

## A GOVERNMENT PERSPECTIVE I

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It is presumptuous of me to talk about the government's perspective. My first disclaimer is that much of what you will hear here today is my interpretation of the government's perspective. I want to talk about three aspects of the government perspective: the challenge that we received, the response that we have given to date, and some ideas that we have gleaned from the conference during the past few days.

### THE CHALLENGE

First, I would like to talk about the challenge. The challenge came to us in 1988, as a result of attendance at the National Coalition for Agricultural Safety and Health (NCASH) meeting and the subsequent publication of *Agriculture at Risk*, the NCASH report. Specifically, the challenge appeared as a legislated initiative designed to promote surveillance, research, and interventions. The specific challenge was to the National Institute for Occupational Safety and Health (NIOSH) to conduct a National Occupational Hazard Survey for Agriculture and to survey agricultural workers exposed to certain risk factors.

The second challenge was from the appropriation language in two programs that comprise the surveillance component. I will talk about one; Dr. Freund will talk about another of the NIOSH agriculture initiatives.

The third challenge is something that we have been aware of for some time and periodically read about in such scientific journals as *American Demographics* or its parent publication, *The Wall Street Journal*. On the 24th of April, the *Journal* carried this article, front page, left-hand side, "Iowa Towns Shriveled as Young People Head for the Cities." They were talking about Alden, Iowa.

From my reading of the map, that is a little town probably about 50 or 60 miles or so north of Des Moines. It is a town in which the young people are leaving and the old people are staying behind to farm and to run the town. The article gives some very interesting demographics about the State of Iowa, demographics that may apply to other agricultural states.

I will just give you a couple of these. The new data from the 1990 census show that 29 of Iowa's 99 counties had more deaths than births, a natural decrease. During the 5 years that preceded 1990, only four counties reported natural decreases. So, here in Iowa, they have gone from 5 counties to 29 counties with a natural decrease.

Natural decrease is an unusual demographic phenomenon. Most of us think in terms of continued growth of a country and a natural increase about 1 percent, but here we have a natural decrease. The median age of Iowa's

