Animal and Plant Health Import Permits in U.S. Agricultural Trade

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The Animal and Plant Health Inspection Service (APHIS) of the U.S. Department of Agriculture (USDA) is the U.S. government authority tasked with regulating the import, transit, and release of regulated animals, animal products, veterinary biologics, plants, plant products, pests, organisms, soil, and genetically engineered organisms. APHIS provides scientific authorities in trade partner countries and U.S. importers with animal and plant health import regulations.

APHIS requires U.S. importers to obtain animal or plant health import permits, which verify that the items being imported meet U.S. import standards. Animal and plant health import permits certify that imports follow U.S. regulations, World Trade Organization (WTO) guidelines, and/or trading partner specific requirements. These import permits are a part of broader agreements between the United States and its trading partners within the WTO on established sanitary and phytosanitary (SPS) measures. These measures aim to protect against diseases, pests, toxins, and other contaminants. The House and Senate Agricultural Appropriations Committees appropriate funds that allow APHIS to carry out a range of activities, including those involved in issuing import permits. From FY2014 to FY2018, discretionary appropriations for APHIS have averaged nearly $900 million. About 85% of the APHIS budget is allocated to the “Safeguarding and Emergency Preparedness/Response” mission area, which includes the administration of health import permits and other efforts to prevent imports of pests and diseases into the United States.

APHIS’s authority over agricultural imports is largely provided by the Animal Health Protection Act (7 U.S.C. §§8301 et seq.), the Plant Protection Act (7 U.S.C. §§7701 et seq.), and the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (7 U.S.C. §§8401). These laws authorize APHIS to administer animal and plant health import permits and conduct agricultural import inspections. APHIS works with other federal agencies, such as the Department of Homeland Security’s Customs and Border Protection (CBP), to conduct animal and plant health monitoring programs and to determine if new pest or disease management programs are needed. In addition, Congress directs the Food and Drug Administration, the Food Safety and Inspection Service, and state-level Departments of Agriculture to participate in inspecting many products regulated by APHIS.

APHIS and CBP personnel inspect shipments of imported agricultural products and certify that the required import health permits and SPS certificates accompany each shipment. One of the major flagship programs that APHIS and CBP administer together is the Agricultural Quarantine Inspection (AQI) program, in which APHIS and CBP technical staff work to ensure that the required animal or plant health permits, sanitary certificates (for animal products), and phytosanitary certificates (for plant products) accompany each shipment. APHIS transfers funds to CBP to conduct AQI activities.

The ongoing congressional commitment to preventing plant and animal disease and pests from entering the United States through agricultural imports is evident in annual appropriations Congress provides for APHIS. Congress has directed APHIS to monitor pests and diseases and has assigned APHIS to oversee SPS activities in some free trade agreements. Moreover, legislation introduced in the 115th Congress sought to address invasive species (e.g., Areawide Integrated Pest Management, H.R. 5411) and would have directed CBP to enforce APHIS regulations to deter smuggling of plants and animals into the United States.
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Introduction

In the past two decades, increasing global trade liberalization, among other factors, has led to a rise in U.S. agricultural imports. The U.S. Department of Agriculture (USDA) reports that U.S. agricultural imports reached nearly $121 billion in the 2017 calendar year (Figure 1), which was twice the level of such imports in 2000. Consequently, the increasing volume of imports has heightened public concern about the potential for introducing pests and diseases. Most imported agricultural products, such as live animal and plants, are inspected by U.S. government officials and have accompanying documentation—animal and plant health import permits—certifying adherence to U.S. requirements. More than ever, the U.S. government depends on the proper use of these import permits to facilitate U.S. agricultural trade.

Figure 1. Total U.S. Agricultural Imports, 1970-2017

![Figure 1](image-url)


Notes: Calendar year data. Values have not been adjusted for inflation.

The USDA’s Animal and Plant Health Inspection Service (APHIS) regulates the import, transit, and release of regulated animals, animal products, veterinary biologics, plants, plant products, pests, organisms, soil, and genetically engineered organisms. APHIS-issued import health permits verify that the health status and the production practices of an imported product meet U.S. import standards. APHIS works with foreign exporters, U.S. importers, and foreign governments to interpret and enforce APHIS-issued animal and plant health import permits.

