARMERS IN MAHMOUDIYA REGION, EGYPT USING AN INTERVIEW QUESTIONNAIRE. RESULTS WERE ANALYZED USING PEARSON CHI-SQUARE TEST, FISHER'S EXACT TEST, STUDENT T-TEST AND ANOVA.

Resultados y discusión

Results and discussion. THE AVERAGE AGE OF FARMERS WAS 34 YEARS AND 61% OF THEM DIDN'T RECEIVE SCHOOL EDUCATION. SCHOOL EDUCATION WAS RELATED TO HIGHER LEVELS OF KNOWLEDGE AND BEHAVIORS. FARMERS WHO RECEIVED SCHOOL EDUCATION HAD MORE KNOWLEDGE ABOUT THE NEGATIVE EFFECTS OF PESTICIDES ON HEALTH AND ROUTES OF CONTAMINATION WITH PESTICIDES. THEY ALSO HAD HIGHER SCORES ON READING LABELS OF PESTICIDES CONTAINERS AND TAKING PRECAUTIONS AFTER COMING IN CONTACT WITH PESTICIDES. REGARDING HEALTH LOCUS OF CONTROL, HIGHER INTERNAL BELIEFS WERE SIGNIFICANTLY RELATED TO HIGHER KNOWLEDGE AND BEHAVIORS SCORES, WHILE THERE WAS NO SIGNIFICANT RELATION BETWEEN CHANCE AND POWERFUL OTHERS BELIEFS WITH KNOWLEDGE OR BEHAVIORS.

Conclusiones

Conclusions. IN THE PRESENT STUDY, HIGHER LEVEL OF EDUCATION AND LOWER LEVEL OF INTERNAL BELIEFS WERE RELATED TO BETTER KNOWLEDGE AND SAFER USE OF PESTICIDES AMONG EGYPTIAN FARMERS. WE RECOMMEND THAT STRATEGIES FOR RAISING INTERNAL BELIEFS MUST BE INCLUDED IN HEALTH EDUCATION PROGRAMS THAT AIM TO AMELIORATE PESTICIDES USE AMONG FARMERS. (EN EL PRESENTE ESTUDIO, UN ALTO NIVEL DE EDUCACIÓN Y BAJO EN LAS CREENCIAS INTERNAS ESTABAN RELACIONADAS CON UN MEJOR CONOCIMIENTO Y UN USO MÁS SEGURO DE LOS PLAGUICIDAS ENTRE LOS AGRICULTORES EGIPCIOS. SE RECOMIENDA QUE LAS ESTRATEGIAS PARA AUMENTAR LAS CREENCIAS INTERNAS DEBEN SER INCLUIDAS EN LOS PROGRAMAS DE EDUCACIÓN PARA LA SALUD QUE TIENEN COMO OBJETIVO MEJORAR EL USO DE PLAGUICIDAS ENTRE LOS AGRICULTORES).

Artículo Nº6

REVISTA: MEDICINA DEL LAVORO - MED LAV 2012; 103, 1: 26-36

Título

IMMUNOSURVEILLANCE FOR MYCOBACTERIUM TUBERCULOSIS OF HEALTH CARE PERSONNEL IN A THIRD LEVEL CARE HOSPITAL (INMUNOVIGILANCIA POR MYCOBACTERIUM TUBERCULOSIS DE PERSONAL DE CUIDADOS DE SALUD EN UN HOSPITAL DE TERCER NIVEL)

Autores

LARCHER C, FRIZZERA E, PRETTO P

Antecedentes y objetivos

Background and objectives. HEALTH CARE WORKERS ARE AT RISK FOR MYCOBACTERIUM TUBERCULOSIS (MTB) INFECTION. TO PERFORM AN OCCUPATIONAL HEALTH SURVEY AMONG 621 EMPLOYEES OF A 800-BED THIRD LEVEL CARE HOSPITAL COVERED BY MTB SURVEILLANCE.

MÉTODOS

Methods. STATISTICAL ANALYSIS WAS APPLIED TO RESULTS FROM TUBERCULIN SKIN TEST (TST), QUANTIFERON® -TB GOLD IN TUBE ASSAY (QFT), PPD-ELISA FOR SERUM ANTIBODIES, AND OCCUPATIONAL OR VACCINE DATA.

