DIRERAF

Development Of Public Health Indicators For Reporting Environmental/Occupational Risks Related To Agriculture and Fishery

A presentation on the progress of the project

Summary of the project

- Develop a tool for reporting risks and assessing the impact of policies and practices with regards to occupational and environmental health risks for the agricultural and fishery sector in the E.U.

- Make this harmonised tool available for use in the E.U. countries

Specific objectives of the project

- To identify and review existing policies and practices regarding data collection for occupational and environmental health risks at the agriculture and fishery sectors.
- To identify and categorize production specific risks for different types of production in the agricultural and fishery sectors
- To develop a minimal set of public health risk indicators with regards to occupational and environmental risk and rural health
- To break down the above mentioned indicators by socioeconomic and demographic criteria.
- To apply indicatively some indicators and collect data on a pilot base so as to test their feasibility and adaptability.
- To evaluate the collected data and assess the results of the evaluation.
- To recommend the set of indicators as a policy tool at the national and European level.

Quick tour: summary of methodology

- So what's novel => the development of indicators will take into consideration :
  - the existing policies and practices identified
  - the sources of data and data collection authorities
  - the minimal dataset
  - the health risks by production type identified
- Will involve:
  - The project partners
  - The panel of experts
  - Any stakeholder interested/involved

Developments since our last meeting

- Focus on making known the project, strengthening the network of experts and national officials involved in the field of health and safety in agriculture and fishery
- Nearing completion of mapping Europe with regards to policies and practices for sources and data collection
- Enhancement of the database of health risks and accidents by production type in agriculture

28th International Congress on Occupational Health – 11-16 June 2006

- A great chance to strengthen the network of experts and officials who are involved in health and safety in agriculture and fishery
- Dissemination of the project aim and early results

16th International Congress of Agricultural Medicine and Rural Health – 18-21 June, Lodi, Italy

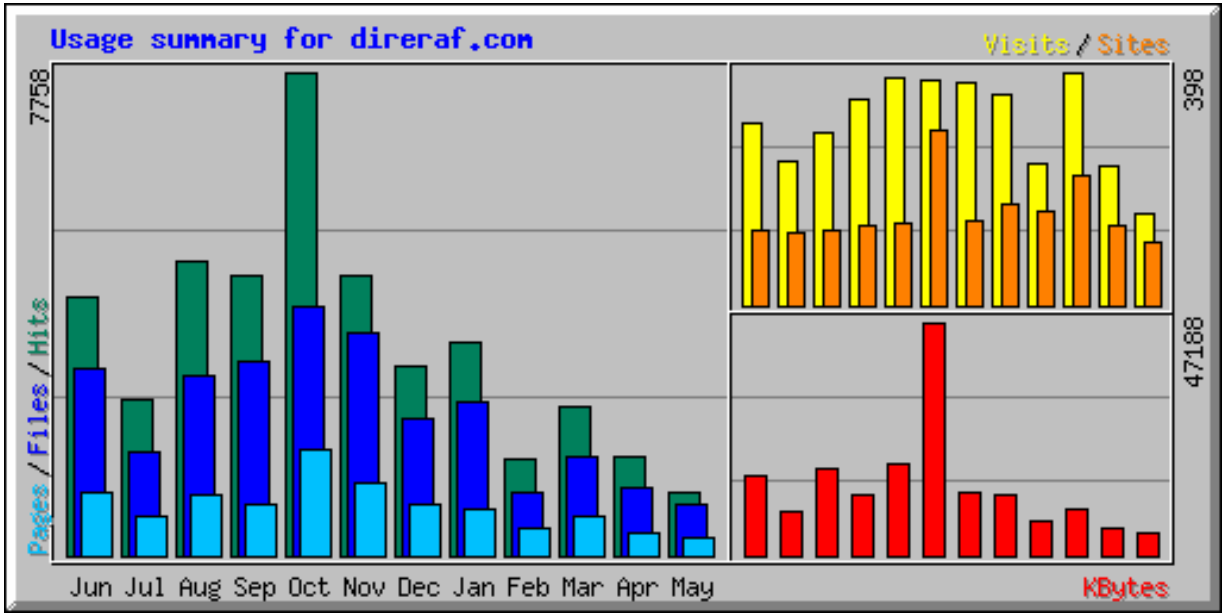
- Presenting health risks pertaining to South Europe agricultural practices and production types
- Description of the methodology to propose health indicators

14th European Conference on Public Health – 16-18 November 2006

- Presenting health risks pertaining to North Europe agricultural practices and production types
- Description of the methodology to propose health indicators

Other dissemination activities

- Newsletter [sent to over 500 individuals]
- Website [3743 visits – 9579 pages viewed – 27382 files served over the last 12 months
- Personal communication [over 100 direct contacts with local and national officials or stakeholders involved in the fields of health and safety, agriculture and fishery



