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Consejería de Economía, Innovación, Ciencia y Empleo



Tabla de contenidos

Nuevos trabajos publicados	3
American Journal of Industrial Medicine	3
Annals of Agricultural and Environmental Medicine	4
Applied Ergonomics.....	5
Agriculture and Human Values	6
Industrial Health.....	9
Journal of Agromedicine	10
Journal of Environmental Science and Health, Part B.....	12
Rural and Remote Health Journal	14
Travail et sécurité	15
Más información	16

Nuevos trabajos publicados

American Journal of Industrial Medicine

Título del trabajo	
“Migrant and seasonal crop worker injury and illness across the northeast” (<i>Accidentes y enfermedades de cosecheros emigrantes y de temporada en la costa nortoriental</i>)	
Publicado en:	American Journal of Industrial Medicine
Autores:	Melissa Scribani, Sherry Wyckoff, Paul Jenkins, et al.
URL:	http://onlinelibrary.wiley.com/doi/10.1002/ajim.22150/abstract
Resumen:	Background: Northeast farmworkers are a small, widely dispersed, and isolated population. Little is known about their occupational injury and illness risk. Methods: Researchers conducted chart reviews in migrant health centers across the Northeast, and calculated incidence-density for agricultural morbidity based on a new method for estimating total worker hours at risk, and adjusting for cases seen at other sources of care. Results: An estimated annual average of 1,260 cases translated to an incidence of 30.27 per 10,000 worker weeks, (12.7 per 100 FTEs). Straining/spraining events (56% cases) was the most common occurrence (16.8 per 10,000 worker weeks), and lifting (21.5% cases) was the leading contributing factor. Incidence by crop category ranged from 12.95 (ground crop) to 29.69 (bush crop) per 10,000 weeks. Only 2.8% filed for Workers' Compensation. Conclusion: The predominance of straining/spraining events affecting the back, and their association with lifting suggests that Northeastern farmworker occupational health programs should focus on ergonomics, and specifically on safe lifting.
Resumen de conclusiones en español:	Los trabajadores del noreste de EE.UU. constituyen una pequeña población dispersa de cuyos accidentes y enfermedades poco se conoce. En este estudio, se ha estimado que se produce una media de 1260 casos anuales con una incidencia de 30.27 por cada 10000 trabajadores-semana. Los accidentes más frecuentes consisten en sobre-esfuerzos/esguinces y la elevación de cargas. Se recomiendan programas de formación en ergonomía, especialmente sobre levantamiento de cargas de manera segura.

Annals of Agricultural and Environmental Medicine

Título del trabajo	
“Occupational exposure to zoonotic agents among agricultural workers in Lombardy Region, northern Italy” (Exposición laboral a agentes zoonóticos entre los trabajadores agrícolas en la región de Lombardía, al norte de Italia)	
Publicado en:	Annals of Agricultural and Environmental Medicine, 2013; 20(4):676-681.
Autores:	RaminTabibi, Rosana Baccalini, AlessandraBarassi, et al.
URL:	http://aaem.pl/abstracted.php?level=5&ICID=1081370
Resumen:	<p>Objectives: This study was conducted in Northern Italy with the aim of defining the risk of agricultural workers' contact with biological agents through the determination of serum antibodies against selected zoonotic agents. Immunity against tetanus was also investigated.</p> <p>Methods: Two groups of agricultural workers consisting of 153 animal breeders (exposed) and 46 non- breeders (controls) were included in the study. In a first group of 103 workers (89 exposed and 14 controls) the serum concentrations of antibodies against Hepatitis E Virus (HEV) were measured, whereas in the second group of 96 workers (64 exposed and 32 controls) the serum concentrations of antibodies against Leptospira spp., Coxiellaburnetii, Borreliaburgdorferi, Brucella spp. and Salmonella spp. were addressed. Immunization against tetanus was also studied in this group.</p> <p>Results: Animal breeders showed higher rates of IgG antibodies against Coxiellaburnetii (50% vs. 31.2%), and Leptospira spp. (59.4% vs. 43.7%). Results of logistic regression analysis revealed that breeder workers showed a tendency to have higher prevalence of positivity for antibodies to Leptospiraspp and Coxiellaburnetii than non-breeders (ORs ~ 3). Only one exposed subject showed antibodies against hepatitis E (none in controls), but when tested with another commercially available kit the percentage of anti HEV IgG positive subjects increased to 22.3% in the exposed, while none of the controls showed positive. None of the subjects showed antibodies against Salmonella spp. and Brucella spp. Italians and other European workers have better protection against tetanus (91%) compared to non-EU workers (81%).</p> <p>Conclusions: The higher frequency of the presence of serum antibodies to zoonotic agents (e.g. Leptospira spp. and Coxiellaburnetii) in animal breeders suggests that they are more exposed to biological agents than workers not involved in animal breeding activities. The risk of contact with HEV deserves further studies because the adoption of different assays can result in significantly different results. The promotion of immunization of agricultural workers might be a priority, in particular for migrants.</p>
Resumen de conclusiones en español:	<p>Este estudio se llevó a cabo en el norte de Italia con el objetivo de definir el riesgo de contacto de los trabajadores agrícolas con agentes biológicos mediante la detección de anticuerpos séricos contra los agentes zoonóticos. También se investigó la inmunidad contra el tétanos. La mayor frecuencia de presencia de anticuerpos séricos contra los agentes zoonóticos (como Leptospira spp. y Coxiellaburnetii) en los criadores de animales sugiere que están más expuestos a agentes biológicos que los trabajadores que no participan en las actividades de cría de animales. El riesgo de contacto con el virus de la Hepatitis E merece estudios adicionales debido a que diferentes ensayos puede dar lugar a resultados significativamente diferentes. La promoción de la inmunización de los trabajadores agrícolas podría ser una prioridad, en particular para los inmigrantes.</p>