RESULTADOS

RESULTS: 29.1% OF SUBJECTS WERE TST POSITIVE, 18.5% WERE QFT POSITIVE. IN 23% OF SUBJECTS NO CORRELATION BETWEEN THESE TESTS WAS FOUND, PRESUMABLY LINKED TO BCG-VACCINATION, SINCE TST POSITIVITY WAS 4 TIMES HIGHER AMONG VACCINATED SUBJECTS, WHEREAS BOTH TESTS CORRELATED WELL IN UNVACCINATED SUBJECTS. QFT VALUES ABOVE 2 IU/ML WERE SIGNIFICANTLY ASSOCIATED WITH POSITIVE TST AND AGE OVER 40 YEARS. WORKING IN MTB RISK LEVEL 4 WAS SIGNIFICANTLY ASSOCIATED WITH QFT, TST, AND PPD-ANTIBODY LEVELS, SUGGESTING BOOSTER EFFECTS BY REPEATED EXPOSURE. NO CLEAR CORRELATION WAS OBSERVED WITH MEDICAL SPECIALIZATIONS BUT SIGNIFICANTLY HIGHER QFT POSITIVITY WAS FOUND IN SUBJECTS NOT ASSIGNED TO THE CLASSICAL MEDICAL PROFESSIONS AND ORIGINATING FROM MTB HIGH RISK AREAS.

CONCLUSIONES

CONCLUSIONS: THESE RESULTS SHIFT THE FOCUS ON MAINTENANCE PERSONNEL, WHO MOSTLY WORKED IN MTB RISK LEVEL 2 AREAS. THE LESS POSITIVE QFT RESULTS IN VACCINATED SUBJECTS HIGHLIGHT QFT'S ADVANTAGE AS A SCREENING TOOL AND ARGUE FOR A PROTECTIVE EFFECT OF THE BCG-VACCINE, ALTHOUGH PERCENTAGES OF VACCINATED PERSONS VARIED LARGELY BETWEEN DIFFERENT MEDICAL PROFESSIONS. INTERESTINGLY, THE PERCENTAGE OF QFT POSITIVE PERSONS WAS LOWER AMONG SUBJECTS REPORTING MTB EXPOSURE THAN THOSE WHO WERE NOT AWARE OF EXPOSURE EVENTS (ESTOS RESULTADOS DESVÍAN LA ATENCIÓN SOBRE EL PERSONAL DE MANTENIMIENTO, QUE EN SU MAYORÍA TRABAJABAN EN EL AREA CON UN NIVEL DE RIESGO 2 DE EXPOSICIÓN A MYCOBACTERIUM TUBERCULOSIS. LOS RESULTADOS QFT MENOS POSITIVOS EN LOS INDIVIDUOS VACUNADOS DEMUESTRA LAS VENTAJAS DE QFT COMO UNA HERRAMIENTA DE EVALUACIÓN Y ABOGAN POR UN EFECTO PROTECTOR DE LA BCG-VACUNA, AUNQUE LOS PORCENTAJES DE PERSONAS VACUNADAS VARÍAN AMPLIAMENTE ENTRE LOS DIFERENTES PROFESIONALES DE LA SALUD. CURIOSAMENTE, EL PORCENTAJE DE PERSONAS QFT POSITIVOS FUE MENOR ENTRE LOS SUJETOS QUE INFORMARON DE LA EXPOSICIÓN DE MTB QUE LOS QUE NO ESTABAN AL TANTO DE LOS EVENTOS DE EXPOSICIÓN).

Artículo Nº7

REVISTA: MEDICINA DEL LAVORO - MED LAV 2012; 103, 2: 123-129

Título

DESCRIPTION OF A SPECIFIC BRONCHIAL PROVOCATION TEST FOR THE DIAGNOSIS OF OCCUPATIONAL ASTHMA DUE TO PLATINUM SALTS (DESCRIPCIÓN DE UN TEST ESPECÍFICO DE PROVOCACIÓN BRONQUIAL PARA EL DIAGNÓSTICO DE ASMA OCUPACIONAL DEBIDO A SALES DE PLATINO)

