National Animal Disease Preparedness and Response Program (NADPRP) FY 2022 Projects

In Fiscal Year 2022, APHIS provided $7.6 million for 35 projects focused on (1) developing vaccination plans for FAD outbreaks, (2) supporting animal movement decisions in a FAD outbreak, or (3) delivering outreach and education on animal disease preparedness and response topics to targeted audiences.

Title	Recipient	Amount	Summary
Increased Biosecurity and Disease Prevention for the Horse Industry	The American Association of Equine Practitioners	$176,960	The American Association of Equine Practitioners (AMEP) is increasing biosecurity and disease prevention in the horse industry by identifying current gaps in biosecurity knowledge and developing and tailoring outreach efforts to audiences at horse races, horse shows, farms, stables, trail rides, and horse events. The project includes developing new disease identification and prevention fact sheets and biosecurity tools, providing educational materials to help horse owners develop biosecurity plans, and sharing information about biosecurity in the horse industry. This is the first NADPRP-funded project supporting the equine industry.
Developing Movement Decision Criteria and Exercising Movement Plans for Livestock Grazing Public Land Allotments in and Around FAD Control Areas Through Collaboration with Industry, State, and Federal Partners	The American Sheep Industry Association	$207,276	The American Sheep Industry Association is leading a collaborative project that addresses the unique challenges of sheep and cattle producers who use public grazing lands during an FMD outbreak. The project is focused on discussing, developing, and exercising livestock management options, movement strategies, and guidance documents to manage and mitigate risks for livestock on public land allotments in an FMD outbreak. The project also aims to develop an animal movement plan to address this issue that will align with USDA's FMD Response Plan.
Mitigation of Economic Loss Within the Arizona Cattle and Swine Industries Secondary to a Transboundary FAD Outbreak Through Efficient Implementation of Vaccine Delivery	The Arizona Department of Agriculture	$234,911	The Arizona Department of Agriculture (ADA) is developing a vaccination plan that will provide rapid and efficient vaccine delivery to premises considered to be high risk during a Foreign Animal Disease (FAD) response. The project includes tabletop and full-scale exercises that will improve the State's capabilities in obtaining, storing, and distributing vaccine through the mobilization of industry responders.
CA Community College Program Expansion: CA Secure Food Supply (SFS) Enhanced Biosecurity Plans	University of California, Davis	$502,156	UC Davis is working with two Hispanic serving community colleges to develop a new animal agriculture biosecurity curriculum that will integrate into existing community college programs. The curriculum builds on existing materials used by farmers to develop biosecurity plans for the California Secure Food Supply program. In-person and online courses and on-site educational experiences will

Title	Recipient	Amount	Summary
			give college students in-demand job skills of writing biosecurity plans and consulting on farm biosecurity. The project includes faculty collaboration across several colleges, CDFA, and the dairy industry to ensure that the skills taught will benefit CDFA and industry and contribute to workforce development.
Closing the Gaps: Improving Animal Disease Mitigation, Identification and Response Knowledge of Private Veterinary Practitioners and Small Flock Owners and Training the Next Generation of Emergency Disease Response Professionals	The University of Delaware	$236,609	The University of Delaware is strengthening emergency preparedness in the poultry industry by providing poultry disease identification and emergency response education and outreach to small flock owners and small animal veterinarians. The project includes multiday emergency response training events, tabletop exercises, and education geared toward non-commercial small-scale and backyard poultry producers. To meet the needs of underrepresented populations, the university is presenting two training events in Spanish.
Enhancing Georgia's FAD Response Capabilities TEP Part II -Vaccination	The Georgia Department of Agriculture	$252,101	The Georgia Department of Agriculture (GDA) is developing a vaccination plan for livestock Foreign Animal Disease (FAD) response as part of a broad, multi-part effort to develop their FAD preparedness, response, and recovery capabilities. The project includes a tabletop exercise and an operations-based exercise that will help GDA validate their new vaccination plan, engage, and familiarize stakeholders with how the plan will work in an FAD outbreak, identify gaps, and further revise and improve the plan.
