

Report to Congress

The National Agriculture and Food Defense Strategy

FY 2024

**Submitted Pursuant to
Section 108 of the
Food Safety Modernization Act**



**U.S. FOOD & DRUG
ADMINISTRATION**

Executive Summary

Protecting the nation's food and agriculture supply against intentional contamination and other emerging threats is an important responsibility shared by federal agencies and state, local, tribal, and territorial governments, as well as by private sector partners. The Food Safety Modernization Act (FSMA) focuses on ensuring the safety of the U.S. food supply by shifting the efforts of federal regulators from response to prevention and recognizes the importance of strengthening existing collaboration among all stakeholders to achieve common public health and security goals (Public Law 111-353). FSMA identifies some key priorities for working with partners in areas such as reliance on federal, state, and local agencies for inspections; improving foodborne illness surveillance; and leveraging and enhancing state and local food safety and defense capacities.

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I. National Agriculture and Food Defense Strategy

A. Introduction

The Food Safety Modernization Act (FSMA) is primarily focused on preventing illness from unintentional contamination, but it also contains mandates for strengthening the U.S. food supply against terrorism and/or intentional adulteration. Specifically, section 108 of FSMA directs the Secretary of Health and Human Services and the Secretary of Agriculture, in coordination with the Secretary of Homeland Security, to develop and implement the National Agriculture and Food Defense Strategy (NAFDS).

Section 108(a)(4) of FSMA requires that the Department of Health and Human Services (HHS) and the United States Department of Agriculture (USDA), in coordination with the Department of Homeland Security (DHS), not only provide updates to Congress every 4 years after the initial submission of the NAFDS report but also report on the progress made by federal agencies, as well as by state, local, tribal, and territorial governments (SLTT) governments, towards the achievement of the following four NAFDS goals: Preparedness, Detection, Emergency Response, and Recovery.

B. Methodology

The FSMA 108 NAFDS Interagency Working Group (Working Group), led by FDA's Human Foods Program's (HFP) Office of Coordinated Outbreak Response, Evaluation & Emergency Preparedness within the Division of Preparedness and Emergency Programs also known as Food Defense Team (FDT¹) oversees the voluntary state survey.

The mission of the FSMA 108 NAFDS Working Group Chair/Lead is to serve as the liaison with other federal agencies such as the Centers for Disease Control and Prevention (CDC), Environmental Protection Agency (EPA), and USDA, in coordination with DHS; conduct internal and external reports and studies; and provide leadership and guidance in developing new research, policy implementation, program resource requirements, and good business practices.

The NAFDS report is prepared by HHS and USDA, in coordination with DHS, and transmitted to Congress as mandated by section 108(a)(1) of FSMA. In 2019, FDA conducted a pilot survey to assess progress by federal and SLTT governments based on FSMA 108 NAFDS Working Group. The current report is FDA's third report to

¹ FDT was formerly known as "FDECS."

Congress, which is a follow-up survey of states conducted between January 2020 and August 2023.

Participation in the NAFDS survey is/was voluntary. FDT developed an internal/external database tool, the FSMA 108 WebApp, to ensure that data security and storage occurs over an extended period for longitudinal studies and reports. The FSMA 108 WebApp is the survey tool that allows FDA to (1) monitor, (2) develop measures as an indicator of progress in meeting the four NAFDS goals, and (3) further modernize the FSMA 108 WebApp as a method of data analysis.

In accordance with the Paperwork Reduction Act, FDA received approval from the Office of Management and Budget (OMB) on July 26, 2021, for the survey's information collection (OMB Approval Control No: 0910-0855; ICR Reference No: 202107-0910-013). Conducting future surveys is warranted; thus, FDA will apply for an extension with OMB prior to the date of expiration (see Appendix A: Overview of NAFDS).

The 2019 survey-request for information solicitation was broadcasted nationally by the Division of Communications in FDA's Office of Inspections and Investigations (OII). OII uses the national broadcast message template to disseminate important Agency regulatory and public health information to SLTT regulatory and public health stakeholders using the FDA GovDelivery email messaging system. Only information that is national in scope and of high importance and relevance to FDA's SLTT regulatory and public health stakeholders is incorporated in the national broadcast message (Appendix B: National Broadcast Messages).

The 2023 state survey was disseminated to FDA's external stakeholder groups, such as the Association of Food and Drug Officials, Conference for Food Protection, FDA's foods program federal partner and national association contacts, manufactured food and lab flexible funding model grantees, human and animal food-related officials, the consolidated national broadcast, public health-related officials, rapid response teams, state emergency response (food/health) officials, district emergency response coordinators in state health departments, state liaisons, state Manufactured Food Regulatory Program Standards Coordinators, and the Partnership for Food Protection.

