



Background

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Food Safety and Inspection Service's Public Health Information System: Improving the Safety of Imported and Exported Meat, Poultry, and Processed Egg Products

Background

The United States Department of Agriculture's (USDA) Food Safety and Inspection Service (FSIS) is the public health regulatory agency responsible for ensuring that domestic and imported meat, poultry, and processed egg products are safe, wholesome, and correctly labeled and packaged.

In order to enhance the Agency's ability to better protect public health, FSIS will launch a comprehensive data analytics system called the Public Health Information System (PHIS) as part of its effort to collect, consolidate, and analyze data. PHIS, which will strengthen FSIS detection and response to foodborne hazards, will be a flexible, user-friendly, and web-based application that replaces many of FSIS' legacy systems [e.g., Performance Based Inspection System (PBIS) and the Automated Import Information System (AIIS)], automates paper-based business processes, and can be modified to accommodate changing needs. PHIS uses a systems approach to food safety.

Through its predictive analytics component, PHIS will integrate FSIS' data streams and, thereby, support a data-driven approach to FSIS inspection, auditing, and scheduling to support a comprehensive, timely, and reliable data-driven inspection system. PHIS will revolutionize the Agency's ability to utilize data in real time to inform all aspects of its domestic inspection, import inspection, and export activities.

This will make the Agency and its employees more accountable and allow FSIS to collect greater information about the U.S. domestic and international food safety systems producing FSIS-regulated products. Using multiple data sources, PHIS will allow analysts to identify trends that will provide the Agency with the capability to adjust domestic and import inspection and sampling. The Agency can better identify food safety risks and detect problems before they reach consumers and result in outbreaks and recalls.

PHIS will enable inspection personnel to better identify shortcomings in establishments' food safety systems and anticipate problems before they result in adulterated products. The new system will guide in-plant inspection personnel to focus their attention on the specific aspects of establishments' food safety systems and supporting documentation that have the most significant impact on public health. In conjunction with associated training, PHIS will better equip in-plant inspection personnel with the necessary information to help them anticipate developing problems and, thus, prevent adulterated products from entering commerce.

The system will facilitate the export process by automating establishment applications for approval for export, applications for export certificates, and issuance of export certificates. It will include an automated edit-check capability to ensure certificates comply with a foreign country's import requirements. This automation will help minimize human error and prevent fraud, waste and abuse.

PHIS will allow FSIS to take a data-driven approach to verifying the effectiveness of foreign food safety systems. By replacing the existing AIIS, PHIS will enable U.S. importers to file for FSIS inspection in advance of arrival of shipments destined to the United States. PHIS will also enable the receipt of electronic foreign health certificates that will provide a secure and timely advance notice of a foreign shipment certified by a foreign government. This certification will be verified upon arrival into the United States. In addition, PHIS will facilitate the planning process for equivalence verification audits of other countries' food regulatory systems.

Export Certification

PHIS will streamline FSIS' export program by automating the Agency's paper-based processes, including establishment applications for approval for export, applications for export certificates, and the issuance of export certificates. The system will enable an automated edit-check capability to ensure certificates properly reflect a foreign country's import requirements.

The export certification process will provide FSIS and exporters improved efficiency, controls, and communication associated with the certification and exportation of meat, poultry, and processed egg products. All products produced in U.S. federally inspected establishments are eligible for export; however, some importing countries may have additional certification requirements. The requirements for all countries can be accessed by FSIS officials or exporters through PHIS, which are identical to the foreign country requirements available for public access through the Export Library that is posted on the FSIS web site. PHIS will enable more effective FSIS oversight and verification of all country requirements. FSIS officials verify that:

- Exporters have completed an application for export certification that contains all the necessary information,
- The product and information identified comply with the importing country's requirements as listed in the FSIS export library, and
- All shipments are subject to reinspection, consistent with existing procedures.

Certificates

In PHIS, certification can be issued as a paper certificate or electronically. Paper export certificates produced in the PHIS system will be printed on security paper to decrease the possibility of fraudulent use of the certificate. The information contained in the PHIS-issued certificate will not change, although the format/appearance may change in some cases. For example, information that previously appeared in the letterhead section of a certificate will now appear in the remarks section of the certificate. In addition, certificates that had previously been printed on both sides of a single page will now be two separate pages.

