

HEALTH AND EXPOSURE RESEARCH FOR THE AGRICULTURAL COMMUNITY: The Agricultural Health Study

*Moving Science
into Action*

Kent Thomas^a, Michael Alavanja^b, Dale Sandler^c, Cynthia Hines^d, Joy Pierce^e, and Charles Lynch^f

^aNational Exposure Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency; ^bNational Cancer Institute and ^cNational Institute of Environmental Health Sciences, National Institutes of Health, DHHS; ^dNational Institute for Occupational Safety and Health; ^eBattelle Centers for Public Health Research and Evaluation; ^fUniversity of Iowa Department of Epidemiology

IMPORTANCE OF COMMUNICATING RESEARCH RESULTS TO THE COMMUNITY

Scientists have the opportunity and responsibility to communicate important research findings to the communities they study. A goal of the Agricultural Health Study (AHS) is to provide research results that can be used to identify factors that promote good health and ways that members of the agricultural community can more effectively protect themselves against possible risks.

Examples of questions that AHS researchers are working to answer:

- What factors promote good health in the agricultural community?
- Are farm pesticide applicators and their families at an elevated risk to some diseases due to agricultural exposures?
- Can we identify key factors that influence exposure in order to help guide development of improved exposure reduction strategies and reduced risk?

HOW IS THE AHS COMMUNICATING RESULTS TO THE AGRICULTURAL COMMUNITY?

Research scientists from federal agencies and the Iowa and North Carolina AHS Field Stations have developed plans for communicating with study participants and other stakeholders using a variety of products and dissemination methods to reach a wide audience. These researchers will continue to develop products as the study progresses and plan to develop new opportunities to communicate results.

PRODUCTS

- Participant newsletters (Figure 1)
— Prepared for AHS cohort participants
- Summaries of individual participant results from exposure measurement sub-studies
- Lay fact sheets
— Prepared by researchers and communications specialists to describe important study news and research results in lay language
- Lay research summaries
— Research summaries posted on the AHS web site
- Brochures and presentations developed for health and safety professionals
- Scientific abstracts and manuscripts
- AHS web site: <http://www.aghealth.org/>

DISSEMINATION

- AHS web site operated and maintained by National Cancer Institute (NCI) and its contractors describes the study and provides summaries of important findings (Figure 2)
- Periodic direct mailings to study participants
- Direct pre-publication email or mailing of important results to stakeholders
- Periodic reporting to the general agricultural communities through established state agricultural print and electronic communication and during training sessions
- Release information to state and local and agricultural trade publications and media
- Partnership with the North Carolina Agromedicine Institute to develop and disseminate research findings
- Presentations at scientific conferences and advisory panel meetings

