

Fighting Foodborne Illness

USDA Enlists Public Health, Medical Communities



By Matthew D. Baun

When you think of the work of the U.S. Department of Agriculture, images of farmers and ranchers quickly come to mind. But there is an ambitious effort at USDA's Food Safety and Inspection Service to expand that circle to include the medical and public health professions. Targeting the public health community is a growing necessity because of changes in the nation's demographics.

Defining "At-Risk"

For instance, there is a growing population of people with weakened immune systems. This group is at greater risk for contracting a foodborne illness that may result in dangerous infections, hospitalization, or even death. Since all people are dependent on food to survive, everyone, *in theory*, is at-risk for foodborne illness. But in reality, certain people are more vulnerable than others and thus are known as "at-risk." The distinction is important. A healthy individual may suffer only minor effects from eating undercooked food, resulting in an upset stomach. Others, however, can suffer far worse conditions, such as acute kidney failure.

But as they look to enlist the help of professionals who have a direct relationship with those who are "at-risk," many USDA officials see signals that the medical community is ready and willing.

Some physicians are talking to their patients about food safety just as they would about stroke or heart-attack prevention. And for USDA this spells good preventive medicine and protects the public health.

"As a general rule, we don't give patients food safety information in our program," said Dr. Sam James, Director of Kidney/Pancreas Transplant Program, University Medical Center, Tucson, Ariz. "Now that I've become a little bit more aware of the food safety issues, I think that we should include food safety information in our patient packet."

Those who fall in the "at-risk" category are people who we know and see every day — an older parent, a young child, a pregnant woman, people with diabetes, or even those with high blood pressure. Patients with weakened immune systems like transplant recipients, and those with HIV/AIDS, cancer, and diabetes are also at higher risk than healthy individuals for severe illness or death due to foodborne illness.

USDA is also reaching out to those who may not have a medical condition but are nonetheless considered "at-risk" — older adults and young children. Surveys conducted by USDA show that individuals in these demographics, or their caregivers, are often more receptive than other people to actually adopting safe food handling behaviors.

Jennifer Doe, a Chevy Chase, Md., pediatrician who is part of a practice that treats about 500 people each week, makes it a point to address foodborne illness with the parents of her young patients.

"We see a wide spectrum of illnesses that can develop as a result of foodborne pathogens, from mild to serious," said Doe. "Foodborne illness is super important to [parents of] infants and young children because the young ones do not have completely developed immune systems, so they're not able to fight off things that you and I can."

A Public Health Mission

Targeting “at-risk” populations is just the latest evolution of health maintenance at USDA. Agriculture officials have talked about food safety in terms of public health for years. Food safety educators throughout the United States, and allies from state and local government as well as industry and consumer groups, have added their voice to the cause of raising food safety awareness.

But what USDA and FSIS officials want is this *call to action* to grow louder so more people can hear and then heed the food safety messages being espoused. Over the next few years, FSIS hopes to strengthen its network of food safety partners by forming relationships with county and city public health officials, physicians, nurses, hospice workers, and other caregivers. These stakeholders are viewed as untapped resources that are potentially able to deliver key food safety messages to people who need them most.

The idea is a simple one that carries a lot of potential. If a doctor, for example, will take the time to explain the impact foodborne pathogens have on people with weakened immune systems, then these patients will be empowered to prevent it from occurring.

As a measure of how important USDA officials are taking this effort to reach out to the medical and public health communities, FSIS last fall sponsored a two-and-a-half day conference (*see related article on page 10*) that brought together the medical and public health communities with food safety educators from all areas of the country.

The idea behind the conference was to have attendees discuss various strategies for communicating the food safety needs of “at-risk” individuals. Agriculture Secretary Mike

Johanns, a keynote speaker, endorsed the mission of the conference and saluted the more than 600 attendees for their work to improve public health through food safety.

Johanns said that while certain groups of people are “at-risk,” the degree of risk can change through concentrated education efforts. “Who better to deliver the message than some of the most trusted people in the world, our doctors, our nurses, and our public health professionals? You have tremendous credibility and influence; you can make a difference.”

“At-Risk” — A Familiar Face

Those who are considered “at-risk” may never actually encounter foodborne illness. But because there is some degree of risk every time food is eaten, ‘at-risk’ individuals always have to take extra precautions. The simple act of eating lunch or dinner at a restaurant is a challenge in and of itself.

“I have no immune system, so something that wouldn’t bother someone else could make me very sick,” said Jane Sanchez, a lung transplant patient in Milton, Fla.

As a consequence, Sanchez is extremely careful in the way she goes out to eat. In order to handle salt and pepper shakers, napkins and other rudiments of the dinner table she wears plastic gloves. She’ll even wear gloves when she prepares meals in her own home, in addition to frequently washing her hands.