Autores

PORRO S, CERRI S, BERNABEO F

Antecedentes

Background. OCCUPATIONAL EXPOSURE TO PLATINUM SALTS MAY CAUSE THE ONSET OF SKIN AND RESPIRATORY DISORDERS WITH AN IGE-MEDIATED ALLERGIC MECHANISM. THE DIAGNOSIS OF OCCUPATIONAL ASTHMA DUE TO PLATINUM SALTS WAS, IN A SMALL NUMBER OF CASES, ACHIEVED ALSO VIA OCCUPATIONAL SPECIFIC BRONCHIAL PROVOCATION TESTS (SBPT), WHICH UNTIL NOW WERE CONDUCTED BY POURING PLATINUM SALT DUSTS FROM ONE TRAY TO ANOTHER OR BY DIRECT AEROSOLING OF HEXACHLOROPLATINATE SOLUTIONS INTO THE PATIENT'S AIRWAYS.

MÉTODOS

Methods. HERE WE DESCRIBE AN ORIGINAL OCCUPATIONAL SBPT BASED ON ATOMIZATION OF SOLUTIONS OF AMMONIUM HEXACHLOROPLATINATE, AT INCREASING CONCENTRATIONS, IN A 5 M³ CHALLENGE ROOM: THE STARTING SOLUTION IS A 1:100 DILUTION OF THE PRESET THRESHOLD OF THE PATIENT'S SKIN REACTIVITY TO THE SUBSTANCE. IN THE ABSENCE OF A BRONCHOCONSTRICTIVE RESPONSE, THE FOLLOWING CONCENTRATION IS ATOMIZED (EACH TIME 10 TIMES HIGHER THAN THE PREVIOUS ONE), UNTIL THE MAXIMUM CONCENTRATION, 10-2 M, IS REACHED. THE PATIENT IS NOT IN THE CHALLENGE ROOM DURING ATOMIZATION OF THE SOLUTIONS, BUT ENTERS WHEN THIS OPERATION HAS BEEN COMPLETED AND REMAINS THERE FOR 15 MINUTES, UNLESS HE/SHE SHOWS SIGNS OF RESPIRATORY TROUBLE BEFORE THAT TIME. AFTER EACH EXPOSURE, THE PATIENT IS CLINICALLY MONITORED, WITH RESPIRATORY FUNCTION TESTS AT PRESET TIMES, UNTIL AT LEAST 8 HOURS AFTER THE END OF THE EXPOSURE.

RESULTADOS Y CONCLUSIONES

RESULTS AND CONCLUSIONS: THE TEST ALLOWED IDENTIFYING A RESPIRATORY HYPERSENSITIVITY SPECIFICALLY TO PLATINUM AS CAUSE OF ASTHMA IN TWO PRECIOUS METAL WORKERS, WITH THE ONSET OF IMMEDIATE BRONCHOSPASM IN ONE PATIENT AND BIPHASIC BRONCHOSPASM IN THE OTHER. COMPARED TO THE SBPT BY POURING A MIXTURE OF PLATINUM SALT DUSTS FROM ONE TRAY TO ANOTHER, THE METHOD WE DESIGNED OFFERS A BETTER STANDARDIZATION OF BRONCHIAL STIMULATION AND, COMPARED TO DIRECT AEROSOLING OF HEXACHLOROPLATINATE INTO THE PATIENT'S AIRWAYS, IT HAS THE ADVANTAGE OF REPRODUCING THE RESPIRATORY RISK CONDITIONS OCCURRING IN THE WORKPLACE AND OFFERS BETTER SAFETY GUARANTEES FOR THE PATIENT, SINCE IT REDUCES THE RISK OF ONSET OF SERIOUS ASTHMATIC OR EVEN SYSTEMIC RESPONSES IN SUBJECTS HIGHLY HYPERSENSITIVE TO THIS METAL. (RESULTADOS Y CONCLUSIONES: LA PRUEBA PERMITIÓ IDENTIFICAR UNA HIPERSENSIBILIDAD RESPIRATORIA ESPECÍFICA A PLATINO, CAUSANTE DE ASMA EN DOS TRABAJADORES DE METALES PRECIOSOS, CON LA APARICIÓN INMEDIATA DE BRONCOESPASMO EN UN PACIENTE Y BRONCOESPASMO BIFÁSICA EN EL OTRO. COMPARANDO EL SBPT AL VERTER UNA MEZCLA DE POLVOS DE SAL DE PLATINO DE UNA BANDEJA A OTRA, EL MÉTODO QUE HEMOS DISEÑADO OFRECE UNA MEJOR ESTANDARIZACIÓN DE LA ESTIMULACIÓN BRONQUIAL Y, EN COMPARACIÓN CON LA PULVERIZACIÓN DIRECTA DE HEXACHLOROPLATINATO A LAS VÍAS RESPIRATORIAS DEL PACIENTE, TIENE LA VENTAJA DE REPRODUCIR LAS CONDICIONES DE RIESGO RESPIRATORIO QUE PUEDEN OCURREN EN EL LUGAR DE TRABAJO Y OFRECE MEJORES GARANTÍAS DE SEGURIDAD PARA EL PACIENTE, YA QUE REDUCE EL RIESGO DE APARICIÓN DE ASMA GRAVE O INCLUSO RESPUESTAS SISTÉMICAS EN SUJETOS ALTAMENTE HIPERSENSIBLES A ESTE METAL).

