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## Cancer Control in Rural Farm Populations

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L. Barbara Conally, MS, and Paul A. Schulte, PhD  
Guest Editors

In 1989, Congress mandated that the National Institute for Occupational Safety and Health (NIOSH) develop an agricultural health initiative that would include goals similar to the *Healthy People 2000 Initiative* led by the National Cancer Institute (NCI). The agricultural health initiative was to serve the overall goal of reducing disease morbidity and mortality in the United States by the year 2000. Specifically, the NIOSH agricultural health initiative would focus on improving the occupational health and safety of farm families and farmworkers. Drs. Paul A. Schulte, Lawrence J. Fine, and colleagues took the lead in the conceptualization and the development of the initiative. Today the *Cancer Control Demonstration Projects for Farming Populations* have been in operation for nearly six years.

One facet of this initiative, according to the congressional mandate, is the development of cancer screening programs targeting farmers in the upper midwest. This mandate was, in part, predicated on the fact that although, overall, farmers experience lower cancer rates than the U.S. population, they are nevertheless at increased risk for certain site-specific cancers, such as brain, stomach, lymphatic and hematopoietic, lip, prostate, and skin cancer. In addition, compared to urban populations, rural cancer patients are more likely to be diagnosed at later stages of disease; are more likely to not be assigned a specific degree of severity, called staging, at diagnosis; and are at a more advanced stage of illness when referred to home health care agencies. In an effort to more fully address the health needs of

farmers and their families, NIOSH developed the *Cancer Control Demonstration Projects for Farming Populations*.

Since 1990, eight U.S. institutions have been awarded funds through cooperative agreements with NIOSH to conduct the cancer control demonstration projects. These projects will continue through 1997. The evaluation of the effectiveness of the demonstration projects will focus on intermediate outcomes that ultimately may lead to reductions in the levels of cancer morbidity and mortality among farmers, farmworkers, and their families.

Although the congressional mandate for the projects was initially focused on providing cancer screening for farmers, NIOSH researchers decided that a broader view should be adopted. Screening should be seen as part of a continuum of cancer control services that includes the provision of information on risk factors, access and use of early detection for symptomatic patients and screening for asymptomatic individuals, receipt of timely treatment, and effective rehabilitation and follow up. Consequently, a broad approach was adopted in developing the program to include the entire range of cancer control methods for primary (cancer prevention and knowledge of cancer risk factors), secondary (cancer screening and early detection), and tertiary (cancer treatment and follow up) prevention.

NIOSH and its eight collaborating agencies worked to develop the project components that are featured in this issue. Project collaborators:

- the Georgia Department of Human Resources,

- Mercy Hospitals of Central Iowa,
- Michigan State University,
- the National Farm Medicine Center at Marshfield Clinic of Wisconsin,
- the Nebraska Department of Health,
- the Program for Appropriate Technology in Health (PATH),
- the University of Minnesota, and
- the Western Consortium of Public Health.

This special supplement to *The Journal of Rural Health* presents articles that illustrate the research approaches and results of the demonstration projects. Many of the demonstration projects addressed the question of whether and to what extent farming populations access cancer control services differently than rural nonfarmers or workers in urban settings. Some of the formative research used focus groups and other mechanisms to identify and characterize the wide variety of subgroups within the farming populations to which cancer interventions were targeted. Several projects implemented interventions to address the identified barriers to cancer control and evaluated their effectiveness. Some of the researchers developed approaches to involve community resources in the dissemination of cancer control information. One unique aspect of the projects targeted migrant and seasonal farmworker populations in five mid-Atlantic states (Maryland, Delaware, Virginia, North Carolina, and West Virginia), and in Georgia, Wisconsin, and California. These projects focused on identifying ways to increase access to cancer control services to mobile populations that traditionally do not prioritize cancer control as a major life concern. The projects targeting migrant and seasonal farm laborers have been particularly concerned with how to access and track these populations to provide cancer screening and follow-up positive or atypical tests results. Another feature of the projects is the attempt to address a wide variety of ethnic and cultural groups.

Given that farming as an occupation includes such a heterogeneous mix of workers, any successful program would need to develop components that reflect that fact. To that end, cultural- and language-specific materials and activities were developed to enhance the probability of demonstrating successful interventions.

In addition, the projects included cost-effectiveness research components (which are not represented in this publication). Collaborators were encouraged to develop research that, for example, would identify the costs related to conducting cancer interventions

(i.e., cancer screening) or compare and contrast the costs and benefits of various screening resources (i.e., mobile screening versus fixed-site screening). The results of those investigations may be available in future issues of this journal and other journals.

The NIOSH *Cancer Control Demonstration Projects for Farming Populations* will continue through 1997, during which a data set representing the research on barriers to cancer control services as derived from the programs in Iowa, Michigan, Minnesota, Nebraska, and Wisconsin will be developed. This "pooled analysis" is designed to evaluate some of the common variables reflected in the barriers data collected from cohorts in those states and will include information on cancer-related knowledge, attitudes and behaviors, insurance coverage, access to care providers, etc.

The research from the demonstration projects will be useful in fostering collaborative links between NIOSH and other federal agencies (i.e., NCI, the Environmental Protection Agency) to contribute to the agricultural cancer research underway at those agencies; to integrate cancer intervention messages, strategies, and educational materials into other programs that are part of the NIOSH agricultural health initiative; to create educational materials that convert commonly understood cancer prevention techniques and cancer research findings into usable occupationally specific guidance for farmers, farmworkers, and their families that can be used by other (governmental and nongovernmental) farm worker organizations; and, finally, to ensure that the knowledge gained from the demonstration projects is distributed widely in the scientific and general health literature.

The articles collected in this issue of *The Journal of Rural Health* do not reflect the entirety of the NIOSH cancer control program. The most salient features of the program are presented here. In future issues of this and other journals, it is our intent to disseminate other project results that will reflect the successes, failures, and lessons learned. It is hoped that other researchers will benefit from this research and that other programs may be developed to address cancer control issues among farming populations, perhaps reducing cancer morbidity and mortality in the United States in the years to come.

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