Animal and plant health import permits include components from U.S. specific regulations and World Trade Organization (WTO) guidelines. Further, these health import permits are a part of broader agreements between the United States and its trading partners in the WTO that establish sanitary and phytosanitary (SPS) standards. SPS measures aim to protect against diseases, pests,
toxins, and other contaminants. Since 2000, the United States has entered into a dozen free trade agreements (FTAs), which include an SPS chapter containing specific U.S. import requirements that the partner country has agreed to recognize. Examples include specific product or processing standards, requirements for products to be produced in disease-free areas, quarantine and inspection procedures, sampling and testing requirements, residue limits for pesticides and drugs in foods, and prohibitions on certain food additives.

APHIS works with the Department of Homeland Security’s (DHS) Customs and Border Protection (CBP), in addition to other federal agencies (e.g., Food Safety and Inspection Service, Food and Drug Administration), to enforce agricultural import regulations. CBP has authority to enforce APHIS regulations at ports of entry. APHIS and CBP personnel inspect shipments of imported agricultural products and certify that the required animal or plant health import permits and SPS documentation accompany each shipment.

APHIS Authority Over Health Import Permits

For much of the 20th century, animal and plant health bureaus within USDA operated independently of one another. The creation of APHIS consolidated these bureaus in 1972. There are a number of statutes (e.g., Table 1) that have established APHIS’s authority over health import permits. However, the majority of the directives are found in two key legislative actions:

1. **The Animal Health Protection Act (AHPA, 7 U.S.C. §§8301 et seq.)** is the primary federal law governing the protection of animal health. It gives APHIS broad authority to detect, control, or eradicate pests or diseases of livestock or poultry. AHPA consolidated all of the animal quarantine and related laws—some dating back to the late 1800s—and replaced them with one statutory framework. While most of the authorities contained in the consolidated AHPA were taken from existing laws, some new provisions were added to fill in gaps in legal authority.

2. **The Plant Protection Act of 2000 (PPA, 7 U.S.C. §§7701 et seq.)** is the primary federal law governing plant pests in foreign and interstate commerce, covering agricultural commodities, plants, biological control organisms, articles that might be infested, means of transportation, and other pathways for moving pests. It authorizes APHIS to prohibit or restrict the importation, exportation, and interstate movement of plants, plant products, certain biological control organisms, noxious weeds, and plant pests. It also authorizes APHIS to inspect foreign plant imports, quarantine any state or premise infested with a new pest or noxious weed, and cooperate with states in certain control and eradication actions.

Both AHPA and PPA give APHIS authority to inspect agricultural imports. However, after the events of September 11, 2001, congressional concern about agroterrorism—the deliberate introduction of an animal or plant disease to infect food, causing economic losses and/or

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5 For more information, see CRS Report R44044, U.S. Trade with Free Trade Agreement (FTA) Partners.


7 Noxious weeds are undesirable plants that infest land or water resources and cause physical and economic damage. Under the PPA—which consolidated APHIS authorities, including almost all of the provisions of the Noxious Weeds Act (7 U.S.C. 2801 et seq.)—APHIS works to prevent noxious weeds from entering the country and conducts cooperative control/eradication programs with the states. Local governments frequently impose taxes on landowners to carry out noxious weed control programs.
undermining social stability—triggered the strengthening of APHIS and other federal agency agricultural inspection activities. Congress passed the Public Health Security and the Bioterrorism Preparedness and Response Act of 2002 (16 U.S.C. §§3371-3378; commonly referred to as the Bioterrorism Act) to bolster protection of the nation’s food and water supplies and prevent unauthorized access to certain animal and plant disease organisms in laboratories. Since the enactment of the Bioterrorism Act, APHIS-issued health permits have been required to accompany APHIS-regulated agricultural imports to facilitate trade.