Artículo Nº8

REVISTA: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - OCCUP ENVIRON MED 2012;69:12-20

Título

THE EFFECTIVENESS OF TWO ACTIVE INTERVENTIONS COMPARED TO SELF-CARE ADVICE IN EMPLOYEES WITH NON-ACUTE LOW BACK SYMPTOMS: A RANDOMISED, CONTROLLED TRIAL WITH A 4-YEAR FOLLOW-UP IN THE OCCUPATIONAL HEALTH SETTING. (EFECTIVIDAD DE DOS INTERVENCIONES ACTIVAS EN COMPARACIÓN CON CONSEJOS DE AUTOCUIDADO EN EMPLEADOS CON SÍNTOMAS LUMBARES NO AGUDOS: UN ENSAYO ALEATORIO CONTROLADO CON UN SEGUIMIENTO DE 4 AÑOS EN EL SERVICIO DE SALUD OCUPACIONAL)

Autores

RANTONEN J, LUOTO S, VEHTARI A, HUPLI M

Objetivos

OBJECTIVE EVALUATE THE EFFECTIVENESS OF TWO ACTIVE INTERVENTIONS, AIMED AT SECONDARY PREVENTION OF LOW BACK PAIN (LBP), IN OCCUPATIONAL HEALTH.

Métodos

Methods. WE PERFORMED A SURVEY OF LBP (N=2480; RESPONSE RATE 71%) AND RANDOMIZED 143 EMPLOYEES (66% MALES, 45 YEARS) WITH LBP OVER 34 MM ON VAS INTO REHABILITATION (N=43), EXERCISE (N=43) OR SELF-CARE (N=40) GROUPS. PRIMARY OUTCOMES WERE LBP, PHYSICAL IMPAIRMENT (PI) AND HEALTH-RELATED QUALITY OF LIFE (HRQOL) FOR TWO YEARS AND SICKNESS ABSENCE (SA) DAYS DURING FOUR YEARS (LBP SPECIFIC, TOTAL).

Resultados

Results. RESULTS COMPARED TO SELF-CARE, EXERCISE REDUCED LBP AT 12 MONTHS (MEAN DIFFERENCE (MD) -12 MM; 95% CI -21 TO -2) AND IMPROVED HRQOL AT 12 AND 24 MONTHS (0.03; 0.00 TO 0.05), BUT DID NOT REDUCE PI. THE MDS OF SA DAYS IN FOUR YEARS WERE -17 (-70 TO 35, TOTAL) AND -15 (-47 TO 13, LBP SPECIFIC). EXERCISE REDUCED THE PROBABILITY OF LBP SPECIFIC SA DURING THE THIRD AND FOURTH YEAR. COMPARED TO SELF-CARE, REHABILITATION REDUCED LBP AT 3 MONTHS (-10 MM; -19 TO -1) AND 6 MONTHS (-10 MM; -20 TO -1), BUT WAS NOT EFFECTIVE IN HRQOL OR PI. THE MDS OF SA DAYS IN FOUR YEARS WERE -41 (-93 TO 8; TOTAL) AND 5 (-30 TO 47; LBP SPECIFIC). REHABILITATION REDUCED THE PROBABILITY OF TOTAL SA DURING FIRST AND SECOND YEAR AND AMOUNT OF TOTAL SA DAYS IN THE FOURTH YEAR.