Enhancing Georgia's FAD Response Capabilities– Animal Movement and Continuity of Business	The Georgia Department of Agriculture	$195,346	The Georgia Department of Agriculture is developing an emergency permitting plan for continuity of business during a livestock Foreign Animal Disease event. The project includes a tabletop exercise to help identify improvement areas followed by an operational exercise to test Georgia Permitting Plan to determine the State's ability to implement the plan effectively.
Animal Disease Training and Exercises Across the Veterinary Educational Spectrum (AD-TEAVES) Two	The University of Illinois	$494,931	The University of Illinois is delivering animal disease training and exercise opportunities in 30 eastern and north-central States that target small and socially disadvantaged producers, veterinary students, incident management team (IMT) personnel, and State and Federal animal health regulatory personnel. The project includes 1) public educational events, 2) training to IMT personnel and tribal all-hazards IMT personnel, 3) online courses for veterinary students leading to Veterinary Emergency Responder certification, 4) multiple large-scale tabletop exercises in eastern States to include 150 to 175 participants ranging from producers to regulators, and 5) educational modules to target improvement areas identified in the exercise.
Framework for Interstate Movement Decisions During a Foot and Mouth Disease Outbreak	Iowa State University, Center for Food Security and Public Health	$504,563	Iowa State University, Center for Food Security and Public Health is coordinating a broad, multi-State initiative to build consensus and develop criteria and documents to support a new framework for interstate animal movement decisions during a Foot and Mouth Disease outbreak in the U.S. The project includes developing common approaches to rapid surveillance, criteria for designation of State status, and

Title	Recipient	Amount	Summary
			identification of vaccinated, infected, and recovered animals/herds in an FMD response. The project is endorsed by the National Assembly of State Animal Health Officials.
Biosecurity Your Way: Guided Assessment and Planning for Beginning Farmers, Non-traditional Farmers, and New Farm Employees	Iowa State University	$239,563	Iowa State University (ISU) is developing biosecurity training for beginning farmers, non-traditional farmers, new farm employees and other audiences with no prior biosecurity experience using unique, media-savvy approaches. The project includes development of a free, bilingual, interactive, mobile-friendly biosecurity short course that includes photos, videos, animations, and segments with farmers and biosecurity experts. The course helps user assess biosecurity practices and develop biosecurity plans and is promoted through producer organizations, extension, veterinarians, and groups representing underserved populations.
Cleaning and Disinfection 101: On-line Educational Training and Tools for Animal Health Professionals	Iowa State University	$264,110	Iowa State University (ISU) is improving livestock biosecurity practices by developing and delivering a new, nationally available, interactive, and free online cleaning and disinfection (C&D) courses for veterinarians, veterinary staff and students, extension agents, producers, farm employees, and other animal health professionals. The educational materials are provided in English and Spanish to train participants to implement C&D procedures on livestock and poultry premises.
Implementation and Communication of the Foot and Mouth Disease Vaccination Plan	The Kansas Department of Agriculture	$63,232	The Kansas Department of Agriculture (KDA) is enhancing their current Foreign Animal Disease (FAD) vaccination plan, including process improvements for requesting the right doses of vaccine, identifying equipment, personnel, and supply requirements to administer vaccinations, managing, and tracking vaccinated animals, and engaging accredited veterinarians. Upon project completion, KDA will have a new validated vaccination plan that is realistic, adaptable, align with USDA guidelines, and support coordination among industry responders.
FMD Transmission Risk of Cattle Movements to and from Auction Markets – Quantitative Risk Assessment and Development of an Online Risk Calculator	Kansas State University	$201,841	Kansas State University is developing a quantitative risk analysis model to estimate the transmission risk of cattle movements into and out of auction markets. The project will allow estimation of risk as well as important sources of variability and uncertainty to guide livestock movement control policy in disease outbreak situations. The model is applicable to cattle auction market operations across the U.S and allows for updates as new data are developed. The project also includes developing an online movement risk calculator.