Data collected from the FSMA 108 WebApp state survey are maintained in a manner that is consistent with the HHS Systems Security Policy, as described in the HHS Security Systems Manual, Part 6, chapters 6-30 and 6-35. The data and/or results gleaned from the FSMA 108 WebApp survey tool are presented below as an illustration of food defense objectives based on scientific research methodology and/or evaluation processes as mandated by FSMA. The data and/or results from voluntary survey responses should not be interpreted or characterized as an interagency determination of readiness or preparedness, detection, emergency response, or recovery. The data will be used for research purposes by FDA and USDA, in coordination with DHS.

Table 1. Summary of the NAFDS's Goals and Objectives.

NAFDS's Goals	NAFDS's Objectives
Preparedness	• Conduct vulnerability assessments of the agriculture and food system • Mitigate vulnerabilities • Improve communication and training relating to the system • Develop and conduct exercises to test decontamination and disposal plans • Develop modeling tools to improve event consequence assessments and decision support • Prepare risk communication tools and enhance public awareness through outreach
Detection	• Identify contamination in food products at the earliest possible time • Conduct surveillance to prevent the spread of diseases
Emergency Response	• Investigate animal disease outbreaks and suspected food contaminations • Prevent additional human illnesses • Organize, train, and equip the animal, plant, and food emergency response teams of the federal government and the state, local, and tribal governments • Design, develop, and evaluate training and exercises • Ensure consistent and organized federal, state, local, and tribal risk communication to the public
Recovery	• Work with the private sector to develop business recovery plans • Conduct exercises of the plans • Rapidly remove and effectively dispose of contaminated agriculture and food products and infected plants and animals • Decontaminate and restore areas affected by an agricultural or food emergency

Table 2 (below) is an illustration of the 29 questions corresponding to the NAFDS goals and objectives. Each question corresponds to Preparedness, Detection, Emergency Response, or Recovery and is measured by the frequency of respondents that were “currently doing” the activity under each objective related to each question (1 of 29) on the 2023 survey.

Table 2. NAFDS Goals and Objectives: Question 1 (Q1) through Question 29 (Q29).

Question Number (Q)	Objective
Preparedness Goal (8 survey items)	
1	Identify or assess potential security threats, risks, or vulnerabilities
2	Mitigate vulnerabilities
3	Communicate with stakeholders about food defense
4	Provide food defense training to stakeholders
5	Develop or conduct exercises to test decontamination or disposal plans
6	Evaluate modeling tools to improve consequence assessment or decision support
7	Prepare risk communication tools
8	Attempt to increase public awareness through outreach
Detection Goal (2 survey items)	
9	Improve the speed of identifying contamination in food products
10	Conduct surveillance to prevent the spread of disease
Emergency Response Goal (12 survey items)	
11	Network with partners to develop new and better methods to detect, investigate, respond to, or control multi-state outbreaks of foodborne disease
12	Develop performance metrics to measure activities related to outbreak response, including laboratory surveillance, epidemiological interviews and investigations, and environmental health
13	Use performance metrics to demonstrate successes and identify gaps in the detection, investigation, and control of enteric disease outbreaks
14	Evaluate responses to outbreaks of disease – attributed to human or animal food outbreak response – to identify areas for improvement and successes
15	Evaluate animal and plant disease and pest outbreak responses to identify areas for improvement and successes
16	Strengthen animal and plant disease and pest response networks to facilitate response activities
17	Prevent additional human illnesses during a plant or animal disease outbreak (i.e., trace forward, trace back, recalls, cease operations)

Question Number (Q)	Objective
18	Conduct pilot tests to foster innovative approaches to improve tracking and internal systems for product trace-backward, recalls, and cessation of operations
19	Organize & train plant, animal, and food emergency response teams
20	Design, develop, and evaluate training & exercises carried out under agriculture and food defense emergency plans
21	Conduct risk communication exercises with government officials for responding to food and agriculture incidents
22	Conduct risk communication exercises with stakeholders
Recovery Goal (7 survey items)	
23	Work with the private sector to develop business recovery plans to rapidly resume agriculture, food production, or international trade following a plant or animal disease outbreak
24	Conduct exercises of response plans with the goal of long-term recovery results
25	Rapidly remove and effectively dispose of contaminated agriculture & food products and infected plants and animals
26	Develop or update protocols, guidance, or model plans for the management of waste from a food or agriculture emergency, including source reduction, waste minimization, waste segregation, waste estimation, recycling, transportation, or treatment and disposal options
27	Provide technical assistance on proper waste management options to local, tribal or territorial government, the private sector, or other stakeholders
28	Encourage the private sector to establish waste management plans
29	Decontaminate and restore areas affected by an agriculture and food emergency

Participants could select one from the following response options to indicate their level of agency and progress toward achieving each objective.