Applied Ergonomics

Título del trabajo	
"Improving meat cutters' work: changes and effects following an intervention" (<i>Mejorando el trabajo de los cortadores de carne: cambios y efectos después de una intervención</i>)	
Publicado en:	Applied Ergonomics
Autores:	Vogel K., Karlton J., Eklund J, et al.
URL:	http://www.sciencedirect.com/science/article/pii/S0003687013000574
Resumen:	Meat cutters face higher risks of injury and musculoskeletal problems than most other occupational groups. The aims of this paper were to describe ergonomics changes implemented in three meat cutting plants and to evaluate effects related to ergonomics on the individual meat cutters and their work. Data was collected by interviews, observations, document studies and a questionnaire (n = 247), as a post intervention study. The changes implemented consisted of reducing knife work to a maximum of 6 h per day and introducing a job rotation scheme with work periods of equal length. Tasks other than traditional meat cutting were added. A competence development plan for each meat cutter and easy adjustment of workplace height were introduced. The questionnaire showed a reduction in perceived physical work load. In general, the changes were perceived positively. Figures from the company showed a positive trend for injuries and sick leave.
Resumen de conclusiones en español:	Los cortadores de carne tienen mayor riesgo de lesiones y problemas músculoesqueléticos que la mayoría de otros grupos ocupacionales. Los objetivos de este trabajo fueron describir los cambios ergonómicos aplicados en tres salas de despiece de carne y evaluar los efectos relacionados con la ergonomía de los cortadores de carne individuales y su trabajo. Los datos se recogieron mediante entrevistas, observaciones, estudios de documentos y un cuestionario, como estudio posterior a la intervención. Los cambios introducidos consistieron en la reducción del trabajo con cuchillo a un máximo de 6 h por día y la introducción de un esquema de rotación de puestos de trabajo con períodos de igual duración. Se agregaron tareas diferentes al corte de carne tradicional. Se introdujeron un plan de desarrollo de competencias para cada cortador de carne y un ajuste fácil de la altura del lugar de trabajo. El cuestionario mostró una reducción en la percepción de la carga física de trabajo. En general, los cambios fueron percibidos positivamente. Las cifras de la empresa mostraron una tendencia positiva para las lesiones y las bajas por enfermedad.