Mobile Education and Outreach Trailer	The Maryland Department of Agriculture	$116,270	The Maryland Department of Agriculture (MDA) is strengthening community knowledge of animal disease prevention through hands-on demonstrations and training using multi-lingual educational materials that will focus on underserved farmers in rural and urban areas. MDA is using a new exhibit trailer to bring valuable biosecurity education opportunities to community farms, events, exhibits, fairs, and trade shows to better serve the needs of underrepresented agriculture groups.
Improving Processes for Issuing Movement Permits During an African Swine Fever Response	The Michigan Department of Agriculture and Rural Development	$195,098	The Michigan Department of Agriculture and Rural Development is strengthening movement permitting readiness in Midwest States including MI, IL, IN, and OH. This collaborative project is improving processes for issuing permits in each State during an FAD response. The project includes educational webinars and tabletop exercises to

Title	Recipient	Amount	Summary
			increase producer and industry partner awareness of the processes for permitted movement of animals, feed, and equipment in FAD events.
Risk Assessment of Fish Movements from Great Lakes Region Fish Farms and Hatcheries to Natural Waters	The University of Minnesota	$331,296	The University of Minnesota is developing a workgroup of Federal, State, and Tribal Nation fish health regulators, fish farmers, hatchery producers, and other subject matter experts to develop science-based risk assessments (RAs) of moving susceptible fish species from uninfected premises to natural waters in the Great Lakes region. The RAs are being translated into movement guidance documents, a consistent risk-based framework guide for movement decisions, and widely distributed direct-action guides for farmed fish producers. This is the first NADPRP-funded project supporting aquatic animal industries.
Modernizing Secure Poultry Supply Plans: Using a scientific approach, team science, and current data to provide updated risk estimations before the next outbreak	The University of Minnesota	$272,696	The University of Minnesota is updating risk assessments used in secure poultry supply plans to assure that risk ratings, mitigation strategies, and guidance criteria needed in a FAD outbreak correctly consider current industry practices. This will revitalize and modernize the risk assessments and makes them more accurate and more useful to producers, regulators, and all stakeholders.
Enhancing U.S. Swine Industry Readiness to Foreign Animal Disease at All Production Levels in Missouri By Combining Standardized On-Farm Biosecurity Plans and Animal Movement in a Data Management Tool	The University of Missouri	$271,730	The University of Missouri is collaborating with North Carolina State University to standardize Secure Pork Supply (Biosecurity) Plans in Missouri and develop a database and application that will combine biosecurity plan information and swine movement data and be used to inform risk-based swine disease prevention and control programs. The project is expanding SPS plan adoption in the swine industry and refining site-specific business continuity plans for Missouri pork producers.
Nebraska FMD Vaccination Plan (FmdVP)	The Nebraska Department of Agriculture	$97,000	The Nebraska Department of Agriculture (NDA) is working to develop a statewide Foot and Mouth Disease Vaccination Plan (FmdVP) for a diverse livestock industry to include all cloven-hooved species. Aspects of the plan includes developing a FMD Vaccination Informational Forum, conducting a functional exercise, and increasing supply inventory required for a mass vaccination exercise. This project positions Nebraska to more effectively prepare and respond to Foot and Mouth Disease in the event of an outbreak.
Protect the Herd – Enhancing New Mexico's Response to a FAD Event Through Vaccination Planning and Training	The New Mexico State University	$220,270	The New Mexico State University (NMSU), The Southwest Border Food Protection and Emergency Preparedness Center (Center) and New Mexico Department of Agriculture (NMDA) are developing a regionally coordinated vaccination and animal movement plan with bordering jurisdictions to ensure consistent and coordinated implementation of vaccination and animal movement procedures across boundaries during a Foreign Animal Disease (FAD) response.
Descriptive Analysis of Multiple Swine Movement Networks and The Development of a Network Model to Estimate the Impacts of Movement Restrictions Under the National African Swine Fever Response Plan	North Carolina State University	$312,012	North Carolina State University is analyzing pig movement across North Carolina, Oklahoma, and Texas using real and up-to-date population and between-farm movement data and developing contact networks that will help identify potential African Swine Fever disease transmission paths. They are developing a model to better understand and quantify the impacts of USDA control strategies on farms and vehicle movements in control zones in an ASF response.