AUDIENCE

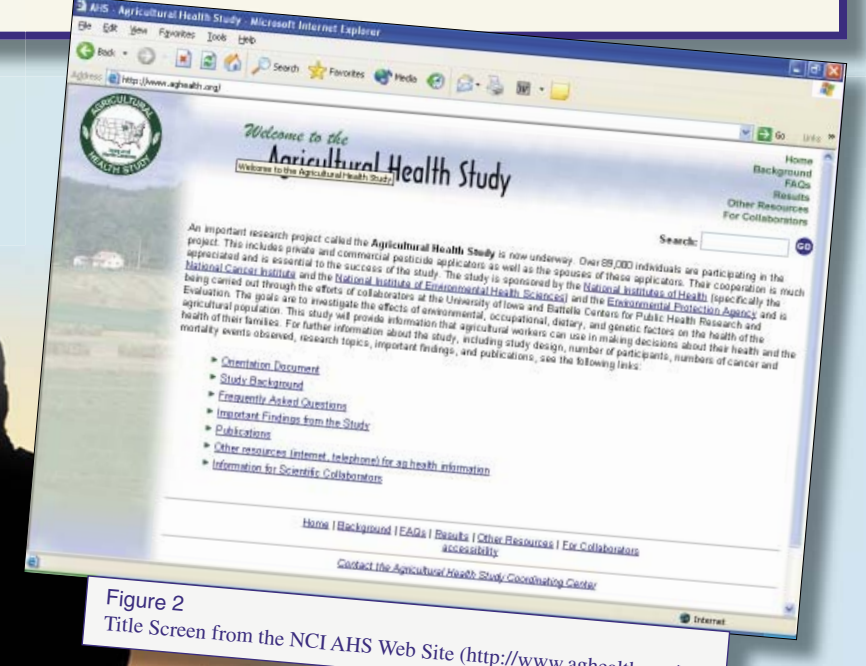
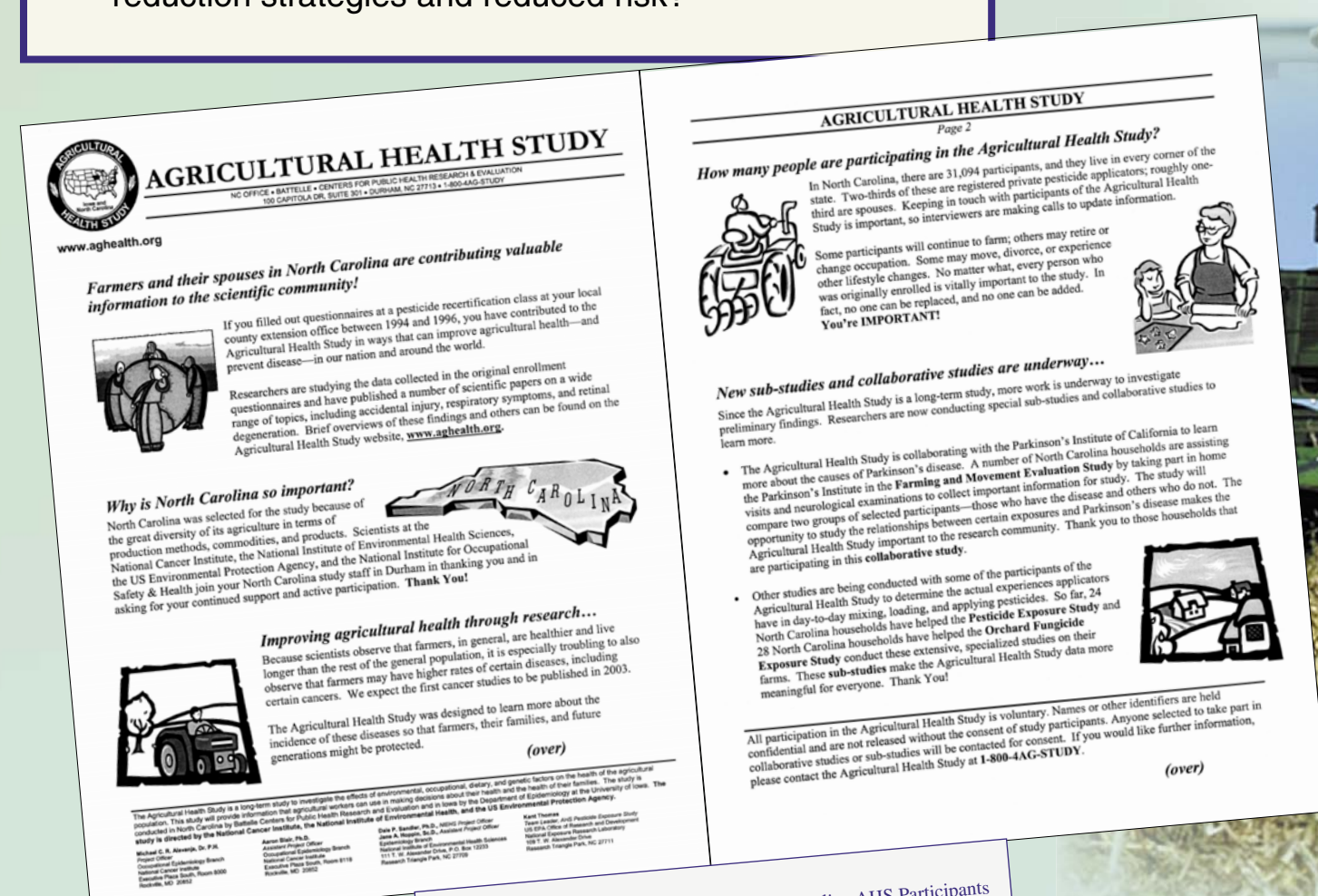
- AHS study participants (includes thousands of farmers in Iowa and North Carolina)
- North Carolina, Iowa, and other state agricultural interests
— Cooperative extension services
— Agricultural research universities
- State Departments of Agriculture
- Pesticide safety educators
- Farm bureaus and other agricultural interest groups and organizations
- State and National Advisory Panels
- Health and risk assessment scientists
- Agricultural chemical industry
- Federal regulatory agencies



IMPACT OF COMMUNICATING AHS RESEARCH RESULTS

The goals for communication and dissemination of research results from the Agricultural Health Study include:

- Informing participants, stakeholders, and pesticide safety educators about important health and exposure research results.
- Providing information that can be used to improve training and work practices to reduce exposures.
- Reducing potential health risks from agricultural exposures and promoting good health practices in the farming community.



MORE INFORMATION ABOUT THE COLLABORATIVE MULTI-AGENCY AGRICULTURAL HEALTH STUDY

- AHS Principal Study**
- The AHS is a collaborative research effort by NCI, NIEHS, EPA, and NIOSH
 - The AHS, the most comprehensive prospective epidemiological study on agricultural populations in the world, is designed to:
 - Measure cancer and non-cancer health risks in the agricultural community
 - Examine associations between use of agricultural chemicals and disease
 - Over 89,000 licensed pesticide applicators and spouses were enrolled in Iowa and North Carolina from 1994 to 1997
 - Information about work practices, agricultural chemical use, and health was collected using detailed questionnaires at enrollment
 - Continued follow-up of health and agricultural practices in the cohort is planned
- AHS Sub-Studies**
- Some sub-studies, such as those led by EPA/ORD/NERL and by NIOSH scientists, directly measure farmer and farm family exposure to agricultural chemicals
 - Other sub-studies collect supplemental information in order to explore relationships between agricultural activities and exposures, and such health outcomes as Parkinson's Disease, immunologic function, and farm injuries