- ...has done this after January 2019 (but is not currently doing)
- ...is currently doing
- ...is planning to do this
- ...is not intending to do this
- ...not sure/don't know
- ...not applicable

C. Survey Responses by State (Map)

Figure 1 (below) is an illustration produced by the FSMA 108 WebApp tool of the 21 total states represented by the 31 respondents.

Figure 1. Map of U.S. States Responding Via the FSMA 108 WebApp to the 2023 NAFDS Survey (21 States).

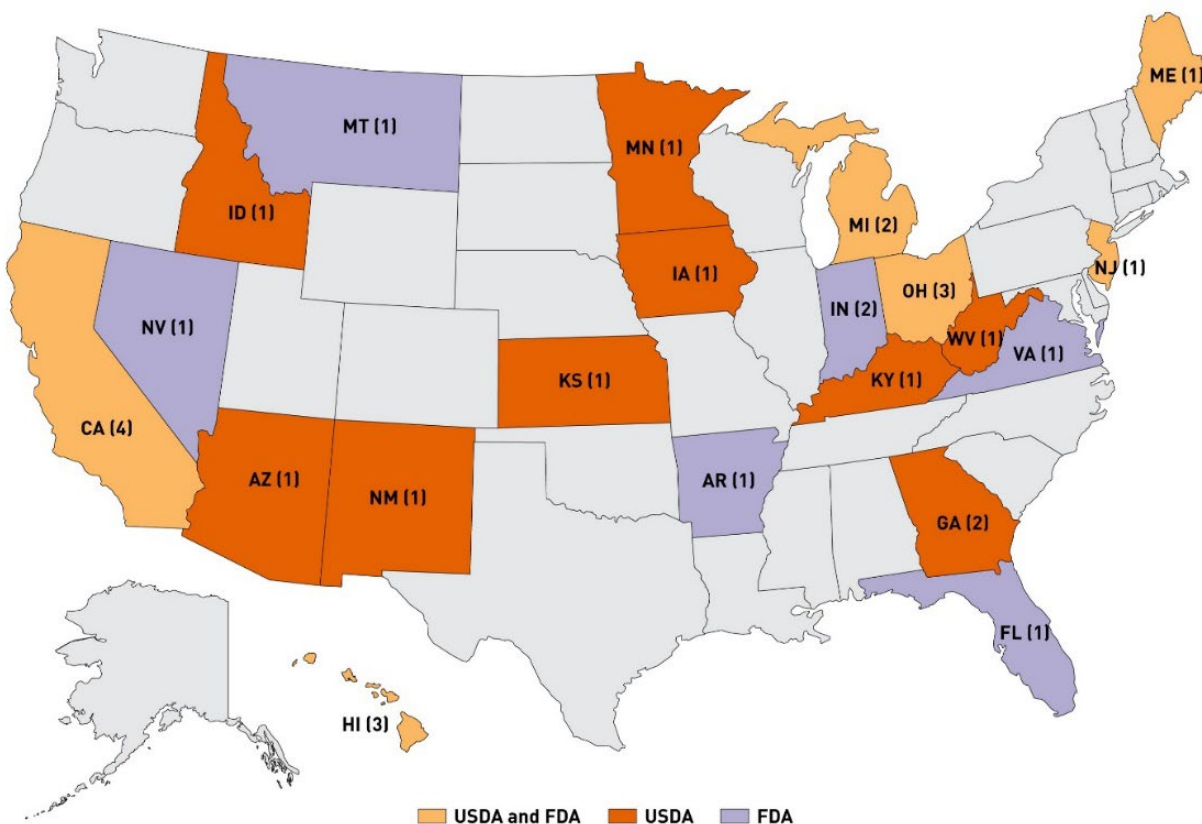


Figure 1 (above) illustrates the number of survey participants represented per state, as detailed in the following list: Arizona (AZ = 1), Arkansas (AR = 1), California (CA = 4), Florida (FL = 1), Georgia (GA = 2), Hawaii (HI = 3), Idaho (ID = 1), Indiana (IN = 2), Iowa (IA = 1), Kansas (KS = 1), Kentucky (KY = 1), Maine (ME = 1), Michigan (MI = 1), Minnesota (MN = 1), Montana (MT = 1), Nevada (NV = 1), New Jersey (NJ = 1), New Mexico (NM = 1), Ohio (OH = 3), Virginia (VA = 1), and West Virginia (WV = 1).

These 21 states correspond to the 31 survey respondents (n=31), who are identified as being affiliated with or having a partnership with one of the following: (1) FDA only, (2) USDA only, or (3) both FDA and USDA combined.

D. State Partners Currently Doing Objectives (Bar Chart)

Figure 2 (below) is displayed in a multi-colored bar chart, shows the percentage of responding state partners that are currently doing each objective: Preparedness (purple), Detection (blue), Emergency Response (green), and/or Recovery (yellow).

Figure 2. Percentage of Responding FDA & USDA State Partners “Currently Doing” the Objectives (n=31) Between 2019 and 2023.

