AGRICOH, A NEWYLY FORMED CONSORTIUM OF AGRICULTURAL COHORTS

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Background and Aims: Chronic exposure to pesticides has endocrine, immunologic and neurologic disrupting properties and other toxic effects believed to be associated with certain cancers, unfavorable reproductive outcomes, neurologic disorders and other health outcomes. Farming and other agricultural jobs are among the occupations with the highest exposures to pesticides. AGRICOH is a consortium of agricultural cohort studies that offers the opportunity to investigate the role of pesticides, and other exposures, in the etiology of several health outcomes. This poster presentation provides a description of AGRICOH to disseminate its formation and future research plans.

Methods: Characteristics of the cohorts integrating AGRICOH, data harmonization plans and research concepts to be studied will be illustrated in the poster presentation including the construction of pesticide crop exposure matrices.

Results: AGRICOH is a consortium of 22 agricultural cohort studies initiated by the US National Cancer Institute (NCI) and coordinated by the International Agency for Research on Cancer (IARC) since October 2010. The consortium includes cohorts from 9 countries: South Africa (1), Canada (3), Costa Rica (2), USA (6), Korea (1), New Zealand (2), Denmark (1), France (3) and Norway (3). AGRICOH aspires to promote and sustain collaboration and pooling of data to investigate the association between a wide range of agricultural exposures and a wide range of health outcomes, with a particular focus on associations that cannot easily be addressed in individual studies because of rare exposures (e.g. use of infrequently applied pesticides) or relatively rare outcomes (e.g. certain types of cancer, neurologic and auto-immune diseases).

Conclusions: AGRICOH represents a great resource for studying cancer, respiratory, neurologic, and auto-immune diseases as well as reproductive and allergic disorders, injuries and overall mortality in association with a wide array of exposures, prominent among these the application of pesticides.