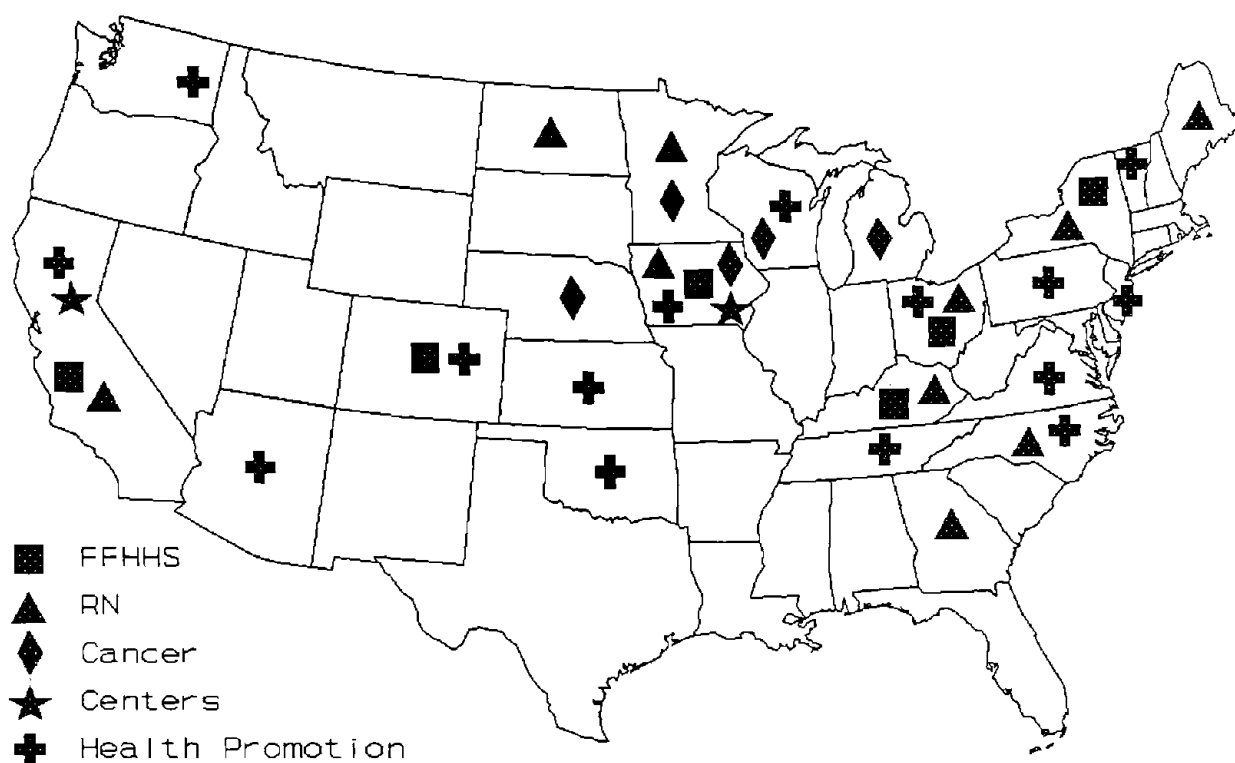


Figure 1. FY-91 NIOSH Agricultural Initiative Programs.

population increased from 30 in 1980 to more than 33 in 1989.

Read on. The situation is so bad that 3 years ago Iowa became only the second state in the nation where the number of people over 75 was greater than the number under 5. I will let you guess at the other state. If you guess Florida, you are right.

Now, the demographic challenge goes on. The flight of young people and middle-aged people from Iowa's rural towns has spawned a sub-crisis of its own: an aging population of people who not only have no doctors nearby but no young relatives or neighbors to look after their health or even do their marketing if they are sick.

Because I am from a public health background and have always been interested in the population at risk, these demographics spell out to me a very serious challenge that we are facing when we look at projects that address the problems of farm families in generally rural areas. With that background, I would like to go on to tell you a little bit about the response to some of these challenges.

The response from NIOSH is broad. It includes surveillance, research, and intervention. Our particular interest here today is in the surveillance component. I would be remiss, however, if I did not remind you that we are part of this triad that uses surveillance signals to trigger either research or intervention. The same surveillance systems may be useful later on to

evaluate the effectiveness of these intervention stratagems.

Figure 1 shows a map of the total NIOSH agricultural initiative FY-1991 funding. The different codes show the different types of programs being funded by NIOSH. I will speak about the Farm Family Health and Hazard Survey (FFHHS); Dr. Freund about the nurses in rural communities.

There are cancer projects in four states. There are two centers of excellence, and, I believe, 15 health promotion states.

You can see how there is a clustering in certain states. That provides an opportunity for collaboration or a symbiotic relationship between these projects. You will also note there are parts of the country that have nothing.

Now, a few words about FFHHS. The purpose of this descriptive survey is, first of all, to describe the health status of farm families and to recognize work-related hazards—chemical, physical, biological hazards.

In doing this, we are borrowing some of the techniques used by our colleagues in the National Center for Health Statistics (NCHS). They are expert in survey design, questionnaire development, training of interviewers. We are also borrowing from our own experience with the National Occupational Hazards Survey, the National Occupational Exposure Survey, and the recognition of work-related hazards.

We have, in effect, two groups working on this project. One group is concerned with the health effects. That group is headed up by Ms. Nina Lulich. Her colleague on the hazard side, Dr. Alice Greife, heads the hazard section of our unit. We have now decentralized to a point where we

have the specialists working with the states that we have funded.

In late FY-1990, we awarded six cooperative agreements. I am sure that some of you in the room know what a cooperative agreement is because you have been awarded one. It is positioned between a grant and a contract. It allows our staff to work very closely with the awardee's staff.

We feel that it is an excellent way to begin to build the kind of infrastructure and continuing collaboration that we have been hearing about in this conference. The average award was \$194,000 per year with the expected duration of 5 years.

The awards went through the competitive process and were awarded to two health departments and four university-based awardees, spanning from the east to the west coast of this country. We are busy working with these people now.

They have all visited Cincinnati, and we are about to undertake a series of visits to each site. We are also preparing our OMB packages for clearance with the questionnaire part of the surveys.

As you might expect, these are quite diverse surveys. Agriculture has a long tradition of being state-based. We see this in the strength of the land-grant university system. We see it in the county extension agent system. We felt that it was important to build on the existing infrastructure.

We had a hard decision to make whether to try to do a national survey with limited resources or to do a state-based survey in states where there was the capability, the interest, and the likelihood of carrying surveillance findings on into research, intervention, and, ultimately, prevention.

We elected to do state-based surveys. Given that construct, it is not surprising that we encounter many variables that are state-determined. For example, some states elected to look at a particular commodity.