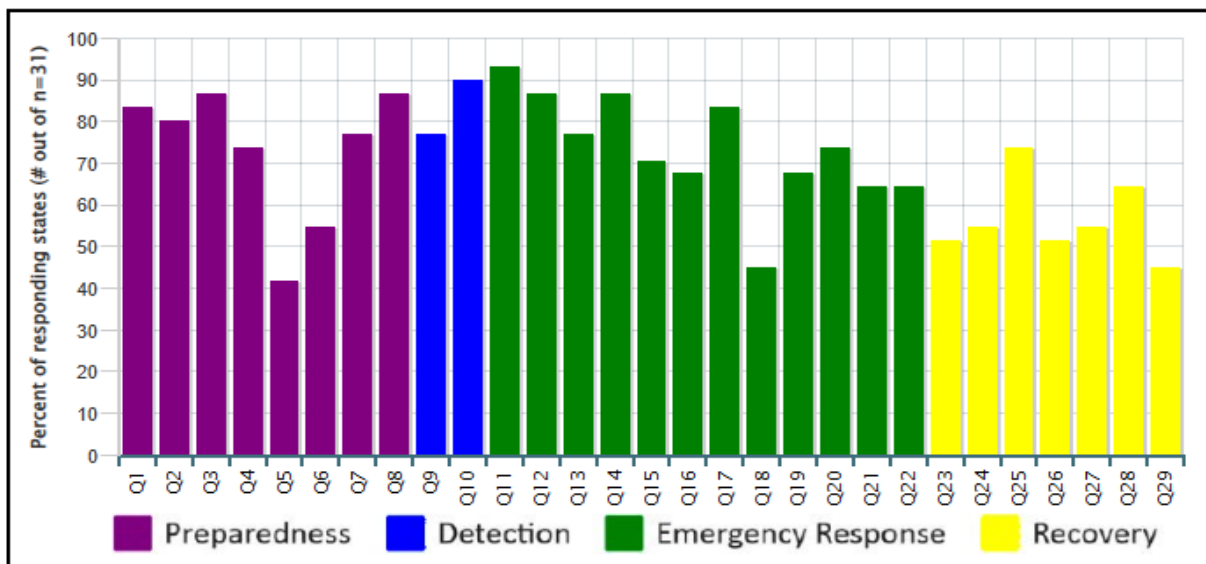


Figure 2 illustrates the following attributes:

- Most responding state partners were actively engaged in the objectives under the Preparedness goal (covering Questions 1–4) between 2019 and 2023, with response rates of Q1=82%, Q2=80%, Q3=88%, and Q4=72%. However, only 40% of respondents indicated they were actively working on Question 5 (Q5=40%) - “Develop or conduct exercises to test decontamination and disposal plans”—during the same period.
- Preparedness, Detection, and Emergency Response objectives (Questions 6–17) had strong participation, ranging from over 50% (Question 6) to more than 90% (Question 11) of responding state partners actively working on them.
- For Question 18, “Conduct pilot tests to foster innovative approaches to improve tracking and internal systems for product traceability, recalls, and cessation of operations”—more than 40% of respondents reported current activities.

- Emergency Response and Recovery objectives (Questions 19–28) had 50–72% of respondents actively engaged. However, Question 29 (focused on Recovery activities: “Decontaminate and restore areas affected by an agricultural and food emergency”) had a below-average response rate.
- Within the Preparedness goal, objectives tied to Questions 1–8 were reported as currently being addressed by 40% (Q5) to over 80% (Q1, Q3, and Q8) of responding state partners.
- The Detection goal objectives (Questions 9–10) were actively pursued by most respondents, with 75% reporting activity on Q9 and 90% on Q10.
- Emergency Response objectives encompass Questions 11–22, while Recovery goals are covered in Questions 23–29.
- A significant number of responses fell under “not sure/don’t know,” suggesting that these objectives were either unknown, irrelevant, or not applicable to the responding state partners’ scope of work.
- Given the variation in objectives among state entities and the nature of the data received, researchers will continue refining the metrics to better assess progress.