Table 1. Select Statutes Concerning APHIS Authority Over Import Permit Issuance

<table>
<thead>
<tr>
<th>General</th>
<th>Collection of fees for inspection services</th>
<th>High-priority research and extension initiatives</th>
</tr>
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<tbody>
<tr>
<td>21 U.S.C. §§136-136a</td>
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<tr>
<td>7 U.S.C. §5925</td>
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<tr>
<td>7 U.S.C. §§8301-8317</td>
<td>Animal Health Protection Act</td>
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<tr>
<td>49 U.S.C. §80502</td>
<td>Transportation of animals (also referred to as the “28-Hour Law”)</td>
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<tr>
<td>7 U.S.C. §2274</td>
<td>Firearm authority of employees engaged in animal quarantine enforcement</td>
<td></td>
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<tr>
<td>21 U.S.C. §§151-159</td>
<td>Virus-Serum-Toxin Act</td>
<td></td>
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<tr>
<td>Plant Health</td>
<td></td>
<td></td>
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<tr>
<td>7 U.S.C. §§2279e, 2279f</td>
<td>Title V of the Agricultural Risk Protection Act of 2000</td>
<td></td>
</tr>
<tr>
<td>16 U.S.C. 3371-3378</td>
<td>Lacey Act</td>
<td></td>
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<tr>
<td>7 U.S.C. §8401</td>
<td>Title II, Subtitle B, of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002</td>
<td></td>
</tr>
<tr>
<td>7 U.S.C. §§281-286</td>
<td>Honeybee Act</td>
<td></td>
</tr>
<tr>
<td>Animal Welfare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 U.S.C. §§2131-2159</td>
<td>Animal Welfare Act</td>
<td></td>
</tr>
</tbody>
</table>


Annual Appropriations to Conduct APHIS Health Import Permit Activities

Overall, the House and Senate Agriculture Committees maintain jurisdiction over USDA’s meat and poultry inspection programs and also other food-safety-related programs administered by other USDA agencies. These House and Senate committees direct APHIS, other federal agencies, states, industry, and professional groups to facilitate international and domestic agricultural trade.

The Subcommittees on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies of the House and Senate Appropriations Committees appropriate funds for APHIS. Between FY2014 and FY2018, APHIS’s discretionary appropriation has averaged $877 million annually. APHIS’s appropriations cover four broad mission areas: (1) Safeguarding and Emergency Preparedness/Response, (2) Agency-Wide Programs, (3) Safe Trade and International Technical Assistance, and (4) Animal Welfare. The Safeguarding and Emergency

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8 However, identifying committees of jurisdiction for specific laws, programs, and federal agencies is not straightforward and further complicated by split jurisdiction between FDA and USDA in the case of some foods due to documented fragmentation, overlap, and duplication among the agencies responsible for administering the laws and programs governing certain foods. For more background information, see CRS Report 98-175, House Committee Jurisdiction and Referral: Rules and Practice; and CRS Report 98-242, Committee Jurisdiction and Referral in the Senate.

9 See CRS In Focus IF10953, Agriculture Appropriations: Animal and Plant Health.
Preparedness/Response portion of the APHIS budget is responsible for monitoring animal and plant health in the United States and throughout the world and represents roughly 85% of APHIS’s annual budget. Most of the animal and plant health import permit activities are housed in this mission area.

In May 2018, both the House and Senate appropriations committees reported bills (H.R. 5961, S. 2976, 115th Congress) that would have provided roughly $1 billion for the APHIS budget for FY2019. This amount was roughly $260 million more than Administration’s FY2019 request and would have amounted to an increase of 7% from the FY2018 appropriation of $981.9 million. In August 2018, the Senate passed H.R. 6147, which would have provided $1 billion for APHIS for FY2019.

**APHIS-Issued Federal Orders**

When the APHIS administrator considers it necessary to take emergency action to protect U.S. agriculture or prevent pest or disease entry into the United States, the administrator may issue a Federal Order. Such Federal Orders are effective immediately, contain specific regulatory requirements, and remain in effect until they are revised by another Federal Order or until an interim rule on the subject is published.