Agriculture and Human Values

Título del trabajo	
“Urban agriculture of the future: an overview of sustainability aspects of food production in and on buildings” (<i>Agricultura urbana del futuro: revisión sobre aspectos de sostenibilidad en la producción alimentaria dentro y sobre edificios</i>)	
Publicado en:	Agriculture and Human Values
Autores:	Kathrin Specht, Rosemarie Siebert, Ina Hartmann, et al.
URL:	http://link.springer.com/article/10.1007/s10460-013-9448-4
Resumen:	Innovative forms of green urban architecture aim to combine food, production, and design to produce food on a larger scale in and on buildings in urban areas. It includes rooftop gardens, rooftop greenhouses, indoor farms, and other building-related forms (defined as “ZFarming”). This study uses the framework of sustainability to understand the role of ZFarming in future urban food production and to review the major benefits and limitations. The results are based on an analysis of 96 documents published in accessible international resources. The analysis shows that ZFarming has multiple functions and produces a range of non-food and non-market goods that may have positive impacts on the urban setting. It promises environmental benefits resulting from the saving and recycling of resources and reduced food miles. Social advantages include improving community food security, the provision of educational facilities, linking consumers to food production, and serving as a design inspiration. In economic terms it provides potential public benefits and commodity outputs. However, managing ZFarming faces several challenges. For some applications, the required technologies are known but have not been used or combined in that way before; others will need entirely new materials or cultivation techniques. Further critical aspects are the problem of high investment costs, exclusionary effects, and a lack of acceptance. In conclusion, ZFarming is seen as an outside-the-box solution which has some potential in generating win-win scenarios in cities. Nevertheless, ZFarming practices are not in and of themselves sustainable and need to be managed properly.
Resumen de conclusiones en español:	Formas innovadoras de arquitectura urbana ecológica tienen como objetivo combinar los alimentos, la producción y el diseño para producir alimentos a una mayor escala y en los edificios en las zonas urbanas. Se incluyen jardines en los tejados, invernaderos en azoteas, granjas de interior y otras formas (“ZFarming”). Este estudio utiliza un enfoque en la sostenibilidad para entender el papel del ZFarming en la producción futura de alimentos en las ciudades, así como para revisar sus principales beneficios y limitaciones. En conclusión, ZFarming se puede ver como una solución lista para uso que tiene un cierto potencial en la generación de escenarios de beneficio para todos en las ciudades. Sin embargo, las prácticas ZFarming no son sostenibles en sí mismas y deben ser gestionados correctamente.

Australian Journal of Rural Health

Título del trabajo	
"Sex-specific correlates of adult physical activity in an Australian rural community" <i>(Correlaciones específicas de género de actividad física en adultos en una comunidad rural australiana)</i>	
Publicado en:	Australian Journal of Rural Health
Autores:	Suzanne Carroll, Jim Dollman, Mark Daniel
URL:	http://onlinelibrary.wiley.com/doi/10.1111/ajr.12081/abstract
Resumen:	<p>Objective: Rural Australians have a higher likelihood of chronic disease and lower levels of physical activity than urban Australians. Little is known of the factors associated with physical activity among rural-dwelling Australians. This study sought to determine the correlates of physical activity among men and women of the South Australian Riverland region.</p> <p>Design: Cross-sectional survey.</p> <p>Setting: Regional area.</p> <p>Participants: There are 299 randomly selected 18–65 year olds.</p> <p>Main outcome measures: Determinations of insufficient and sufficient physical activity levels based on public health recommendations.</p> <p>Results: Using logistic regression: in men, sufficient physical activity was associated with reporting perceived sufficient physical activity for health (odds ratio 3.194 [1.703–5.989]), and having friends who encouraged physical activity (3.641 [1.450–9.141]). Men who reported insufficient time (0.350 [0.151–0.812]) and getting enough physical activity at their job (0.374 [0.199–0.702]) were less likely to be sufficiently active. In women, sufficient physical activity was associated with not being employed (2.929 [1.063–8.066]), higher self-efficacy (2.939 [1.118–7.726]) and having a regular physical activity routine (3.404 [1.829–6.337]). Older age (0.960 [0.929–0.995]), poorer self-rated health (0.233 [0.060–0.900]) and weekend sitting time (0.823 [0.692–0.980]) were negatively associated with sufficient physical activity for women.</p> <p>Conclusions: Factors associated with physical activity in this rural adult population differed by sex. Sex-specific approaches to promote physical activity might have utility for this population. Strategies to enhance social connectedness among men and encourage physical activity outside of work can be warranted. Women can require programs to help them develop a regular physical activity routine and improve self-efficacy.</p>
Resumen de conclusiones en español:	<p>Los australianos rurales tienen una mayor probabilidad de enfermedades crónicas y niveles más bajos de actividad física que los australianos urbanos. Poco se sabe de los factores asociados con la actividad física entre los australianos que habitan zonas rurales. Este estudio trata de determinar la correlación de la actividad física entre los hombres y las mujeres de la región de Riverland del Sur de Australia. Se concluye que existen factores asociados con la actividad física en esta población adulta rural que difieren según el sexo. Por tanto, pueden ser útiles en esta población aplicar enfoques específicos para cada sexo para promover la actividad física. Se deben garantizar estrategias para mejorar la conexión social entre los hombres y fomentar la actividad física fuera del trabajo. Para las mujeres se pueden desarrollar programas que les ayuden a desarrollar una rutina regular de actividad física.</p>