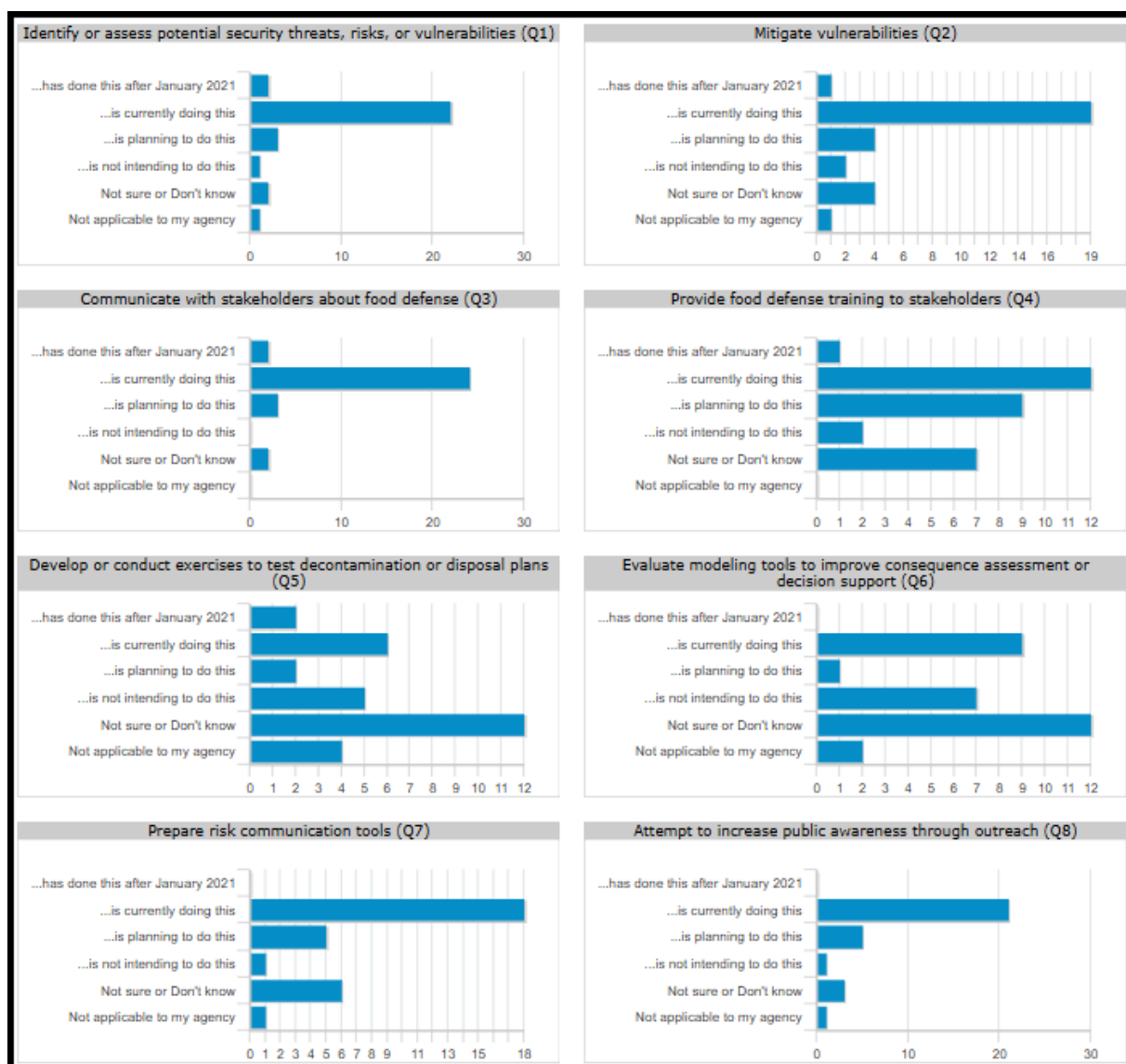
The below subsections provide more detail regarding the responses to each goal.

E. Survey Responses by Goal

Goal One: Preparedness

Figure 3 shows responses to Questions 1 to 8 under the Preparedness goal. Many of the activities under each objective of this goal were either “currently being done” or “not sure/don’t know,” which could indicate that the objective was not known.

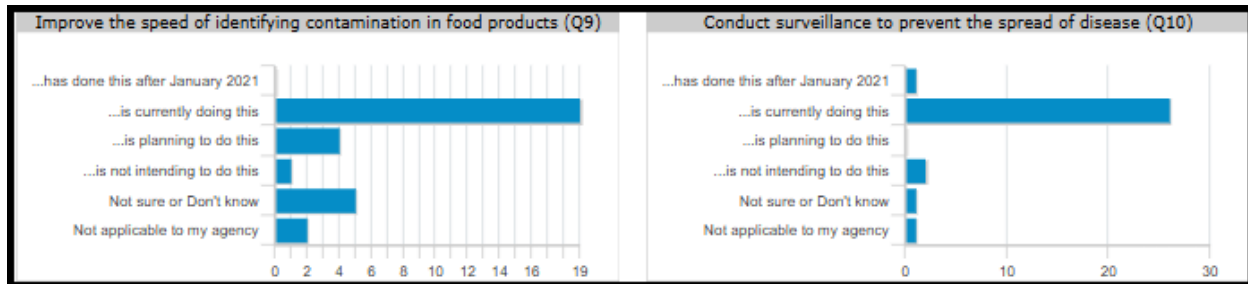
Figure 3. FDA/USDA State Partners’ Responses to Questions 1 through 8 Correspond with the Preparedness Goal (n=31).