Conclusiones

Conclusions. CONCLUSIONS AMONG EMPLOYEES WITH RELATIVELY MILD LBP, BOTH INTERVENTIONS REDUCED PAIN, BUT THE EFFECTS ON SA AND PI WERE MINOR. EXERCISE IMPROVED HRQOL. THE EFFECT SIZES WERE RATHER SMALL. (CONCLUSIONES: ENTRE LOS EMPLEADOS Y CON RELATIVO DOLOR LUMBAR LEVE, AMBAS INTERVENCIONES REDUCEN EL DOLOR, PERO LOS EFECTOS SOBRE LA DISCAPACIDAD FÍSICA Y BAJA POR ENFERMEDAD FUERON MENORES. EL EJERCICIO MEJORA LA CALIDAD DE VIDA CON RESPECTO A SU SALUD. LAS MAGNITUDES DEL EFECTO FUERON RELATIVAMENTE BAJAS).

Artículo Nº9

REVISTA: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - OCCUP ENVIRON MED 2012;69:99-106

Título

SENSITISATION TO COMMON ALLERGENS AND RESPIRATORY SYMPTOMS IN ENDOTOXIN EXPOSED WORKERS: A POOLED ANALYSIS . (SENSIBILIZACIÓN A ALERGENOS COMUNES Y SÍNTOMAS RESPIRATORIOS EN TRABAJADORES EXPUESTOS A ENDOTOXINAS: UN ANÁLISIS AGRUPADO).

Autores

BASINAS I, SCHLÜNSEN V, HEEDERIK D, SIGSGAARD T

Objetivos

OBJECTIVE TO TEST THE HYPOTHESES THAT CURRENT ENDOTOXIN EXPOSURE IS INVERSELY ASSOCIATED WITH ALLERGIC SENSITISATION AND POSITIVELY ASSOCIATED WITH NON-ALLERGIC RESPIRATORY DISEASES IN FOUR OCCUPATIONALLY EXPOSED POPULATIONS USING A STANDARDISED ANALYTICAL APPROACH.

Métodos

METHODS DATA WERE POOLED FROM FOUR EPIDEMIOLOGICAL STUDIES INCLUDING 3883 DUTCH AND DANISH EMPLOYEES IN VETERINARY MEDICINE, AGRICULTURE AND POWER PLANTS USING BIOFUEL. ENDOTOXIN EXPOSURE WAS ESTIMATED BY QUANTITATIVE JOB-EXPOSURE MATRICES SPECIFIC FOR THE STUDY POPULATIONS. DOSE-RESPONSE RELATIONSHIPS BETWEEN EXPOSURE, IGE-MEDIATED SENSITISATION TO COMMON ALLERGENS AND SELF-REPORTED HEALTH SYMPTOMS WERE ASSESSED USING LOGISTIC REGRESSION AND GENERALISED ADDITIVE MODELLING. ADJUSTMENTS WERE MADE FOR STUDY, AGE, SEX, ATOPIC PREDISPOSITION, SMOKING HABIT AND FARM CHILDHOOD. HETEROGENEITY WAS ASSESSED BY ANALYSIS STRATIFIED BY STUDY.

Resultados

RESULTS CURRENT ENDOTOXIN EXPOSURE WAS DOSE-DEPENDENTLY ASSOCIATED WITH A REDUCED PREVALENCE OF ALLERGIC SENSITISATION (ORS OF 0.92, 0.81 AND 0.66 FOR LOW MEDIAN, HIGH MEDIAN AND HIGH EXPOSURE) AND HAY FEVER (ORS OF 1.16, 0.81 AND 0.58). ENDOTOXIN EXPOSURE WAS A RISK FACTOR FOR ORGANIC DUST TOXIC SYNDROME, AND LEVELS ABOVE 100 EU/M³ SIGNIFICANTLY INCREASED THE RISK OF CHRONIC BRONCHITIS ($P < 0.0001$). STRATIFICATION BY FARM CHILDHOOD SHOWED NO EFFECT MODIFICATION EXCEPT FOR ALLERGIC SENSITISATION. ONLY AMONG WORKERS WITHOUT A FARM CHILDHOOD, ENDOTOXIN EXPOSURE WAS INVERSELY ASSOCIATED WITH ALLERGIC SENSITISATION. HETEROGENEITY WAS PRIMARILY PRESENT FOR BIOFUEL WORKERS.