APHIS issues Federal Orders, under the PPA, which authorizes USDA to prohibit or restrict the importation or entry of any plant, plant part, or article that USDA identifies as necessary to prevent the introduction or dissemination of a plant pest into or within the United States. For example, in June 2018, APHIS released a Federal Order prohibiting the importation of pomegranate arils from Peru into the United States due to concerns about the potential importation of the Mediterranean fruit fly (*Ceratitis capitata*). This Federal Order is still in effect as of January 9, 2019.

**Obtaining an Animal or Plant Health Import Permit**

Agricultural imports arrive to the United States through five U.S. Customs Districts (*Figure 2*). Although APHIS regulations are enforced at the ports of entry, they are typically mediated through health import permits.

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10 Plus $3.2 buildings and facilities costs.

11 PPA, as amended, §412(a), 7 U.S.C. 7712(a).

12 A pomegranate aril is a seed pod of a pomegranate.

13 APHIS, Federal Import Order, June 11, 2018. The Mediterranean fruit fly can infest a wide range of commercial and garden fruits, nuts, and vegetables, such as apple, avocado, bell pepper, citrus, melon, peach, plum, and tomato.
Figure 2. Total U.S. Agricultural Imports by Customs District (2017)

Notes: 2017 calendar year data.

East Coast Districts: New York, NY; Philadelphia, PA; Miami, FL; Savannah, GA; Norfolk, VA; Baltimore, MD; Tampa, FL; Charleston, SC; Boston, MA; Portland, ME; Charlotte, NC; Washington, DC; and Providence, RI.

Gulf Districts: Laredo, TX; Houston-Galveston, TX; Nogales, AZ; New Orleans, LA; El Paso, TX; St. Louis, MO; Mobile, AL; Dallas-Ft. Worth, TX; and Port Arthur, TX.

West Coast Districts: Los Angeles, CA; San Francisco, CA; Seattle, WA; San Diego, CA; Great Falls, MT; and Portland, OR.

Great Lakes Districts: Detroit, MI; Buffalo, NY; Pembina, ND; Chicago, IL; Ogdensburg, NY; Duluth, MN; Cleveland, OH; Minneapolis, MN; and Milwaukee, WI.

Other Districts: San Juan, PR; Honolulu, HI; Virgin Islands; and Anchorage, AK.

APHIS’s Plant Production Quarantine and Veterinary Services oversee the health import permit process for a “plant health import permit” or “animal health import permit,” respectively (Figure 3). APHIS works with several federal agencies to issue import permits.

Figure 3. APHIS’s Health Import Permit Issuing Offices

Source: CRS, using information from APHIS, Permits and Certifications, March 7, 2016.
Notes: APHIS cooperates with many federal agencies—including CBP, FDA, and FSIS—to facilitate the import permit issuing process. Veterinary biologics are vaccines, bacterins, diagnostics, etc., that are used to prevent, treat, or diagnose animal diseases. These products generally work through an immunological method or process.

U.S. importers obtain APHIS health import permits via the APHIS website (“ePermit”) or in consultation with APHIS or state Department of Agriculture offices. Many U.S. importers use ePermit for the importation of products from abroad as well as for interstate trade. The ePermit
system enables federal regulatory officials to issue, track, and verify the validity of import permits online. There is a cost to the importer associated with each ePermit application.\textsuperscript{14}

APHIS and the state-level authorities often request health import permit submissions alongside supporting documentation (\textbf{Figure 4}).\textsuperscript{15} In many cases, a biosafety facility inspection is a part of the review process—where a facility (e.g., laboratory, greenhouse, growth chamber) must demonstrate they can adequately and safely contain certain organisms.\textsuperscript{16} Health import permits are normally processed and issued within 10 business days of receipt of the application.

**Figure 4. Flow Chart of APHIS-Issued Animal or Plant Health Import Permit**

After a health import permit is obtained, APHIS and/or CBP must inspect the APHIS-regulated product. One of the flagship programs that APHIS and CBP collaborate on and administer is the Agricultural Quarantine Inspection (AQI) program. AQI ensures that the required health permits, sanitary certificates (for animal products), and phytosanitary certificates (for plant products) accompany each shipment. APHIS transfers funds to CBP to conduct AQI activities.