Goal Two: Detection

Figure 4 shows the following two objectives under the Detection goal: “Improve the speed of identifying contamination in food products” (Q9) and “Conduct surveillance to prevent the spread of disease” (Q10).

Figure 4. FDA/USDA State Partners’ Responses to Questions 9 and 10 Correspond with the Detection Goal (n=31).



Goal Three: Emergency Response

Figure 5 shows that many activities under the objectives of this goal were either “currently being done” or “not sure/don’t know,” which could indicate that the objectives were not known.

Figure 5. FDA/USDA State Partners’ Responses to Questions 11 through 22 Correspond with the Emergency Response Goal (n=31).

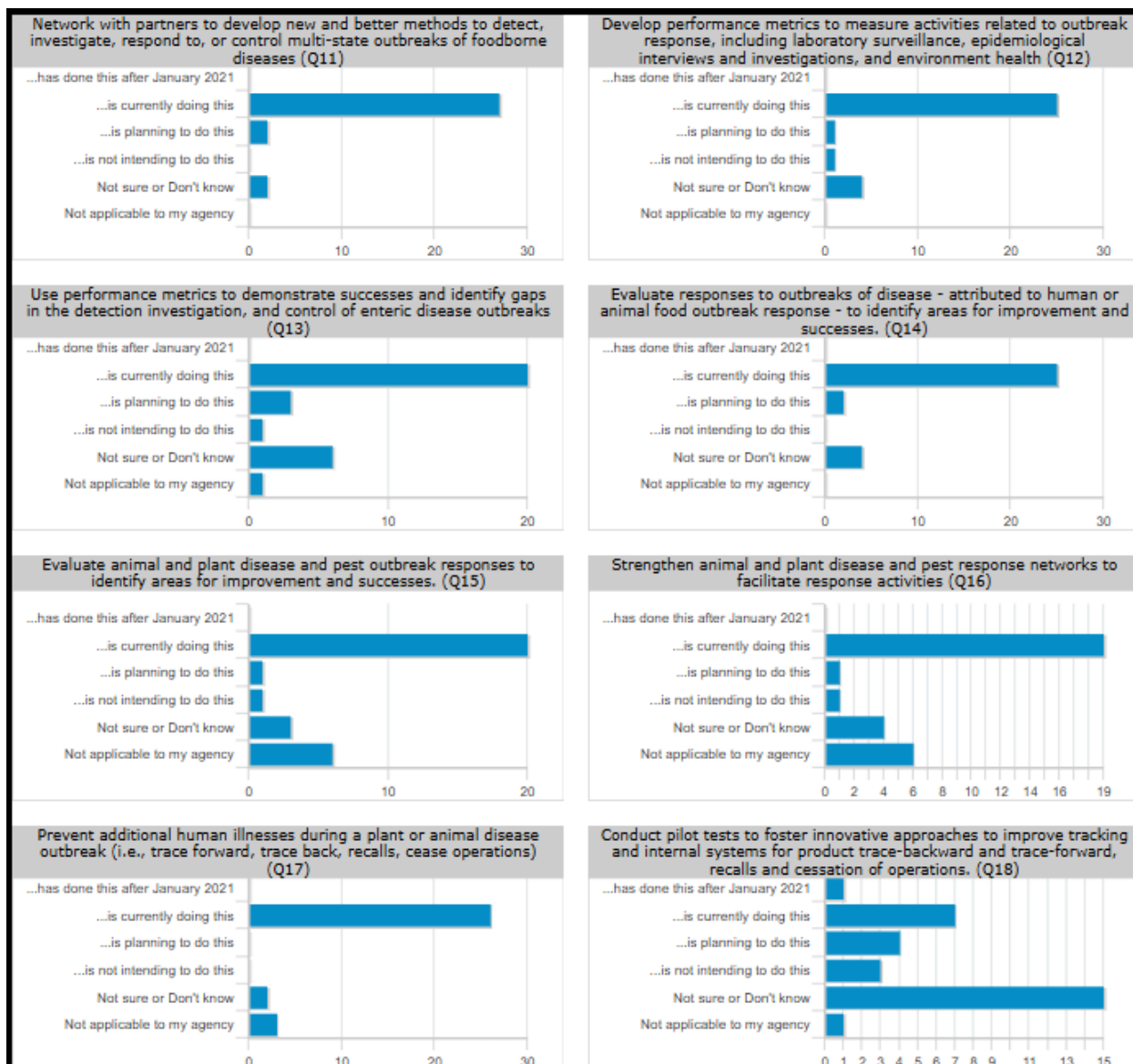
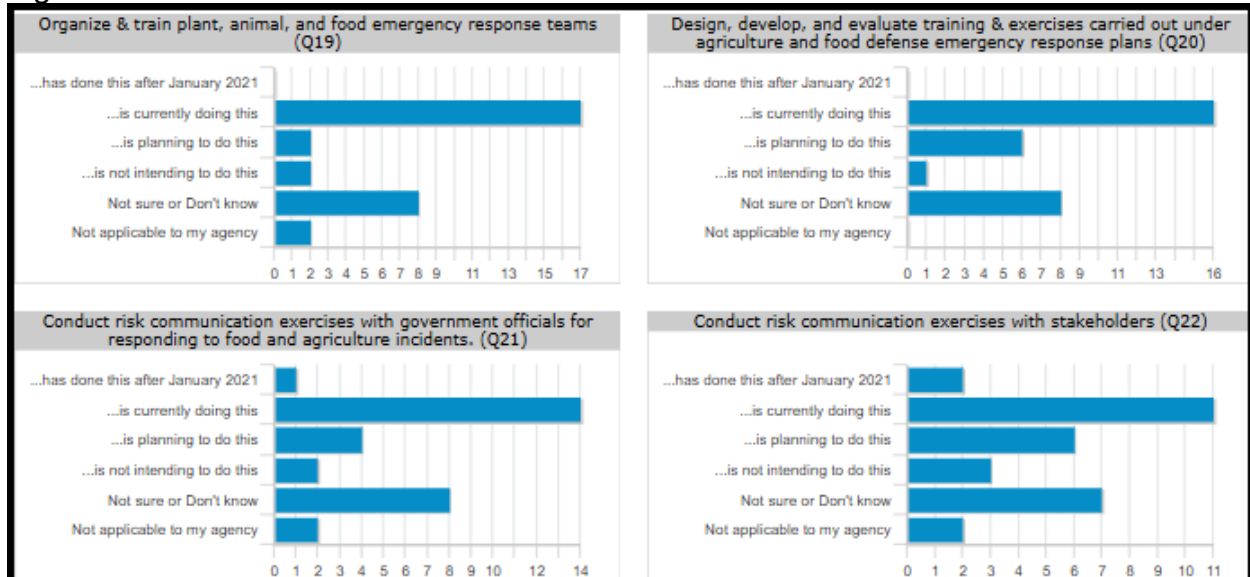