Conclusiones

CONCLUSIONS OCCUPATIONAL ENDOTOXIN EXPOSURE HAS A PROTECTIVE EFFECT ON ALLERGIC SENSITISATION AND HAY FEVER BUT INCREASES THE RISK FOR ORGANIC DUST TOXIC SYNDROME AND CHRONIC BRONCHITIS. ENDOTOXIN'S PROTECTIVE EFFECTS ARE MOST CLEARLY OBSERVED AMONG AGRICULTURAL WORKERS. (LA EXPOSICIÓN OCUPACIONAL A ENDOTOXINAS TIENE UN EFECTO PROTECTOR EN LA SENSIBILIZACIÓN ALÉRGICA Y FIEBRE DEL HENO, PERO AUMENTA EL RIESGO DE SÍNDROME DE POLVO ORGÁNICO TÓXICO Y BRONQUITIS CRÓNICA. EFECTOS PROTECTORES DE ENDOTOXINAS SE OBSERVA MÁS CLARAMENTE ENTRE LOS TRABAJADORES AGRÍCOLAS).

Artículo Nº10

REVISTA: OCCUPATIONAL AND ENVIRONMENTAL MEDICINE - OCCUP ENVIRON MED 2012;69:184-190

Título

STRUCTURAL EQUATION MODELS IN OCCUPATIONAL HEALTH: AN APPLICATION TO EXPOSURE MODELLING (MODELOS DE ECUACIÓN ESTRUCTURAL EN SALUD LABORAL: UNA APLICACIÓN PARA CUANTIFICAR LA EXPOSICIÓN)

Autores

DAVIS M

Objetivos

OBJECTIVES MANY OCCUPATIONAL HYGIENE SURVEYS ARE DESIGNED TO COLLECT POLLUTANT MONITORING DATA FROM MULTIPLE LOCATIONS SIMULTANEOUSLY TO BETTER REFLECT THE REALITY OF WORK-RELATED EXPOSURE. THE EXPOSURE MODEL MUST ACCOUNT FOR THE COMPLEXITY INHERENT IN THIS STUDY DESIGN, AS WELL AS BE FLEXIBLE TO EXTRAPOLATING EXPOSURES ACROSS AN OCCUPATIONAL COHORT FOR DOSE-RESPONSE MODELLING AND RISK ASSESSMENT. THIS PAPER EXPLORES THE STRUCTURAL EQUATION MODEL (SEM) AS A TOOL TO ANALYSE POLLUTANT MONITORING DATA FROM OCCUPATIONAL STUDIES WITH MULTIPLE CONCURRENT SAMPLING ACROSS EXPOSURE LOCATIONS.

Métodos

METHODS THIS STUDY USES EXPOSURE DATA FROM A COMPREHENSIVE ASSESSMENT OF DIESEL EXHAUST IN THE US TRUCKING INDUSTRY TO TEST THE STRENGTH OF SEMS OVER MORE STANDARD ANALYTICAL APPROACHES SUCH AS ORDINARY LEAST SQUARES (OLS). THE EXPOSURE DATA CONSIST OF CONCURRENT SAMPLING OF ELEMENTAL CARBON FROM MULTIPLE CO-LOCATED MONITORS ON INDIVIDUAL WORKERS, WORK AREA AND BACKGROUND LEVELS AT 36 DIFFERENT TRUCKING TERMINALS ACROSS THE USA.

Resultados

RESULTS THE SEM IS COMPARED WITH TWO SEPARATE OLS SPECIFICATIONS—ONE THAT FOCUSES ONLY ON PREDICTING PERSONAL EXPOSURE AND EXCLUDES DATA FROM THE ADDITIONAL MONITORING SITES, AND A SECOND THAT ESTIMATES THREE SEPARATE OLS SPECIFICATIONS. WHEN COMPARED WITH THE OLS SPECIFICATIONS, THE SEM PROVIDED A BETTER FIT TO THESE LAYERED EXPOSURE DATA. THE OLS SPECIFICATIONS SUFFERED FROM BIAS IN THE COEFFICIENTS, INCLUDING DOWNWARD BIAS IN THE WORK AREA AND BACKGROUND EXPOSURE LEVELS AND OVERSTATEMENT OF THE SMOKING EFFECT. ADDITIONALLY, MANY THEORETICALLY VALID COVARIATES WERE SIGNIFICANT ONLY IN THE SEM.

