systems and several awareness-raising materials. Reporting on pesticide incidents to the Rotterdam Convention has the advantage of making those incidents known to the world by sharing information with other countries which experience the same problems with specific pesticide formulations and allowing them to see if risk management measures are properly taken into account at national level.

1725d ACTIVATING THE PRIVATE SECTOR IN SAFE WORK FOR YOUTH AGES 15–17

Vicki Walker. *Prime International*

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Since 2002, global trends in child labour reveal a persistent prevalence of hazardous work by youth 15 to 17 due largely to working conditions that violate legal standards. Rather than address occupational safety and health (OSH) conditions and remove hazards in order to protect youth, companies and employers tend to mitigate risk in their supply chains, by 'over-correcting' and not allowing youth under 18 to work although those over 15 normally have a right to work in the context of country laws and core labour standards based on International Labour Organisation (ILO) Conventions 138 and 182.

This paper demonstrates how years of data highlighting child labour and hazardous conditions of work have resulted in preventing and scaring away employers from hiring or purchasing goods produced from any youth under 18. Through qualitative and quantitative research, we have explored options for addressing the risks of child labour and gaps in younger youth employment. Our focus was to determine how employers and farmers react to youth of legal working age. We researched reports on the topic, and met with over 100 employers, farmers and unionists. Nearly 90% of the situations and inquiries as part of the survey maintained that they do not allow anyone under 18 to work. Over 50% are aware that youth under 18 *may not work in hazardous conditions* however, they are not willing nor have the resources to change the conditions to enable youth to work. This pushes the youth to work illegally somewhere else in hazardous conditions.

We discuss business-led standards and efforts to transition youth from exploitive, hazardous, or harmful labour into safe and prosperous production as key to addressing youth unemployment, low-end jobs, and hazardous child labour.

559 USE OF A RISK ASSESSMENT TO PROMOTE FARMER'S HEALTH

¹J McNamara*, ²P Griffin, ³J Phelan, ³J Kinsella. ¹*Teagasc- Agriculture and Food Development Authority, Kildalton, Co. Kilkenny, Ireland*; ²*Health and Safety Authority, Dublin 1, Ireland*; ³*School of Agriculture, University College Dublin, Ireland*

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Introduction Research in Ireland has indicated that farmers as an occupational group have inferior health outcomes. To assist with addressing this issue, health issues were included in a pilot Risk Assessment (RA) and associated half-day training

course being evaluated for the agriculture sector under OSH legislation. The health RA template required a farmer to specify missing health controls. Farmers could complete the RA document with or without half-day training. At training guidance on health issues was provided using a DVD presented by a medical doctor. This paper provides evaluation on the health related controls specified in the RA for action and opinions of training provided.

Methods RA documents were obtained from farmers who completed it with (n=335) and without (n=140) training and health controls specified for action were tabulated. Opinions were obtained from both farmers (n=291) and trainers (n=51) on the health element of RA training delivered using a Likert-type question with a 5 point scale, with 5 the most positive response. Trainers had the option of additionally providing a comment.

Results A total of 0.32 and 0.14 controls per RA document were specified when completed with or without training. Controls were in the following categories: preventing back injury (2.4%); respiratory protection (9.5%), preventing infection (17.6%), noise exposure control (9.5%), stress/personal health management (56.4%) (obtaining a 1 st aid box made-up 80% of this category) and additional controls (4.8%). The opinion of health messages delivered at training had a mean score of 3.9 among both farmer and trainer respondents. Additionally 25.5% of trainers commented positively on the benefit of health training.

Conclusion The study indicates low uptake of health practices by farmers following RA completion. Training increased the level of specification of controls. Feedback from both farmers and trainers related to the health messages delivered at training was positive.

570 RISK FACTORS OF PESTICIDE POISONING AND CHOLINESTERASE INHIBITION WITH COTTON WORKERS FROM NORTH OF BENIN'REPUBLIC (BANIKOARA AND KANDI TOWNSHIPS)

¹Hinson Antoine Vikkey*, ¹Dossou Fidel, ²Yehouenou Pazou Elisabeth, ³Gounongbé Fabien, ⁴Aguemon Badirou, ¹Hountikpo Hilaire, ¹Lawin Hervé, ¹Fayomi Benjamin. ¹*Unity of Teaching and Research in Occupational Health and Environment, FSS/UAC, Abomey-Calavi (Benin)*; ²*Laboratoire de Recherche en Biologie Appliquée (LARBA), EPAC/UAC, Abomey-Calavi (Benin)*; ³*Département de Médecine et Spécialités Médicales, FM/Université de Parakou, Parakou (Benin)*; ⁴*Département de Santé Publique, unité de biostatistique FSS/UAC Abomey-Calavi (Benin)*

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Introduction The use of pesticides saved millions of lives by killing the insects which are known to be potential vectors of disease, however, those pesticides have harmful effects on human health and on the environment public health and environmental problems caused using pesticides outweigh the benefits. The objective of this study is to assess the level of poisoning with the AChE test due to cotton producer's pesticide exposure in the biggest cotton production townships of northern Benin (Banikoara and Kandi), and to identifying the risk factors.

Method Through a cross sectional study, we recruited 190 pesticides sprayers for at least 5 years. They were submitted to a questionnaire and to acetylcholinesterase (AChE) test using the Test Mate model 400 devices (EQM Research Inc)

with main component of the device: photometric sensor and principle based on the works by Ellman. By a non-probabilistic sampling, we recruited 190 farmers from the two townships fulfilling all the inclusion criteria and available to participate to all stages of the study.