Other states, in terms of the geographic coverage, elected to go to a subset of counties rather than statewide. In one or two states, there was a demographic slice, and they elected to look at a sample of young and old farmworkers—the very young and very old.

This is both a disease and injury survey. There is no question that injuries are a very important part of the farm family's assessment of their hazards. They see this every day on their own farm; they see it with their neighbors. Injuries predominate.

That is reflected in many of the proposals. We are looking at injury patterns. We are doing this in collaboration with our colleagues in the Division of Safety Research in Morgantown.

In addition, we are looking at disease components. Here again we are collaborating with the Division of Respiratory Disease Studies in Morgantown. Dr. Castellan has been a faithful and valuable contributor to this aspect of it. Beyond that, we are trying to look at a wide spectrum of disease and also look at the hazards, the physical, chemical, and biological hazards that cause these diseases or injuries.

This is an attempt to show in matrix form a summary of health interview and examination topics that were elected by the six states. I should point out that we were insistent on one or two topics.

We want a good demographic base. We felt we should have consistency in age, sex, and race types of questions. That presents very little problem.

We are all used to using the kind of questions the Census and NCHS use to get that kind of information. Beyond that, we wanted to look at medical access.

What are the barriers to medical care? Do people have health insurance? If they have it, how did they get it?

Many of these people are self-employed. Does the health insurance come as a result of one, or maybe both, adult members of a family taking employment off the farm in order to be eligible for health insurance? These are questions that I think are particularly important in juxtaposition with the *Wall Street Journal* article I referred to, which made the point about the breakdown of the medical care delivery system in rural America. The barrier—the economic barrier—may not be the problem. It may be that there is nobody in practice; there is no hospital. These are things we need to find out.

Injuries are being recorded. We are also interested in musculoskeletal, respiratory, dermatologic, mental health, neurologic, cancer, spirometry testing, and hearing and audiometric testing. These are the types of things that are being built into surveys using what we call modules.

We developed these suggested patterns or models. States are picking up on one or more modules and putting these in their survey proposal. The proposal will then be packaged for OMB review and approval.

Hazards are next. Borrowing from our experience with the National Occupational

Exposure and Hazard Surveys, we are working toward an on-site walk-through in much the same way we would walk through an industry or industrial setting. We are looking at pesticides. We will do some sampling. We will look at chronic trauma. We will look at safety risk factors, injuries, ergonomics, rollovers, PTO's, and secondary occupations.

We need the information on secondary occupation for a number of reasons. One I cited was health insurance. The other is a bit more along the lines of traditional industrial hygiene interests. If a person has an off-farm job that has certain hazards that may result in a disease, we want to know about that job. We want to know the potential for those hazards. Otherwise, we may attribute that particular disease to something that is being done on the farm. It is very important to look at the relationship between off-farm and farm employment.

**[REMARKS FOLLOWING NEXT  
SPEAKER]**

Mr. Todd M. Frazier: One thing about a conference like this is that you are hit with so many thoughts and ideas that it is hard to put them all together in any meaningful way. I am not going to attempt to do that for even a small part of this conference.

I went back through my notes last night and picked out words—words that, if you forced me to, I could attribute to a speaker but right now they are just words. They are words that I am going to take home from this conference to see if what we are

doing somehow addresses the concerns we have heard from people at the Surgeon's General's Conference.

Here are some of the words. Of course, "change." Times are changing. For most of us in NIOSH it went from a smokestack to haystack type of change (i.e., change in the direction of our own organization).

"Cooperation, communication, education"—in many different forms, we have heard that. "Infrastructure"—we are dealing with that. That is why we are here in many respects. "Children." "Women." "Older farmers." "Disabled farmers." "Target groups." "Exposure assessment." "Weaving the ideas of industrial hygiene into agricultural aspects." "Shortage of rural health care personnel." "Stress."

Back to the *Wall Street Journal*. Here is a man whose kids are leaving the farm. He says:

*"We expected to live here forever. Be surrounded by our family. We planned on it, but things change; and I'm seeing that all change is not for the better. Things aren't going to work out the way I thought they would."*

So here is a 70-year-old man who is going to farm whether he likes it or not.

You have farmer-provider interaction. You have that phrase I do not want to forget. John May used it, "teachable moment."

Then, I have to say this. Did you read the paper this morning about that old guy that pitched his seventh no-hitter? So, if we build it, they will come.□



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