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Identification and Review of existing policies and practices

- The first meeting of partners [May 2005] produced a set of questions that explore the aspects of existing policies and practices in agriculture and fishery as far as data collection and national policies are concerned – also planned ahead for the shaping of a panel of experts in the field

Questionnaire for data sources and survey of available data

- Number of persons employed in agriculture and fishery
- National data sources on Occupational Hygiene, Health and Safety and Environmental Health regarding Agriculture and Fishery
- Employment of younger persons (< 14 years)
- Employment of elder persons (> 68 years)
- Employment of immigrants
- Availability of indicators for morbidity and mortality
- Availability of data based on specific health indicators for persons employed in agriculture and fishery

Questionnaire for data sources and survey of available data

- Availability of data referring to occupational diseases regarding the specific sectors [A/F]
- National health programs on health education, health promotion specifically targeting those employed in agriculture and fishery
- Availability of data on the annual use of pesticides by specific produce category
- Suggestion of appropriate indicators that may be useful in measuring environmental/occupational risks, related to agriculture and fishery.

Progress of this task

- Collaboration with International Centre for Pesticides and Health Risk Prevention (ICPS) and with the contribution of the other project partners – recent meeting 5/5/2006
- Complicated and vast task in a field where little is known and little is collected
- A versatile methodology which relies on multiple channels of communication and data retrieval Shaping a European-wide panel of experts

Progress of this task

- Currently, data have been collected for most of the 25 EU Member countries, plus one candidate country
- The task is expected to end by late June 2006, when all member countries will have been investigated and the panel of experts will have been formed
- Evaluation of the results for the quest for the minimal dataset has already begun (ICPS)

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Health risks in agriculture and fishery

- Identifying risks: based on published literature and other relevant information from government reports, on-line sources and other appropriate sources (eg National/International Occupational Burden of Diseases reports – Risk profiles in Agriculture)
- No new investigations are undertaken to obtain information on exposure or risk.
- Novelty: exploration by production techniques, type of production, type of employment

Health risks in agriculture and fishery

- Environmental factors are included where relevant to work activities
- Appraisal and summarization of the library
- Tabulation: production type – work groups - estimates of relative risk, odds ratio, standardised incidence ratio or standardised mortality ratio – study origin – year
- Comprehensive reviews of selected production types

Production types reviewed

- Tobacco, Olive, Grapes, Citrus, Greenhouse vegetables, Corn, Cereals
- Data are scarce when searching for health risks by specific production type

Example: Musculoskeletal disorders / injuries and tobacco farming

authors	year	study type	size (n)	Period	Results
Browning SR et al	2003	Prospective study	999 children <18 years	1-year follow up	tobacco and cattle: 2.8 / 100 children injured (95% CI 1.7-3.8 9.2 / 100 children injured aged 16-18
Trape-Cardoso M et al	2003	retrospective chart review	331 shade tobacco immigrant workers 41 work related reported cases		39% of cases reported as musculoskeletal including sprains/strains, DeQuervain's tenosynovitis and muscle spasm
Struttmann TW et al	2002	hospital surveillance system	2892 total agricultural injuries 687 tobacco-farming related injuries	8-year follow up	Injuries incurred while working in burley tobacco production are most often caused by falls, cutting and piercing instruments, and overexertion. The majority of injuries are minor, but some exceed thousands of dollars in medical charges.
Pugh KJ et al	2000	trauma registry based survey	surgery department	16-month period	23 of 24 farm related injuries in tobacco farming. 17/23 falls, 18/23 skeletal injury
Browning SR et al	1998	Prospective study	998 farmers >55 years	1-year follow up	beef: OR=1.80 (CI 0.98-3.28) beef and tobacco: OR=2.10 (CI 1.03-4.29) tobacco: OR=0.83 (CI 0.29-2.40)
Schulman MD et al	1997	survey data	random sample of North Carolina teenages (aged 14-17) N=141		Exposure to tractors, large animals, all-terrain vehicles, farm trucks, and rotary mowers, and more than one-third reported exposure to pesticides and tobacco harvesters. Common reported injuries include insect stings, cuts, burns, and falls

Comprehensive reviews

- Occupational and environmental risks in tobacco farming in the European Union

Second meeting of partners

- Will take place in Milan, Italy – 17th June, 2006
- Partners will discuss the findings of the data collection on policies-practices and the results of the literature review of health risks and accidents in agriculture
- A first pool of indicators will be discussed based on the early findings

What's next?

- 2nd meeting of partners
- Enhancing the database of health risks and accidents
- Focusing on developing indicators
- Raising momentum on the project
- Collaboration with International organizations

Conclusion

- We are a few steps away from our core task of developing indicators for health and safety in agriculture and fishery
- We aim to propose a small set of functional and feasible indicators

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