Title	Recipient	Amount	Summary
Developing a Tool for Standardization for Cataloging, Reviewing, and Approving of Secure Beef Supply Plans of Producers on Different Types of Operations in Kansas	North Carolina State University and Kansas Department of Agriculture	$405,110	North Carolina State University and Kansas Department of Agriculture are collaborating to improve on-farm Secure Beef Supply biosecurity plans and review and standardize these plans. The project focuses on expanding SBS plan adoption throughout the Kansas cattle industry and developing a database and application to enhance the State's ability to rapidly access and use information to respond to animal health emergencies and enable business continuity in Kansas. This project builds on successful projects that NADPRP funded in 2019 and 2020.
Building Blue Ribbon Preparedness for Foreign Animal Disease Outbreak Response among the Show Pig Industry	The Ohio State University	$185,504	The Ohio State University is improving preparedness for foreign animal disease (FAD) response by delivering educational programs to exhibition swine producers on the risk and response to an FAD outbreak in the U.S. The project includes Secure Pork Supply Plan workshops, helping exhibit animal producers develop biosecurity plans, developing a road map of show pig movement networks, and an outbreak response exercise to increase awareness in this audience about the challenges presented by an FAD outbreak.
Real Time Data Interchange for Disease Response and Movement Permitting in Oregon	The Oregon Department of Agriculture	$62,722	The Oregon Department of Agriculture is expanding on current methods use to track avian field work to support laboratory testing, incident surveillance, and permitted movement activities in disease responses for any species of livestock. The project focuses on improving the flow of data from field sample collection to laboratory testing to reporting diagnostic results and includes coordination of information with USDA's EMRS system to support surveillance and permitted movement of animals and animal products in a large-scale disease response.
Development of an Oregon Statewide Cross-Sector Secure Food Supply Program	The Oregon Department of Agriculture	$152,896	The Oregon Department of Agriculture is improving secure food supply programs in Oregon by developing a State Secure Food Supply (SFS) participant registry, improving training and materials to encourage producers to develop and validate biosecurity plans, and developing commodity-specific movement guidance. The overall goal is to provide producers with accurate and easy-to-follow training and guidance materials to improve continuity of business for livestock producers during an FAD response.
Evaluation, Enhancement, and Socialization of a Comprehensive Statewide Animal Disease Response Plan	The Oregon Department of Agriculture	$72,349	The Oregon Department of Agriculture (ODA) is updating their Animal Disease Response Plan through a series of tabletop and functional disease response exercises engaging livestock industry representatives. The project includes the development and implementation of a strategic communications plan providing outreach on biosecurity and disease prevention to Oregon livestock producers with an emphasis on reaching diverse and non-traditional livestock producers.
Animal and Agricultural Emergency Preparedness Regional Group Meeting	Clemson University Livestock Poultry Health	$143,447	Clemson University Livestock Poultry Health (LPH) is collaborating with regional partners to co-host a meeting to work on regional foreign animal disease (FAD) response topics including FAD vaccination plans, permitted movement between states during disease incidents, regional disease-specific plans, and consistent regional messaging and outreach.

Title	Recipient	Amount	Summary
Online Emergency Preparedness Video Resources for Tennessee Livestock Producers and Caretakers	The Tennessee Department of Agriculture	$146,007	The Tennessee Department of Agriculture is producing a series of publicly available video resources to aid in animal health emergency planning and improve outreach to producers who need assistance with creating biosecurity plans. The project is also developing biosecurity planning resources for use in livestock facilities. The project's outreach and education materials will be available on a public webpage for easy access by all animal agriculture stakeholders.
Outreach to Beginner and Small- to Mid-Sized Tennessee Livestock Producers to Increase Premises Identification Number Registry and Enhance Emergency Preparedness	The Tennessee Department of Agriculture	$112,938	The Tennessee Department of Agriculture (TDA) is enhancing emergency preparedness efforts in TN by conducting outreach activities for new and small- mid-sized livestock operations. The outreach focuses on educating producers on the importance of registering for a premises identification number and collecting, recording, and maintaining premises information that is critically needed if their farm is involved in an outbreak or located in a disease control zone.