In order to provide greater security and access to electronic certification to our trading partners, USDA provides a web-based alternative to paper certificates, the USDA Agricultural Marketing Service's electronic Trade Document Exchange system (eTDE). This secure alternative to paper certificates will allow countries to receive official certificates through the internet to facilitate export of FSIS-regulated products. The USDA eTDE validates the identity of each document provider that uploads certificates and has security controls in place to ensure that certificate data obtained from document providers remains unaltered once it is posted onto the site. Electronic document management eliminates the need for hard-copy documents that may be lost, damaged, stolen, or illegible. It allows authorized port authorities to view or print certificates. It provides foreign government officials with secure internet-browser access to USDA-managed electronic trade documentation at any time, any place.

Another format available from PHIS for exchanging export certificates electronically between trading partners is called eCert. The standards for the eCert were developed and published by the United Nations' Centre for Trade Facilitation and Electronic Business (UN/CEFACT). It provides a standard for the machine-to-machine exchange of electronic certificate information between government regulators involved in cross-border trade, where export certification is required to make entry of the product into the country easier.

Additional information about the application of eTDE and eCert in PHIS will be provided as it becomes available.

Import Reinspection

When PHIS is implemented, U.S. port of entry verification activities will continue to be performed on imported meat, poultry, and processed egg products that have already been inspected and passed by an equivalent foreign inspection system. Eligibility of the foreign country, foreign establishment, and product will be determined by the system when the application for FSIS import inspection is filed by the U.S. Importer of Record or U.S. Customs Broker. These applications will be entered directly into PHIS in advance of the shipment arrival. The information will be verified by the import inspector when the shipment is presented at the official import establishment, using the official certificate issued by the foreign inspection system. In addition, the inspector will verify that every shipment is properly certified, product is accurately labeled, and any product damaged during transportation is separated and refused entry.

Port-of-entry sampling will continue to be allocated by country, HACCP process category, finished product category, and species, as well as adjusted for each country's risk-based sampling plan. This plan is established annually based on the volume of product imported the previous calendar year. Those sampling plans may include physical examinations (e.g., product examination), examination for uncooked meat from countries restricted for foot-and-mouth disease (e.g., pink juices), or the condition of container for hermetically sealed products and/or laboratory sampling for pathogens, pathology, chemical/veterinary drug residues, species, or food chemistry, based on the risk category of the product. The results of these inspection activities will be documented in PHIS.

PHIS will also establish an electronic interface with the U.S. Customs and Border Protection's Automated Commercial Environment (ACE), thereby enabling greater information sharing between FSIS and other U.S. federal agencies involved with tracking the cross-border movement of import and export shipments of meat, poultry, and processed egg products.

Foreign Country and Establishment Profile

The foreign country and establishment profiles maintained in PHIS will be a repository of information about each country eligible to export meat, poultry, or processed egg products to the United States. It also includes establishments certified as eligible to produce product they directly export to the United States, as well as establishments eligible to produce product to be used later in products shipped to the United States from other eligible countries. FSIS will be able to use the country profile information to inform decisions about each eligible country's food safety performance as well as to determine the appropriate scope of equivalent verification audits and the frequency of port-of-entry inspection activities for each eligible country.

The profile will contain contact information for the country's inspection service, information about the country's food safety system (e.g., equivalence decisions on individual sanitary measures), and the types of products produced and shipped. Information will be transmitted in the annual certification required from each eligible country and updated as needed throughout the year.

System-to-System Communication

PHIS will facilitate electronic communication between governments, increasing the efficiency of processes. This allows for electronic receipt of health certificates from foreign governments for product exported to the United States. Also, the results of the inspections performed can be reported, including the disposition of a refused entry. Under the legacy import system FSIS has been using electronic certification with one country and it has worked well. Other countries will be added through PHIS as it is implemented.

Summary

PHIS is the future of public health management for FSIS. It will connect public health and food safety agencies around the country, changing the way we operate worldwide. The system will allow FSIS to see what is working, as well as what is not, through its four components—domestic inspection, import inspection, export inspection and predictive analytics. The system is state-of-the-art, with appropriate checks and balances that will ensure transparency and accountability.

FSIS will be able to provide more specific information related to U.S. export and import certification requirements as the implementation of PHIS gets closer. Specific to U.S. exports, FSIS will include information about the format of the paper certificates generated by PHIS and electronic certification options. Specific to U.S. imports, FSIS will include information about U.S. changes to the data elements/certification requirements, options for exchanging electronic certification, clarification on advance import inspection applications, and foreign country equivalence verification audits.

As we prepare to implement PHIS, FSIS will continue to provide updates on the status of implementation of PHIS. If you have any questions regarding PHIS, please contact the USDA Foreign Agricultural Service post providing coverage for your country.