Título del trabajo	
"Preparing rural general practitioners and health services for climate change and extreme weather" (<i>Preparación de los médicos de cabecera rurales y los servicios de salud para el cambio climático y condiciones climatológicas extremas</i>)	
Publicado en:	Australian Journal of Rural Health
Autores:	Rachael Purcell, Joe McGirr
URL:	http://onlinelibrary.wiley.com/doi/10.1111/ajr.12075/abstract
Resumen:	<p>Objective: To determine the knowledge and recommendations of rural general practitioners (GPs) in regard to climate change and the preparedness of rural health services for its health impacts.</p> <p>Design: A quantitative descriptive survey distributed in paper-based or electronic form.</p> <p>Setting: Rural Southwest of New South Wales.</p> <p>Participants: GPs and GP registrars working in Rural Remote Metropolitan Areas (RRMA) 3–7.</p> <p>Main outcome measures: Questionnaire responses analysed with descriptive statistics and inferential tests.</p> <p>Results: While the majority of respondents agreed with statements supporting climate science and the impact of climate change on health, between 24% and 34% of respondents were unsure or did not agree. Furthermore, between 33% and 44% of GP respondents working in RRMA 5–7 were unsure or did not agree that their health service had the capacity to provide an initial response to an extreme weather event ($P = 0.01$). Strengthening health service acute disaster capacity response was a preferred adaptation strategy for improving health service preparedness of 61% of participants. A greater proportion of GPs were supportive of their role as advocates on general health issues (80%) compared with extreme weather events (60%) or climate change and health (63.5%) ($P \leq 0.01$). For professional development and education, 71% preferred a locally based workshop or seminar.</p> <p>Conclusions: The study highlights the need to consider closely the views of GPs when preparing rural communities for the possible health effects of climate change. Findings indicate concern for health service preparedness, particularly in smaller rural communities. Further development of disaster response planning and communication is needed.</p>
Resumen de conclusiones en español:	El estudio pone de relieve la necesidad de considerar atentamente las opiniones de los médicos de cabecera al preparar a las comunidades rurales contra los posibles efectos para la salud del cambio climático. Los resultados indican la preocupación por la preparación de los servicios de salud especialmente en las comunidades rurales más pequeñas. Se necesita desarrollar más y mejor la planificación y la comunicación de la respuesta a desastres.

Industrial Health

Título del trabajo	
“The Prevalence of Musculoskeletal Disorder and Association with Productivity Loss: A Preliminary Study among Labour Intensive Manual Harvesting Activities in Oil Palm Plantation” (<i>La prevalencia del trastorno musculoesquelético y su asociación con la pérdida de productividad: un estudio preliminar entre actividades de recolección manuales intensivas en plantaciones de aceite de palma</i>)	
Publicado en:	Industrial Health 2014, 52, 78–85
Autores:	Yee Guan NG, Shamsul Bahri Mohd TAMRIN, Wai Mun YIK, et al.
URL:	http://www.jniosh.go.jp/en/indu_hel/pdf/IH_52_1_78.pdf
Resumen:	Production agriculture such as harvesting in oil palm plantation has been frequently associated with MSD and significant loss of productivities. This study tends to evaluate from the viewpoint of health, the association between self-reported prevalence of musculoskeletal disorders and productivities; the impact of musculoskeletal disorders on productivity. A cross-sectional study was conducted among 143 harvesters in oil palm plantation. A general questionnaire was used to collect socio-demographic background data while Nordic Musculoskeletal Questionnaire was used to determine the prevalence of MSD. Expressed in 4 different indicators; daily harvesting quantity, efficiency score, sick leave and presenteeism, the productivity data were analysed for association. This study reveals that oil palm harvesters suffering acute MSD (for the past week) were likely to be still present to work and produce half lesser than their healthy counterparts. Thus, further study with comprehensive surveillance strategy is essential in order to determinate the urgency or need of appropriate intervention.
Resumen de conclusiones en español:	La agricultura de producción como la cosecha en plantaciones de palma se ha asociado frecuentemente con TME y una significativa pérdida de productividad. Se ha llevado a cabo un estudio transversal entre 143 cosechadores en las plantaciones de palma. Se utilizó un cuestionario general para recoger datos sobre los antecedentes socio-demográficos, mientras que el cuestionario “Nordic Musculoskeletal” se utilizó para determinar la prevalencia de TME. Este estudio revela que los recolectores de palma que sufrieron TME agudo durante la última semana probablemente aún se presentan a trabajar y producen menos de la mitad que sus compañeros sanos.