APHIS collects AQI user fees from international airline passengers, operators of commercial vehicles,\textsuperscript{17} cruise ship passengers, and importers of shipments requiring phytosanitary treatments.\textsuperscript{18} Congress appropriates funding for AQI each year (e.g., operating expenses such as rent, utilities, travel, and supplies to conduct program activities). The AQI user fees recover costs that APHIS and CBP bear to administer the inspections. USDA estimates that in FY2018, AQI collected $765 million in fees, of which it transferred $539 million to DHS and retained $226 million to augment its discretionary appropriation.\textsuperscript{19} In a 2013 report, the Government Accountability Office (GAO) identified a gap between fee revenues and total program costs.\textsuperscript{20} In its report, GAO recommended aligning the division of fees between APHIS and CBP with their respective costs and that the two agencies ensure that fees are collected when due. In February 2018, APHIS announced it had implemented all of GAO’s recommendations.\textsuperscript{21}

\textsuperscript{14} 9 CFR 130.2 and 7 CFR 354.3.


\textsuperscript{16} Often conducted and reviewed by APHIS, the objective of the biosafety facility inspection is to verify that the facility has protocols in place to contain certain plant and animal pests or diseases (7 C.F.R. 330).

\textsuperscript{17} Vehicles include aircraft, commercial maritime vessels, commercial trucks, and commercial railroad cars.

\textsuperscript{18} Under Section 2509 of the Food, Agriculture, Conservation, and Trade Act of 1990.


Role of Other Government Entities in Plant and Animal Imports

Importers must obtain APHIS-issued health import permits before beginning the inspection process. In addition to APHIS, Congress has directed other federal agencies and state-level Departments of Agriculture (see Table 2) to participate in inspecting APHIS-regulated products:

1. **The Food and Drug Administration (FDA)** has taken steps to protect the public from terrorist attacks on the U.S. food supply and other food-related emergencies in collaboration with DHS. Since 2003, FDA has advised U.S. importers to submit “prior notice” online forms to FDA before food is imported or offered for import into the United States. Unlike APHIS, FDA does not enforce industry guidelines, but FDA does review APHIS-issued import permits to verify the disease or pest status of the agricultural product. The Food Safety Modernization Act (FSMA; P.L. 111-353) created new rules governing FDA’s food inspection regime of both domestic and imported foods under the agency’s jurisdiction.  

- **CBP** and APHIS inspect agricultural products together through the AQI program. CBP officials require U.S. importers to present an APHIS-issued import permit before conducting inspections.

- **The Food Safety and Inspection Service (FSIS)** has regulatory oversight of meat, poultry, and some egg products. FSIS often requests APHIS-issued health import permits before proceeding with meat inspections. In the case of FSIS-regulated products, FSIS requires APHIS-issued animal health import permits to ensure that the meat and/or poultry ingredients in such food products are prepared under FSIS inspection or in a foreign establishment certified by a foreign inspection system approved by FSIS.

- **State-level Departments of Agriculture** enforce APHIS regulations. States have different animal and plant health import restrictions that apply to interstate trade. Some states have heightened restrictions based on disease and pest detections. Similar to FSIS, state-level regulators typically request APHIS-issued animal or plant health import permits before conducting their inspections. State-level Departments of Agriculture often coordinate with APHIS and CBP directly (e.g., when a state detects a disease outbreak).

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23 FSMA amends the Federal Food, Drug, and Cosmetic Act. For more information, see CRS Report R43724, *Implementation of the FDA Food Safety Modernization Act (FSMA, P.L. 111-353)*. FSMA was the largest expansion of FDA’s food safety authorities since the 1930s.