Poultry Agribusiness Training for Development of an Enhanced Emergency Preparedness Infrastructure Partnership between the US Commercial Poultry Industry and Animal Health Officials	The Texas A&M AgriLife Research Unit	$168,166	The Texas A&M AgriLife Research Unit is creating a national poultry industry training program to provide specialized education opportunities for State and Federal regulatory animal health officials through one-week short courses. The program supports the overall goal of enhancing emergency management competencies of State and Federal animal health officials, protecting the well-being of the U.S. poultry industry, and increasing capabilities, capacity, and readiness of the agricultural community in the face of reportable diseases.
Outreach and Education Program Development on Animal Mortality Preparedness and Response in the State of Texas	The Texas A&M AgriLife Extension	$147,719	The Texas A&M AgriLife Extension is developing online animal mortality management training and outreach materials for producers of dairy, beef, swine, and poultry feeding operations in Texas. The project is also developing a virtual field guide, education material and templates, and an interactive online map displaying critical resources and key contacts for animal mortality management to improve access and audience understanding of carcass disposal in Texas.
Producer Education and Plan Implementation of Secure Food Supply Plans in Texas	The Texas Animal Health Commission	$99,501	The Texas Animal Health Commission (TAHC) is improving the State's Secure Food Supply Plans (SFSPs) for beef, pork, milk, sheep and wool, and poultry by educating accredited veterinarians about SFSPs, establishing a communication and education plan for producers to help producers develop premises-specific plans, and improving TAHC's process for receiving, reviewing, storing plans, and providing useful feedback to producers about their plans. The project engages industry to address communication issues and set goals for producer enrollment in SFSPs.
Microbial Evaluation of Poultry Farm Pathogen Interventions to Improve Biosecurity	Texas A&M AgriLife Research	$116,809	Texas A&M AgriLife Research is improving current farm biosecurity practices in layer and broiler complexes in southeastern States. They are working with industry partners to conduct environmental testing to detect microbes (surrogates for disease pathogens) before and after implementation of different biosecurity intervention strategies. The environmental testing will assess effectiveness of cleaning, disinfection, and other biosecurity methods and provide direct feedback on how effectively these techniques are being implemented on premises. Results will be shared with poultry industry

Title	Recipient	Amount	Summary
			partners and help farm workers improve the effectiveness of their biosecurity practices and programs.
Carcass Management Preparedness Train the Trainer Programs for Animal Agriculture Sector Responders in the Northwest	The Washington State Department of Agriculture	$194,366	The Washington State Department of Agriculture (WSDA) is collaborating with Washington State University (WSU) to update the Foreign Animal Disease (FAD) Carcass Management Response - Train the Trainer Program for Livestock Agricultural Professionals and is conducting two new training sessions that will increase the number of SME's on this topic in the Pacific Northwest. The training includes mortality management, composting, above ground burial, and the use of grinding equipment. The project is developing guidance documents, best management practices, and a training framework. Materials will be available on a centralized mortality management resource public webpage to help all livestock agricultural professionals.
West Virginia Animal Disease Preparedness and Response Enhancements	The West Virginia Department of Agriculture	$108,801	The West Virginia Department of Agriculture is enhancing existing disease preparedness and response capabilities through outreach and education on animal disease prevention, preparedness, and response topics to small-to-mid-size food animal producers and emergency responders .
Development of A Bovine Germplasm Movement Plan (BGMP) to Maintain Interstate Movement of Bovine Germplasm and High Genomic Merit Cattle in the Event of a Foot and Mouth Disease Outbreak	The University of Wisconsin Veterinary Diagnostic Lab	$100,999	The University of Wisconsin Veterinary Diagnostic Lab is collaborating with industry and state and federal animal health officials to develop standardized criteria to allow interstate movement of bovine germplasm and high genomic merit animals during a FMD outbreak. This will the first Secure Supply Plan related to germplasm products and will facilitate continuity of business in this industry area in an FAD response.