Journal of Agromedicine

Título del trabajo	
“Perceptions of Tilt Angles of an Agricultural Tractor” (<i>Percepción de ángulos de inclinación de un tractor agrícola</i>)	
Publicado en:	Journal of Agromedicine
Autores:	Serap Görücü, Eugenio Cavallo, Dennis Murphy
URL:	http://www.tandfonline.com/doi/full/10.1080/1059924X.2013.855690
Resumen:	A tractor stability simulator has been developed to help study tractor operators' perceptions of angles when the simulator is tilted to the side. The simulator is a trailer-mounted tractor cab equipped with hydraulic lift that can tilt the tractor cabin up to 30 degrees. This paper summarizes data from 82 participants who sat in the simulator while it was tilted. Demographic variables, estimates of tilt angles, and measured tilt angles were collected. The effects of age, gender, tractor driving experience, and frequency of operation on the estimated and measured tilt angles were analyzed. The results showed that about 50% of the participants reported estimations of side tilt angles within ± 5 degrees of the actual angles, and nearly the same percentage overestimated the actual side tilt angles. Only a small percentage underestimated the angles. Older, more experienced, and male participants set higher limits on the actual angle at which they felt uncomfortable and would not drive.
Resumen de conclusiones en español:	Se ha desarrollado un simulador de estabilidad de tractor para ayudar a estudiar la percepción de los ángulos cuando el simulador se inclina lateralmente. El simulador es una cabina del tractor remolque montado equipado con un elevador hidráulico que puede inclinar la cabina del tractor hasta 30 grados. Los resultados mostraron que alrededor del 50% de los participantes informaron de las estimaciones de los ángulos de inclinación lateral con un error de ± 5 grados, y casi el mismo porcentaje sobreestimó los ángulos de inclinación lateral reales. Sólo un pequeño porcentaje subestimó los ángulos.

Título del trabajo	
“Exploring Cancer Development in Adulthood: Cholinesterase Depression and Genotoxic Effect From Chronic Exposure to Organophosphate Pesticides Among Rural Farm Children” (<i>Explorando el desarrollo del cáncer en la edad adulta: depresión de colinesterasa y efecto genotóxico de la exposición crónica a plaguicidas organofosforados entre niños de granjas rurales</i>)	
Publicado en:	Journal of Agromedicine
Autores:	Vivien How, Zailina Hashim, Patimah Ismail, et al.
URL:	http://www.tandfonline.com/doi/full/10.1080/1059924X.2013.866917
Resumen:	Children are the vulnerable group in the agricultural community due to their early exposure to pesticides through the dynamic interplay between genetic predisposition, environment, and host-related factors. This study aims to identify the possible association between the depression in blood cholinesterase level and genotoxic effect among farm children. The results of micronuclei assay and comet assay showed that the reduced blood cholinesterase level from organophosphate pesticide exposure is significantly associated with an increase in chromosome breakage and DNA strand breaks. These genotoxicity end points suggest that farm children's cells experience early DNA damage that may lead to uncontrolled cell proliferation during their adulthood. Thus, farm children who grow up near pesticide-treated farmland have a higher probability of developing cancer than children with minimal or zero exposure to pesticides.