24 See “Introduction” for a discussion on CBP activities.

Table 2. Select Government Entities that Inspect Agricultural Imports

<table>
<thead>
<tr>
<th>Government Entity</th>
<th>Commodity Jurisdiction</th>
<th>APHIS Health Import Permit Enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>APHIS</td>
<td>Animals, animal products, veterinary biologics, plants, plant products, pests, organisms, soil, and genetically engineered organisms</td>
<td>Yes</td>
</tr>
<tr>
<td>Food and Drug Administration (FDA)</td>
<td>Dietary supplements, bottled water, food additives, infant formula, other food products (not regulated by USDA), eggs in the shell, and game meats</td>
<td>No</td>
</tr>
<tr>
<td>Customs and Border Protection</td>
<td>All APHIS-regulated commodities</td>
<td>Yes</td>
</tr>
<tr>
<td>Food Safety and Inspection Service</td>
<td>Meat, poultry, and some eggs</td>
<td>Yes</td>
</tr>
<tr>
<td>State-Level Departments of Agriculture</td>
<td>All APHIS-regulated commodities</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Summarized by CRS. For more information on the agencies and their roles see CRS Report RS22600, *The Federal Food Safety System: A Primer.*


Congressional Activities

Congress has long been involved in efforts to prevent the entry of pest and disease threats into the United States from agricultural imports. This oversight has manifest in various congressional actions, including continuing to provide APHIS with appropriations to monitor pests and diseases, introducing legislation to address invasive species (e.g., Areawide Integrated Pest Management, H.R. 5411, 115th Congress), and directing CBP to enforce APHIS regulations to deter agricultural smuggling into the United States. APHIS-issued animal and plant health import permits can be a tool to prevent agricultural import threats to the United States. The sections that follow summarize selected issues that Congress has addressed by directing APHIS to undertake a specific role, assigning the agency with specific responsibilities, or authorizing it carry out certain actions.

Pests and Diseases

In the event of a U.S. disease outbreak or pest infestation, APHIS is designated to be the lead U.S. agency for informing the international community (such as to the World Organization for Animal Health, also known as “OIE”). Typically, APHIS would directly contact the partner country’s scientific authority to explain the nature and extent of the outbreak. In most cases, APHIS and officials of the partner country observe the SPS guidelines agreed upon under the WTO framework or, in some cases, the SPS chapters in individual FTAs. Responses to a pest or

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26 OIE is based in Paris and known by its former French abbreviation, OIE (Office International des Épizooties), even though it has been renamed the World Organization for Animal Health. OIE is not part of the United Nations but is a separate intergovernmental organization that was founded in 1924 under an international agreement. For more information, see OIE’s website: http://www.oie.int/index.php.

27 APHIS is the lead federal agency charged with enforcing SPS chapter agreements in FTAs as well as WTO SPS guidelines/commitments in order to limit the disruption to agricultural trade from pest and disease detections or outbreaks. See WTO, “Sanitary and Phytosanitary Measures,” https://www.wto.org/english/tratop_e/spse/spse_e.htm.
disease outbreak can include a complete ban on the importation of U.S. products impacted by the pest/disease. Under certain circumstances, a “regionalization” protocol may be applied in which a specific exporting region within the United States may be recognized as disease- or pest-free.

In the event of a trading partner experiencing a disease outbreak or pest infestation, the notification process is similar to a U.S. outbreak (e.g., informing OIE). APHIS informs U.S. importers of the trading partner outbreak. U.S. importers work with APHIS to verify that the health import permit reflects the disease or pest status of the exporting country. APHIS provides guidance to U.S. importers if their health import permits would be accepted (e.g., following SPS protocol of regionalization) or rejected (e.g., ban products from an infected trading partner).

Table 3 provides a selected listing of prominent APHIS-monitored diseases and pests that pose a threat to U.S. agriculture. Among these are disease concerns, including avian influenza and foot-and-mouth disease, and invasive plant pests such as the Asian longhorned beetle and the emerald ash borer. In some instances, agricultural imports (or even interstate shipments) can arrive into AQI with pests and diseases that could impact public health or U.S. agricultural production systems.