USDA officials believe that engaging the public health and medical communities on food safety issues will reduce the rates of human foodborne illness cases. They hope patients like Sanchez will get the food safety messages they need to help them enjoy a better quality of life and protect them from foodborne illness.

Uniting the Stakeholders

To help make inroads into the world of physicians and public health officials, USDA officials don’t have to look very far for help. Richard Raymond, M.D., Under Secretary for Food Safety at USDA, is the nation’s highest ranking food safety official. Raymond’s perspective is unique. As a practicing family physician he treated patients and is fully aware of the vulnerabilities and physical toll foodborne illness has on people. Raymond has also been at the forefront of many public health issues, having served as Nebraska’s chief medical officer as well as serving as President of the Association of State and Territorial Health Officials.



Joan Mondschein, a kidney transplant patient, receives counseling from Dr. Sam James, Director of the Kidney/Pancreas Transplant Program, University Medical Center, Tucson, Ariz. (Photo courtesy of the 2006 Food Safety Education Conference)

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Read Labels to Reduce Risk of Getting Sick

By Keith Payne


What's the difference between "ready-to-eat" and "ready-to-cook"?

An enormous one if you're not careful, which is why USDA recommends that you read all food product labels very carefully.

"Ready-to-eat" means just what it says — the food does not require cooking or any additional preparation by the consumer before it's eaten.

Phrases such as "cook and serve," "ready to cook" and "oven ready" on labels convey to consumers that the product is not ready to eat and should be accompanied by validated cooking instructions. Although products might appear to be cooked, partially cooked or browned, you should prepare these foods no differently than if you were handling a raw product.

Many frozen stuffed poultry products, such as those filled with cheese and other ingredients, are typically not ready to eat and *must* be fully cooked as if they were raw. Because these products are stuffed with additional ingredients, they will likely take longer to cook than products, such as chicken breasts, that do not contain fillings to reach a safe minimum internal temperature of 165° F.

If the label mentions that a microwave oven can be used, then always follow the cooking instructions carefully. Cover and rotate so it heats evenly and always use a food thermometer to take multiple temperature readings in different locations throughout the product. This will ensure that the product is safely cooked. 

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In his role at USDA, Raymond has a clear vision for reaching what some might consider non-traditional stakeholders for USDA.

"It's just high time we began to remind people the 'and' in Food Safety and Inspection Service means we have a bigger role than *just* inspection," said Raymond. "We do want to become known as the public health branch of the USDA."

In addition to sponsoring last fall's food safety conference, which drew attendees from nearly every U.S. state and eight countries, FSIS unveiled a new series of brochures that can be used by medical and public health professions as well as other caregivers. These brochures offer food safety recommendations to people with specific medical conditions like HIV/AIDS, cancer, diabetes and transplant recipients as well as older adults. (*see "Equipping the At-Risk" on page 11*)

Inspection and Education

All this talk about education isn't to say that Raymond is placing less of a priority on inspection — quite the contrary. Raymond believes the food safety education programs and the meat, poultry and egg product inspection programs at USDA work in lock-step. Both are integral to meet the goal of seeing a sustained decrease in the number of human foodborne illness cases.

Raymond explains that just as FSIS targets its food safety education efforts toward those who are considered "at-risk," the agency also focuses its inspection resources on the products and facilities that pose the greatest risk to public health. This is called "risk-based inspection."

"What we're after is a commonsense, cost-effective public health strategy that best serves the American consumer and the meat and poultry industry by preventing human illness and, in turn, protecting those most at-risk from foodborne illnesses."

To make it work, Raymond is a firm believer in the farm-to-fork approach. The traditional group of players in the farm-to-fork continuum included the usual USDA players: ranchers, food processors, food distributors, grocers, food service professionals and consumers. But Raymond wants to invite more to the table — physicians, nurses, hospice workers, state and county health officials and, *really*, any other caregiver.

So how will these "new" stakeholders benefit from USDA's work on behalf of food safety?

Reflecting back to his days as a practicing physician, Raymond is quick to assert that foodborne illness is among the most under-reported diseases in the nation. The first step, he says, is for doctors and public health professionals to develop a more accurate system for reporting of foodborne illness. He notes that milder cases of food-related illness are often not detected through routine surveillance.

"This has serious negative consequences on our ability to understand the food safety environment we are operating in and our ability to obtain the support for the funding needed to combat foodborne illnesses. This information is absolutely necessary in order to create and guide prevention efforts and assess the effectiveness of our food safety regulations." (*Cmdr. Janice Adams-King contributed to this article.*) 