Resumen de conclusiones en español:	Los niños son el grupo vulnerable en la comunidad agrícola debido a su temprana exposición a los pesticidas a través de la dinámica entre la predisposición genética, el medio ambiente y otros factores. Este estudio tiene como objetivo identificar la posible asociación entre la depresión en el nivel de la colinesterasa en la sangre y el efecto genotóxico de los niños campesinos. La conclusión es que los niños campesinos que crecen cerca de las tierras agrícolas tratadas con pesticidas tienen una mayor probabilidad de desarrollar cáncer que los niños con mínima o nula exposición a los pesticidas.
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Título del trabajo	
"Sun Safety Among Farmers and Farmworkers: A Review" (<i>Protección contra el sol entre los agricultores y trabajadores del campo: una revisión</i>)	
Publicado en:	Journal of Agromedicine
Autores:	Gregory D. Kearney, Xiaohui Xu, Jo Anne G. Balanay, et al.
URL:	http://www.tandfonline.com/doi/full/10.1080/1059924X.2013.855691
Resumen:	Farmers and farmworkers face increased risks of skin cancer from exposure to solar ultraviolet radiation (UVR) when working outdoors. The objective of this study was to evaluate the evidence from behavioral and intervention studies from the peer-reviewed studies related to sun safety among farmers and farmworkers and identify any gaps in the literature. A comprehensive review was conducted between 1990 and 2013; 22 studies were identified related to behavior and health interventions of sun safety among these targeted groups. The inconsistency of data collection methods makes it difficult to estimate with accuracy any overall meaningful results of behavior. However, from the studies reviewed, farmers and farmworkers most frequently reported wearing some type of hat (23.6%–100%) as a primary method of protection from the sun when working outdoors. Female farmers were more likely than male farmers to use sunscreen and engage in indoor tanning behavior. All sun safety educational interventions studies reviewed reported positive increases in behavioral change. To a large degree, adequate sun protection is lacking and varies geographically among farmers. Although targeted education is key to making improvements on sun protection behavior, aggressive attempts have to be made. Studies related to farmworkers, sun safety behavior, and skin cancer are scarce and more research is needed in this area.
Resumen de conclusiones en español:	Los agricultores y los trabajadores agrícolas se enfrentan a un mayor riesgo de cáncer de piel por su exposición a la radiación solar ultravioleta (UV) al trabajar al aire libre. En gran medida, la protección solar adecuada es escasa y varía geográficamente entre los agricultores. Aunque la educación específica es clave para hacer mejoras en el comportamiento de la protección solar, intentos agresivos están aún por hacerse. Los estudios relacionados con los trabajadores agrícolas, los comportamientos de protección solar y cáncer de piel son escasos y se necesita más investigación en esta área.

Journal of Environmental Science and Health, Part B

Título del trabajo	
“Photocatalytic degradation of agricultural antibiotics using a UV-LED light source” (Degradación fotocatalítica de antibióticos en agricultura usando una fuente luz LED UV)	
Publicado en:	Journal of Environmental Science and Health, Part B
Autores:	Aramice Y.S. Malkhasiana, Maryam Izadifardb, Gopal Acharic, et al.
URL:	http://www.tandfonline.com/doi/full/10.1080/03601234.2013.836871
Resumen:	With a view to developing a UV-LED photocatalytic reactor for small and remote water systems, the degradation of three representative agriculturally produced contaminants, two antibiotics and an endocrine disruptor hormone, was evaluated in a bench 365 nm LED photoreactor using a slurry of the well-known Degussa P25® (TiO2) as photocatalyst. Use of an additional electron capture additives O2 and H2O2 was also assessed. Loss of the parent organic compounds was tracked by HPLC or UV absorbance and mineralization, where feasible, was studied with TOC analysis with conventional instrumentation. In all cases, degradation is significant with moderate light dose. Lab data suggest log reduction with light delivery less than 2.2 kWhr per cubic meter light delivery.
Resumen de conclusiones en español:	Con el fin de desarrollar un reactor fotocatalítico LED UV para sistemas de agua pequeños y remotos, se ha evaluado la degradación de tres representante de los contaminantes de carácter agrícola, dos antibióticos y una hormona disruptora del sistema endocrino, usando un fotorreactor LED de 365 nm y una suspensión de Degussa P25 (TiO2) como fotocatalizador. En todos los casos, la degradación es significativa con dosis de luz moderada. Los datos de laboratorio sugieren una reducción logarítmica con entregas de luz inferiores a 2,2 kWh por metro cúbico.