Conclusiones

Conclusions. This study provides evidence in favour of more widespread use of SEMs in occupational health. SEMs represent a more robust and realistic framework for modelling multiple exposure pathways and have the potential to reduce exposure misclassification bias and strengthen the linkages between studies of exposure and disease outcomes. (ESTE ESTUDIO PROPORCIONA EVIDENCIA A FAVOR DE UN USO MÁS GENERALIZADO DE LOS MODELOS DE ECUACIONES ESTRUCTURALES(SEM EN INGLES) EN SALUD OCUPACIONAL. SEM REPRESENTAN UN MARCO MÁS SÓLIDO Y REALISTA PARA EL MODELADO DE MÚLTIPLES VÍAS DE EXPOSICIÓN Y TIENEN EL POTENCIAL DE REDUCIR EL SESGO DE CLASIFICACIÓN ERRÓNEA DE LA EXPOSICIÓN Y FORTALECER LOS VÍNCULOS ENTRE LOS ESTUDIOS DE EXPOSICIÓN Y RESULTADOS DE LA ENFERMEDAD).

Artículo Nº11

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Título

PARKINSON'S DISEASE AMONG GARDENERS EXPOSED TO PESTICIDES - A DANISH COHORT STUDY. (ENFERMEDAD DE PARKINSON EN JARDINEROS EXPUESTOS A PESTICIDAS: UN ESTUDIO DE COHORTES DANÉS)

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Objetivos

OBJECTIVE: SEVERAL STUDIES HAVE FOUND POSITIVE ASSOCIATIONS BETWEEN EXPOSURE TO PESTICIDES AND PARKINSON'S DISEASE. AS DANISH GARDENERS HAVE HAD FREQUENT, INTENSIVE EXPOSURE TO PESTICIDES, THE AIM OF THIS STUDY WAS TO INVESTIGATE THEIR RISK FOR PARKINSON'S DISEASE.

Métodos

METHODS: THE COHORT WAS COMPRISED OF 3124 MALE MEMBERS OF THE DANISH UNION OF GARDENERS ON 1 APRIL 1975. HOSPITAL REGISTER DATA WERE USED TO FOLLOW THEM FOR A PRIMARY DIAGNOSIS OF PARKINSON'S DISEASE DURING 1977-2008 AND TO CALCULATE STANDARDIZED HOSPITALIZATION RATE RATIOS (SHR) FOR THIS DISEASE AMONG GARDENERS AND THE GENERAL DANISH POPULATION FOR COMPARISON. DATA FROM THE DANISH CANCER REGISTRY WERE USED TO CALCULATE STANDARDIZED INCIDENCE RATE RATIOS (SIR) FOR SMOKING-RELATED CANCERS AMONG GARDENERS AND THE GENERAL POPULATION.

Resultados

RESULTS: THE SHR FOR PARKINSON'S DISEASE AMONG GARDENERS WAS CLOSE TO THAT OF THE GENERAL POPULATION [1.14, 95% CONFIDENCE INTERVAL (95% CI) 0.76-1.65]. IN A BIRTH COHORT ANALYSIS, A DOWNWARD TREND WAS OBSERVED, WITH THE HIGHEST RISK AMONG GARDENERS BORN BEFORE 1915 (SHR 1.55, 95% CI 0.77-2.77). THE SIR FOR SMOKING-RELATED CANCERS DID NOT DIFFER FROM THAT OF THE GENERAL POPULATION.

Conclusiones

Conclusions.: THE RESULTS INDICATE A WEAK BUT DOSE-RELATED ASSOCIATION BETWEEN EXPOSURE TO PESTICIDES AND RISK FOR PARKINSON'S DISEASE; HOWEVER, THE RESULTS WERE BASED ON 28 CASES AND THE POSSIBILITY OF NO ASSOCIATION CANNOT BE RULED OUT. (LOS RESULTADOS INDICAN UNA ASOCIACIÓN DÉBIL, PERO RELACIONADA CON LA DOSIS ENTRE LA EXPOSICIÓN A LOS PESTICIDAS Y EL RIESGO DE LA ENFERMEDAD DE PARKINSON, SIN EMBARGO, LOS RESULTADOS SE BASARON EN 28 CASOS Y LA POSIBILIDAD DE UNA NO ASOCIACIÓN).