Table 3. Select APHIS-Monitored Pests and Diseases

<table>
<thead>
<tr>
<th>PLANT</th>
<th>ANIMAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Asian citrus psyllid</td>
<td>• Avian influenza</td>
</tr>
<tr>
<td>• Asian gypsy moth</td>
<td>• Bovine spongiform encephalopathy</td>
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<tr>
<td>• Asian longhorned beetle</td>
<td>• Brucellosis</td>
</tr>
<tr>
<td>• Citrus greening</td>
<td>• Castle fever tick</td>
</tr>
<tr>
<td>• Coconut rhinoceros beetle</td>
<td>• Chronic wasting disease</td>
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<tr>
<td>• Emerald ash borer beetle</td>
<td>• Classical swine fever</td>
</tr>
<tr>
<td>• European cherry fruit fly</td>
<td>• Contagious equine metritis</td>
</tr>
<tr>
<td>• False codling moth</td>
<td>• Equine herpesvirus</td>
</tr>
<tr>
<td>• Giant African snail</td>
<td>• Equine infectious anemia</td>
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<tr>
<td></td>
<td>• Equine piroplasmosis</td>
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<td></td>
<td>• Equine viral arthritis</td>
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<td></td>
<td>• Foot-and-mouth disease</td>
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<tr>
<td></td>
<td>• Johns</td>
</tr>
<tr>
<td></td>
<td>• Imported fire ant</td>
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<tr>
<td></td>
<td>• Khapra beetle</td>
</tr>
<tr>
<td></td>
<td>• Light brown apple moth</td>
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<tr>
<td></td>
<td>• Mediterranean fruit fly</td>
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<tr>
<td></td>
<td>• Mexican fruit fly</td>
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<td></td>
<td>• Old world bollworm</td>
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<td></td>
<td>• Oriental fruit fly</td>
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<td></td>
<td>• Spotted lanternfly</td>
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<tr>
<td></td>
<td>• Sudden oak death</td>
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<tr>
<td></td>
<td>• New World screwworm</td>
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<tr>
<td></td>
<td>• Piroplasmosis</td>
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<tr>
<td></td>
<td>• Porcine epidemic diarrhea virus</td>
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<tr>
<td></td>
<td>• Pseudorabies</td>
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<tr>
<td></td>
<td>• Schmallenberg virus</td>
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<td></td>
<td>• Scapie</td>
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<tr>
<td></td>
<td>• Spring viremia carp</td>
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<td>• Swine influenza</td>
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<td>• Ticks</td>
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<td></td>
<td>• Tuberculosis/Brucellosis</td>
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<td></td>
<td>• Tuberculosis</td>
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<tr>
<td></td>
<td>• Vesicular stomatitis</td>
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<td></td>
<td>• West Nile virus</td>
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Notes: Italicized font refer to diseases. Non-italicized font refer to pests.

Congress has sometimes directed APHIS to address certain diseases through the annual appropriations process. For example, the Consolidated Appropriations Act, 2018 (P.L. 115-141), includes a general provision providing APHIS with an additional $5.5 million—to remain
available until the end of FY2019—to fund a multiple-agency response to citrus greening disease.28

**Agroterrorism**

Agroterrorism is the deliberate introduction of an animal or plant disease with the objective of infecting food, causing economic losses and/or undermining social stability. Requiring U.S. importers to obtain APHIS-issued health import permits is one way that APHIS and the CBP protect against agroterrorism. Permits provide APHIS and CBP inspectors an opportunity to conduct random sampling to assist in disease and pest identification or to detect other potential threats.

Congress has taken steps to address potential harmful imports (“select agents”) that could impact public health or animal/plant health29 through the Bioterrorism Act by directing the Department of Health and Human Services’s (HHS) Centers for Disease Control and Prevention (CDC) and APHIS to enforce the Select Agents and Toxins List under the Federal Select Agent Program.30 The agents and toxins on this list have been determined to pose a threat to human and animal health, plant health, or animal and plant products.31 Some of these agents and toxins are overseen by HHS, others by USDA, and certain ones by both agencies.

**Invasive Species**

An invasive species is a nonnative (also known as an alien) species that does or is likely to cause economic or environmental harm or harm to human health.32 Invasive species include plants, animals, and microbes. The introduction of invasive species into the United States—whether deliberate or unintentional—can threaten native animal and plant communities, lead to ecosystem disruptions, and contribute to extinctions of native species. Invasive species can also impact biodiversity and alter habitats and can result in the introduction of new pests and diseases.33 An estimated 50,000 non-native invasive animal and plant species have been introduced to the United States for over a century, with a 2011 study citing total costs exceeding $100 billion annually—including economic costs related to damages as well as management, mitigation, and recovery activities.34