Título del trabajo	
“Effects of ozone fumigation treatment on the removal of residual difenoconazole from strawberries and on their quality” (Efectos del tratamiento de fumigación con ozono sobre la eliminación del difenoconazol residual en fresas y sobre su calidad)	
Publicado en:	Journal of Environmental Science and Health, Part B
Autores:	Fernanda F. Heleno, Maria Eliana L. R. de Queiroza, Antônio Augusto Nevesa, et al.
URL:	http://www.tandfonline.com/doi/full/10.1080/03601234.2014.846736
Resumen:	The effect of ozone fumigation on the reduction of difenoconazole residue on strawberries was studied. Strawberries were immersed in 1.0 L of aqueous solution containing 400 µL of the commercial product (250 g L ⁻¹ of difenoconazole) for 1 min. Then, they were dried and exposed to ozone gas (O ₃) at concentrations of 0.3, 0.6 and 0.8 mg L ⁻¹ for 1 h. The ozone fumigation treatments reduced the difenoconazole residue on strawberries to concentrations below 0.5 mg kg ⁻¹ , which corresponds to a 95% reduction. The strawberries treated with ozone and the control group, which was not treated with ozone, were stored at 4°C for 10 days. Some characteristics of the fruit were monitored throughout this period. Among these, pH, weight loss and total color difference did not change significantly (P > 0.05). The fumigation with ozone significantly affected the soluble solids, titratable acidity and ascorbic acid content (vitamin C) of the strawberries preventing a sharp reduction of these parameters during storage.
Resumen de conclusiones en español:	Se estudió el efecto de la fumigación de ozono sobre la reducción de residuos de difenoconazol en las fresas. Las fresas se sumergieron en 1,0 L de solución acuosa con 400 µL de producto comercial (250 g L ⁻¹ de difenoconazol) durante 1 min. Entonces, se secaron y se expusieron al gas ozono (O ₃) a concentraciones de 0,3, 0,6 y 0,8 mg L ⁻¹ durante 1 h. La fumigación con ozono afectó significativamente los sólidos solubles, la acidez valorable y al contenido de ácido ascórbico (vitamina C) de las fresas que impiden una fuerte reducción de dichos parámetros durante su almacenamiento.

Título del trabajo	
"Nature of the field-to-field distribution of pesticide residues" (<i>Naturaleza de la distribución campo a campo de los residuos de plaguicidas</i>)	
Publicado en:	Journal of Environmental Science and Health, Part B
Autores:	Árpád Ambrusa, Zsuzsanna Horvátha, Zsuzsa Farkasa, et al.
URL:	http://www.tandfonline.com/doi/full/10.1080/03601234.2014.868272
Resumen:	The supervised trial datasets (1950), consisting of a minimum of five residue values and selected by the experts of FAO/WHO Joint Meeting on Pesticide Residues for recommending maximum residue levels between 1997 and 2011, were evaluated to obtain information on the typical spread of residue values in individual datasets. The typical relative standard deviation, CV, of field-to-field variation of pesticide residues was about 80%. The spread of residues in datasets is independent from the chemical structure of pesticides, residue level, pre-harvest interval and number of values in the datasets. The CV ranges within the Codex commodity groups and between groups overlapped and their difference were not statistically significant. The number of residues below the limit of quantification (LOQ) affects the CV at various extents depending on the ratio of LOQ/R mean. The combined uncertainty of the highest residue in a dataset significantly affects the CV of the dataset. The lowest and intermediate ones have less influence. The residues in different fields receiving the same treatment vary within large range: 55%, 72%, 78%, 86% and 89% of the 25,766 residues values were, respectively, within 3, 4, 5, 6 and 7 times the median value of the corresponding dataset.
Resumen de conclusiones en español:	Las bases de datos de ensayos supervisados (1950), que consta de un mínimo de cinco valores de residuos y seleccionados por los expertos de la Reunión Conjunta FAO / OMS sobre Residuos de Plaguicidas para la recomendación de límites máximos de residuos entre 1997 y 2011, han sido evaluadas para obtener información sobre la propagación típica de valores de los residuos en las bases de datos individuales. La típica desviación estándar relativa de la variación de campo a campo de los residuos de plaguicidas fue del 80%. La propagación de los residuos en las bases de datos es independiente de la estructura química de los plaguicidas, nivel de residuos, plazos de seguridad y el número de valores en cada conjunto de datos.

