



Strategic Goal 4

Enhance Protection and Safety of the Nation's Agriculture and Food Supply

USDA has unique and critical responsibilities to provide the consumer with a healthy food supply and a secure agricultural production system. This is achieved by ensuring that the Nation's meat, poultry and egg products are safe, wholesome and labeled accurately. This also is achieved by protecting the Nation's agricultural system from pests and disease outbreaks, minimizing production losses, maintaining market viability and promoting responsible environmental stewardship.

Strategic Result: A Safe U.S. Food Supply and Agricultural Production System

OBJECTIVE 4.1: REDUCE THE INCIDENCE OF FOODBORNE ILLNESSES RELATED TO MEAT, POULTRY, AND EGG PRODUCTS IN THE U.S.

To reduce the incidence of foodborne illness, USDA is moving toward a more scientific inspection system. A more risk-based approach to verification will allow USDA to allocate inspection resources and carry out regulatory activities on high-risk processes that may require more attention from inspection program personnel. By focusing our resources in a more risk-based manner, USDA expects to identify the establishments and processes that present the greatest public health concerns and thereby have a more effective impact on improving public health. The Department's food-safety systems, particularly those for meat, poultry and egg products, must be assessed and updated continually. This evaluation process will help maintain consumer confidence and protect them from exposure to foodborne diseases. These systems include activities to track the incidence of pathogens and illness-causing organisms in these products. They are also designed to raise public awareness about food safety, food security and safe food handling.

Key Outcome: Reduction in Foodborne Illness Associated with the Consumption of Meat, Poultry and Egg Products

Performance Measures

4.1.1 Reduce overall public exposure to generic *Salmonella* from broiler carcasses using existing scientific standards

Baseline 2005
Overall public exposure of 16.3 percent positive of samples tested.
Target 2010
Reduce overall public exposure to less than 10 percent positive of samples tested.

4.1.2 Decrease the overall-percent-positive rate for *Listeria monocytogenes* in ready-to-eat products through the use of Food Safety Assessments

Baseline 2005
Overall-percent-positive rate of 0.70 percent.
Target 2010
Maintain the overall-percent-positive rate at less than 0.70 percent.

4.1.3 Reduce the prevalence of *E-coli* O157:H7 on ground beef

Baseline 2005
Overall-percent-positive rate of 0.20 percent.
Target 2010
Maintain the overall-percent-positive rate at less than 0.20 percent.

Actionable Strategies

USDA must continue to strengthen the public health, communication and response infrastructure that protects the integrity of the food and agricultural system. Future actions will include (not in priority order):

- Enhance easy access to food safety information;
 - Conduct, verify and perform food safety assessment activity to improve food safety related to public health concerns, e.g. *Listeria monocytogenes*, *Escherichia coli* O157:H7, and *Salmonella*;
 - Create and integrate comprehensive bio-surveillance systems and intelligently use the data to systematically identify potential food security concerns;
 - Increase small and very small plant outreach and food safety preparation and handling educational efforts to include American Indians, Native Alaskans, Hispanics, Asian Pacific Islanders, and others with information on all emerging food safety and defense initiatives created by USDA's Food Safety and Inspection Service;
 - Fully implement Sanitary and Phytosanitary (SPS) / Sanitation Standards Operating Procedures (SSOP) / Hazard Analysis and Critical Control Point (HACCP) in egg product establishments by providing training to USDA inspection personnel with oversight in this program area, industry outreach activities, and new USDA guidance material to facilitate a seamless transition from a command and control format to a HACCP inspection system;
 - Leverage cooperative agreements with minority colleges, universities, and States to develop outreach efforts to improve food safety and defense through full implementation of HACCP by small and very small plants;
 - Conduct joint training with industry in small and very small plants to ensure effective implementation and enforcement of HACCP SSOP systems and good manufacturing practices;
 - Create an effective information and resource clearinghouse for small and very small plants to ensure full development and implementation of required systems of HACCP, SSOP, and prerequisite programs into these plants;
 - Provide the scientific data needed and conduct risk assessments to ensure implementation of science-based policies;
- Continue to train the entire workforce in methods to perform risk-based inspection;
 - Use new diagnostic and other new technologies to more effectively perform inspection and enforcement activities;
 - Increase participation, cooperation, and collaboration between Federal, State and local governments to increase the reporting of food-related illnesses to Food Net, the Consumer Complaint Monitoring System and other data systems;
 - Significantly enhance the capability and capacity of the State and local labs in support of the Food Emergency Response Network;
 - Conduct radiological, biological and chemical exercises in district offices to ensure readiness to respond to a terrorist event or food safety outbreak; and
 - Provide an enterprise solution that is dynamic and focuses on priority areas for capacity-building, including:
 - A secure, accessible and state-of-the-art information technology infrastructure that is essential to communicate rapidly, analyze and interpret public health data, and provide public access to food safety and public health information;
 - An advanced epidemiology and surveillance system, which will provide the ability to rapidly detect food safety and public health threats that are naturally occurring or deliberately introduced;
 - A well-trained, well-staffed, fully prepared food safety and public health workforce (human capital) that utilizes the data and that can be mobilized and deployed rapidly to combat food-safety and public-health issues;
 - A solid communication system — a swift, secure, multi-directional flow of information. This includes the ability to provide timely, accurate information to the public and advice to policy-makers in food safety and public health emergencies. Enhance our ability to routinely

translate scientific information, provide food safety and public health information; and

- A preparedness and disaster response capability, including disaster-response plans that leverage Federal, State and local resources for a broader outreach, as well as testing and maintaining a high-level of preparedness.