APHIS collects information on invasive species and monitors their impacts (e.g., on agricultural production, forest lands). The information is updated and shared with AQI and ports of entries. The health import permits provide the APHIS/CBP officials specific guidelines (e.g., identifying

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28 P.L. 115-141, §771. Citrus greening, also called Huanglongbing or yellow dragon disease, is spread by an insect called the Asian citrus psyllid. The psyllid feeds on the stems and leaves of the trees, infecting the trees with the bacteria that causes citrus greening. Greening impairs the tree’s ability to take in nourishment, ultimately resulting in fewer and smaller fruit over time. There is currently no cure for infected trees.

29 For more information, see section “Microbial Pathogens in the Laboratory: Safety and Security” in CRS Report R44786, Science and Technology Issues in the 115th Congress.


31 An attenuated strain of a select agent or an inactive form of a select toxin may be excluded from the requirements of the Select Agent Regulations.

32 For more information, see CRS In Focus IF11011, Invasive Species: A Brief Overview.

33 See CRS Report R43258, Invasive Species: Major Laws and the Role of Selected Federal Agencies.

34 Inherent in any calculation of the costs of invasive species, however, is valuation of economic and societal factors on which expert opinion differs. See D. Pimentel, “Environmental and Economic Costs Associated with Alien Invasive Species in the United States,” in Biological Invasions: Economic and Environmental Costs of Alien Plant, Animal, and Microbe Species (Abingdon, UK: CRC Press, 2011).
specific pests), depending on the origination of the product, that facilitate detection during inspecting or random sampling of the imported agricultural products. U.S. importers also work with APHIS and other federal agencies (e.g., the Environmental Protection Agency) to obtain regulations on preventing an invasive species infestation (e.g., vessel ballast water discharge).  

Several statutes provide federal agencies with authorities to address invasive species in the United States. Some in Congress have expressed interest in pursuing legislation to reduce the prevalence of invasive species, such as through the introduction of “area-wide integrated pest management” (e.g., H.R. 5411, 115th Congress), a pest management strategy that is applied within a geographical area. This bill would have expanded the USDA Integrated Research, Education, and Extension Competitive Grants Program for qualified area-wide integrated pest management projects.

**Smuggling**

Over the past 30 years, there has been a steady increase in the movement of people and agricultural products around the world. The volume of smuggled and improperly imported agricultural products entering the United States has been a congressional concern. Products smuggled into the United States can harbor exotic plant and animal pests, diseases, or invasive species that could damage domestic crops, livestock, and the environment. If APHIS identifies an illegally imported product or a regulatory violation, it may seize the item and pursue civil and criminal penalties, if warranted. APHIS encourages distributors and retailers to purchase products that have been imported through legal channels that are typically accompanied by APHIS health import permits.

One way that Congress has attempted to prevent agricultural smuggling is through the Lacey Act. The Lacey Act dates from 1900 and prohibits the importation of any plant— with limited exceptions—that is taken or traded in violation of domestic or international laws. The act requires declarations—in addition to the APHIS-issued plant health import permits—for imported shipments of most plants or plant products. APHIS works with CBP, the U.S. Coast Guard (e.g., for fisheries violations), the National Marine Fisheries Service, the Federal Bureau of Investigation, the U.S. Forest Service, and U.S. Immigration and Customs Enforcement to enforce the Lacey Act through inspection or monitoring activities. APHIS’s role in this context is to collect APHIS-issued health import permits, manage the declaration requirement, provide guidance to importers regarding the declaration, perform compliance checks, and provide enforcement agencies with information to assist their investigations. The declaration is to be made by the importer at the time of import. According to USDA, both CBP and APHIS activities have contributed to an increase in the number of declarations, with approximately 1 million declarations in FY2017, up roughly 300,000 from FY2016. This increase has coincided with the introduction of the online system in lieu of paper-based declarations.

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35 See CRS Report R42142, *EPA’s Vessel General Permits: Background and Issues.*
39 For more information, see CRS Report R42119, *The Lacey Act: Compliance Issues Related to Importing Plants and Plant Products.*
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