Figure 5 continues next page.

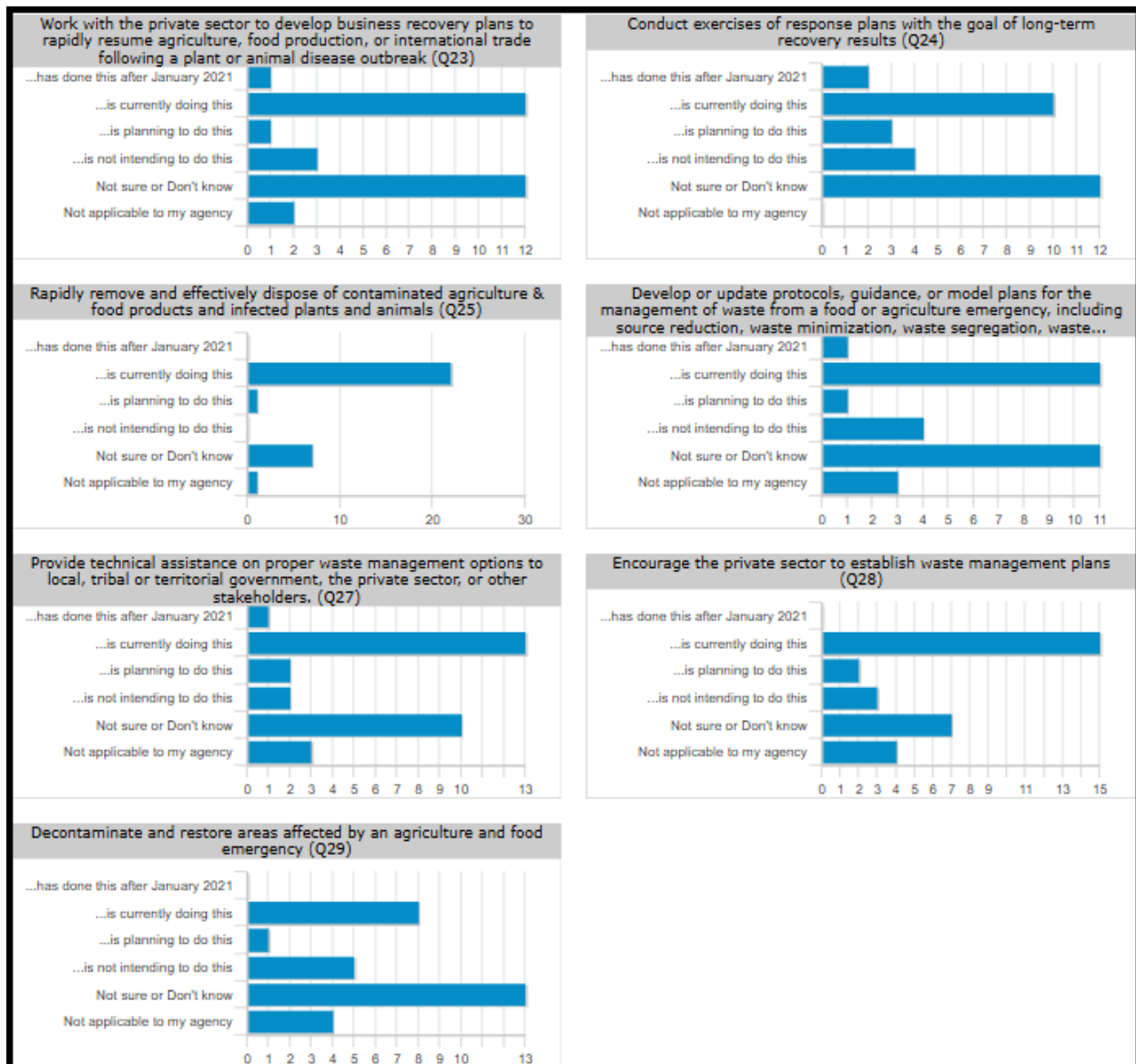
Figure 5 continued.