Rural and Remote Health Journal

Título del trabajo	
“Suicide and accidental death in Australia’s rural farming communities: a review of the literature” (<i>El suicidio y la muerte accidental en las comunidades agrícolas rurales de Australia: una revisión de la literatura</i>)	
Publicado en:	Rural and Remote Health Journal
Autores:	Kennedy AJ, Maple MJ, McKay K, Brumby SA
URL:	http://www.rrh.org.au/articles/showarticlenew.asp?ArticleID=2517
Resumen:	<p>Introduction: Australia’s farmers constitute a heterogeneous group within the rural population. This literature review incorporates four broad areas: an understanding of farming communities, families and individuals and the contexts in which they live and work; an exploration of the challenges to morbidity and mortality that these communities face; a description of the patterns of suicide and accidental death in farming communities; and an outline of what is missing from the current body of research. Recommendations will be made on how these gaps may be addressed.</p> <p>Methods: In developing this comprehensive literature review, a snowballing and saturation approach was adopted. Initial search terms included suicid*, farm*, accident*, fatal*, death, sudden death, rural OR remote, Australia and NOT Australia. Databases searched included SCOPUS, PubMed, Proquest and SafetyLit; research from 1995 onwards was examined for relevance. Earlier seminal texts were also included. Reference lists of retrieved articles were searched and citations explored for further relevant research material. The primary focus was on Australian peer-reviewed research with supplementary grey literature. International material was used as examples.</p> <p>Results: The literature variously describes farmers as members of both rural farming communities and farming families, and as individuals within an occupational classification. Within each of these classifications, there is evidence of the cumulative impact of a multiplicity of social, geographical and psychological factors relating to work, living and social arrangements that impact the health and wellbeing of Australia’s farmers and their families, particularly accidental death and suicide. Research consistently demonstrates traumatic death to be at a greater rate than in the general Australian population, with reductions found more recently in some modes of farming-related accidental death. Patterns of accidental death and suicide are commonly linked to the changing shape of contemporary farming. Suicide rates are also frequently described in relation to lethality and accessibility of means. The limitations of suicide and accidental death data are considerable.</p> <p>Conclusion: While there is consistent reporting of heightened levels of risk for suicide and accidental death in farming communities the limitations of the research remain significant. There are substantial gaps in current knowledge, and the body of research to date lacks clarity, inclusiveness and contextual specificity. Absent from the literature is any investigation of the impact of these frequently preventable deaths on the families and communities in which they occur. Recommendations for future research are suggested.</p>
Resumen de conclusiones en español:	Si bien existen informes consistentes sobre los elevados riesgos de suicidio y muerte accidental en las comunidades agrícolas, las limitaciones en su investigación siguen siendo significativas. Hay importantes lagunas en los conocimientos actuales y el cuerpo de la investigación hasta la fecha carece de claridad, integración y especificidad de cada contexto. No existe en la literatura ninguna investigación sobre el impacto de estas muertes frecuentemente evitables en las familias y las comunidades en las que se producen. Se sugieren recomendaciones para la investigación futura.

Travail et sécurité

Título del trabajo	
“Les TMS dans l'agroalimentaire” (<i>Los trastornos musculoesqueléticos en la industria agroalimentaria</i>)	
Publicado en:	Travail et sécurité
Autores:	A. Bondéelle, et al.
URL:	http://www.inrs.fr/accueil/produits/mediatheque/doc/publications.html?refINRS=TS743page13
Resumen de conclusiones en español:	<p>El sector agroalimentario en Francia es uno de los más expuestos a riesgos de lumbalgias y de alteraciones musculoesqueléticas. Muchas empresas han reflexionado sobre los puestos, las tareas y la organización del trabajo. El 85 % de las enfermedades profesionales reconocidas en 2010 son trastornos musculoesqueléticos y han originado 9,7 millones de jornadas perdidas y cada trastorno musculoesquelético cuesta una media de 21.512 euros. El 62 % de los trabajadores europeos efectuarán movimientos repetitivos de manos y brazos, durante al menos un cuarto de su tiempo de trabajo. Esta cifra, que se plasma en la 5ª Encuesta europea de condiciones de trabajo, demuestra que los trabajadores en la Unión Europea siguen estando particularmente expuestos a los principales factores de riesgo de trastornos musculoesqueléticos. Este dossier analiza este tema desde diferentes tipos de industria dentro del sector agroalimentario.</p>

Más información

Listado de publicaciones científicas relacionadas. El laboratorio-observatorio LASA mantiene una completa colección de referencias a publicaciones relacionadas directamente con la seguridad en el trabajo, haciendo especial hincapié en las que habitualmente tratan el sector agrícola. Los listados están [accesibles online](#) en nuestra web.

Eventos y congresos. Puede consultar un listado actualizado de los últimos congresos relacionados con la salud ocupacional en el sector agrícola en [nuestra página web](#).