OBJECTIVE 4.2: REDUCE THE NUMBER AND SEVERITY OF AGRICULTURAL PEST AND DISEASE OUTBREAKS

Safeguarding America’s animal and plant resources from invasive pests and diseases ensures the continued prevalence of agricultural trade as the foundation of America’s prosperity and its people’s existence. The dynamic nature of invasive pests and diseases demands a proactive approach to exclude further outbreaks and manage established pests and diseases. Partnerships with Federal and State agencies, industry and professional organizations provide the framework from which we sponsor prevention activities. These activities allow for the coordination of effective pest and animal disease emergency response systems to limit the severity of such outbreaks. USDA has begun phasing in a new measure of the economic damages avoided or mitigated by pest and disease eradication or control efforts.

Economic sustainability of the agricultural crop and livestock systems and participation in global markets is limited by disease status. Many factors affect the likelihood of diseases of crops and livestock. These include:

- Globalization and international commerce,
- Presence of pathogen vectors,
- Industrialization of agriculture,
- Availability of vaccines and protection systems,
- Movement of animals during production,
- Continued emergence of new diseases,
- Genetic resistance of crops and livestock, and
- Availability of trained plant and animal health specialists.

While traditionally open and extensive livestock production systems increasingly are more closely monitored, they remain vulnerable to intentional exposure to pathogens. Crop systems have limited diversity and will remain extensive, making them more vulnerable to intentional exposure to pathogens.

USDA plays a vital role in:

- Securing supply, including Homeland Security issues, of quality food and fiber with its stewardship of Agency-administered programs;
- Administering provisions of the United States Warehouse Act, which supports a secure supply of food and fiber through enforcement of licensing requirements for commodity storage facilities;
- Reducing contamination from improper storage practices and providing adequate and secure storage capacity for the Nation’s commodities; and
- Ensuring an adequate capacity of approved and licensed storage facilities, reducing the amount of stored products that go out of condition, and reducing the time interval between licensed warehouse examinations.

Key Outcome: A Secure Agricultural Production System and Healthy Food Supply

Performance Measures

4.2.1 Prevent significant introductions of foreign animal diseases and pests that spread beyond the original area of introduction, causing severe economic or environmental damage and/or threatening animals or humans

Baseline 2002
Zero
Target 2010
Zero

4.2.2 Number of emerging plant pests and diseases not contained within the quarantined area

Baseline 2003
Four emerging plant pests/diseases.
Target 2010
One emerging plant pest/disease.

Actionable Strategies

Future actions will include:

- Strengthen procedures for evaluating and auditing international inspection systems and State inspection programs;
- Improve the capabilities of diagnostic laboratories;
- Improve the ability to trace back and trace forward animals affected by animal diseases of concern, such as *Bovine Spongiform Encephalopathy*, within at least 48 hours of discovery;
- Provide scientific information to protect animals from pests, infectious diseases and other disease-causing entities that impact animal and human health;
- Intensify research and education efforts to rapidly identify pests and diseases that enter the U.S.;
- Increase scientific monitoring for a broader array of emerging agricultural pests and diseases;
- Develop, validate and deploy new identification devices that can rapidly detect pathogens and toxins that threaten livestock, poultry, plants/crops and food;
- Research and disseminate results on:
 - The role of genes and proteins in the immune systems of animals and plants;
 - Microorganisms, pathogens and toxins that can contaminate foods;
 - Advanced molecular, biological and immunological studies of the effects of pathogens on vulnerable animal species;
 - Advanced diagnostics, protections and treatments; and
 - Improved management practices.

- Conduct research, education and information transfer on the transmission and epidemiology of animal and plant diseases to rapidly develop and apply strategies for controlling disease outbreaks;
- Develop rapid, economical, environmentally sound and humane methods of euthanasia for animals and the large-scale disposal of animal carcasses should an emergency occur;
- Conduct research and education on effective real-time cleaning and disinfecting technologies to limit or contain the spread of infectious materials, and isolate and contain potential disease outbreaks;
- Conduct agricultural surveys to provide needed information concerning quantities of chemicals applied to agricultural commodities, including livestock;
- Undertake research and education to support approval and licensing by the U.S. Environmental Protection Agency of safe and effective disinfectants, pesticides, insecticides and other emergency compounds;
- Strengthen disease surveillance systems for plant and animal pests to minimize the spread beyond the original area of introduction and minimize economic and environmental risk;
- Develop a national pathogenic control and prevention program targeting *Avian Influenza*, an infectious disease found in poultry; and
- Continue to develop and implement a National Animal Identification System to improve the response time to adverse animal health events.

Key External Factors

The introduction of hazardous substances, whether accidental or intentional, may threaten human health and the environment. This potential threat makes prevention, early detection, identification and rapid control or eradication a vital challenge. Collaboration between the public and private sectors plays a large role in food safety and food security.