Results The studied population is essentially young: 83.16% were under 45 years old, with 75% illiterates. 70.3% of the farmers have more than 10 years of spraying experience. We noted that 2.06% of the farmers still used domestic containers to prepare the pesticides. As precautions to prevent poisoning after spraying, 10.31% of the surveyed farmers drink milk. There was a significant AChE decrease between pre-exposure (AChE 3.08 ± 2.3 IU/ml) and post-exposure (AChE 2.65 ± 0.52 IU/ml); $p=0.009$. 73.1% of the farmers were concerned by that inhibition. Those who could read the pictograms faced less inhibition of AChE ($p<0.05$). The age variables, level of education and experience of pulverisation do not have any influence on AChE inhibition.

Conclusion AChE monitoring is needed for the surveillance of farmers.

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RISK PERCEPTION AMONG MIGRANT AGRICULTURAL WORKERS

Antonio Valenti*, Benedetta Persechino, Bruno Maria Rondinone, Grazia Fortuna, Valeria Bocconi, Sergio Iavicolo. *Inail, Monteporzio Catone, Italy*

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Introduction Over the past few years, there has been a progressive increase in foreign labour force in agricultural sector in Italy, which has reached over 1 15 000 units (14.2% of total employment in agriculture), of which 36% coming from EU countries, while 64% from non-EU countries.

In case of migrant workers factors such as lack of knowledge of occupational safety and health (OSH) legislation, language knowledge difficulties, young age, lack of information and training and, consequently, reduced perception of work-related risks, could further increase the risk for health due to both specific risks of the activities carried out and the peculiar characteristics of the work organisation.

The present study aims at detecting the perception of OSH risk in agriculture in migrant workers as a contribution to the identification of training needs.

Methods With the support of cultural mediators, an *ad hoc* questionnaire was submitted to 402 migrant workers employed in agriculture in Lombardy Region.

Results The interviewees have different nationalities (60% Indian, 15% Moroccan, 15% Bengali), with mostly seasonal employment contracts (96%); the age most represented is 25–34 years (41%).

Over 56% generally evaluate their health 'very good'. About 73% of respondents believe that there are no risks for OSH and 80% of them believe that are not personally exposed. Over 62% is very/completely agree that the lack of knowledge and awareness of workers' dangers in the workplace contributes to an injury.

Conclusions Preliminary results of the study requires a secondary analysis in order to contribute to the implementation and optimisation of preventative tools in consideration of the peculiarities that characterise the agricultural sector.

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EVIDENCE-BASED SOCIAL LEARNING FOR SAFETY AND HEALTH PROMOTION AMONG IRISH DAIRY FARMERS

^{1,2}T O'Connor*, ²D Meredith, ¹J Kinsella, ³J McNamara. ¹*School of Agriculture and Food Science, University College Dublin, Dublin, Ireland;* ²*Rural Economy and Development Centre, Teagasc, Dublin, Ireland;* ³*Kildalton College, Teagasc, Piltown, Ireland*

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Introduction Farming is an occupation that incurs high rates of occupational injuries and illness, including fatalities. Internationally, legislative approaches to improve agricultural occupational safety and health (OSH) practices have been inconsistent in achieving those objectives. Many alternative initiatives to influence agricultural OSH practices have been developed, frequently emphasising information provision. In Ireland, evaluation of information provision approaches, such as classroom-based learning, has found that this is ineffective for improving agricultural OSH practices. However, peer-based learning using communities of practice (COPs), such as Teagasc dairy farmer discussion groups, presents a promising context for agricultural OSH promotion in Ireland.

Research has established the efficacy of farmer discussion groups for promoting adoption of novel technologies and production practices. Little research has been undertaken to assess whether they are effective for promoting agricultural OSH practices. This paper describes the extent to which Teagasc dairy discussion groups engage with agricultural OSH, and identifies the characteristics associated with agricultural OSH engagement. The results are evaluated with respect to the existing literature regarding effective social learning for farming and OSH promotion, to assess the suitability of these COPs for agricultural OSH promotion.

Methods Information about discussion group characteristics and engagement with OSH topics was collected using a survey of Teagasc dairy discussion group members, and a survey of Teagasc dairy discussion group facilitators. The statistical software R was used to assess variation in discussion group engagement with OSH, and the group characteristics statistically associated with that variation.

Result Analysis of the results is ongoing and will be completed in September 2017.

Discussion The findings of this study, including the evaluation framework developed from literature review, can contribute to effective agricultural OSH promotion in Ireland, and internationally. This is especially true for other countries with existing farmer COPs, such as farmer discussion groups in New Zealand and Wales.

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KNOWLEDGE, ATTITUDES, AND PRACTICES OF THE USER GARDENERS OF PESTICIDES IN BURKINA FASO

¹AV Hinson, ²MS Lompo, ³B Aguemou, ¹H Lawin, ¹P Ayelo, ¹B Fayomi. ¹*Unity of Teaching and Research in Occupational Health, University of Abomey-Calavi (Benin);* ²*Unity of Training and Research in Health Science, Public Health department, University of Ouagadougou (Burkina Faso);* ³*Département de Santé Publique, unité de biostatistique Faculté des Sciences de la Santé de Cotonou (Université d'Abomey-Calavi Bénin)*

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Introduction Pesticides are very useful in the field of gardening for the fight against pests, which exposes gardeners to the risks associated with their use. The aim of our work was to study the