Goal Four: Recovery

Figure 6 shows that under the Recovery goal, most FDA/USDA state partners responded that the objectives were either “currently being done” or “not sure/don’t know,” which could indicate that the objectives were not known.

Figure 6. FDA/USDA State Partners’ Responses to Questions 23 through 29 Correspond with the Recovery Goal (n=31).



II. Conclusion

The NAFDS has been developed to establish metrics for assessing the food and agricultural supply to safeguard against intentional contamination and other emerging threats. Results indicate that states are involved at some level with the food defense Preparedness, Detection, Emergency Response, and Recovery goals. However, the NAFDS is neither a test of readiness or unreadiness nor an indication of full or partial capabilities of the United States to prepare for, detect, respond, or recover from an incidence of intentional adulteration or emerging threat(s). FDA will continue to focus on advancing the FSMA 108 WebApp tool. The current version of that tool (v.3.0) will be further developed (e.g., conduct longitudinal studies).

External stakeholder engagement is key as more food and agricultural research is essential to reliably assess the following four NAFDS goals: Preparedness, Detection, Emergency Response, and/or Recovery. When evaluating an objective or goal, care needs to be given to determine the progress based on the “scope of work” at the different federal/SLTT government entities.

Future work should consider incorporating additional markers to enhance our understanding of food defense as a shared responsibility. Key areas of focus include developing tools, strengthening the working group, creating a more comprehensive report, and gathering feedback from stakeholders:

- The FSMA 108 Interagency Working Group will continue efforts to increase state participation rates and establish metrics to strengthen conclusions, ensuring a more comprehensive assessment.²
- The FSMA 108 WebApp tool has allowed FDT to securely capture and store important metrics for determining progress, which shall be further developed.
- FSMA 108 has created an Interagency Working-Group with inputs by external partners as well as non-governmental associations, such as Association of Food and Drug Officials (AFDO).

Many of the activities under each objective of these goals are either “currently being done” or “not sure/don’t know,” which could indicate that the objectives are not known and/or applicable.

² <https://www.fda.gov/food/food-defense/national-security-memorandum-strengthening-security-and-resilience-united-states-food-and>

Note: No sensitive, secret, or private-sector information was collected or used for reporting purposes by FDA/HFP/FDT. The current (and third) NAFDS report will be sent to the appropriate sub-committees on Food and Agriculture as directed by FSMA.

Like previously submitted FSMA 108 results, this report should NOT be used (1) as guidance, an official government policy change, or approval for academia or industry or (2) by any entity governing food or agricultural industries. The research presented is a snapshot of our voluntary programs and/or allocated resources. The information/data contained within the NAFDS FSMA 108 survey project was designed to promote various survey modeling techniques and frequency distributions.

The protection against contamination and emerging threats is an important responsibility shared by federal and SLTT governments, as well as private sector partners. Developing metrics on food defense activities enables the United States to strengthen its collaboration among these stakeholders to meet the food defense goals outlined in section 108 of FSMA. The current survey methods will be further evaluated to determine if the NAFDS objectives are related to progress. In addition, updates to the NAFDS will be further assessed to show if the FSMA 108 WebApp tool's survey design provides a cross-sectional illustration as described in section 108 of FSMA.

III. References

FDA's first NAFDS report to Congress (2015): <https://www.fda.gov/food/food-safety-modernization-act-fsma/report-congress-national-agriculture-and-food-defense-strategy-nafds-2015>

FDA's second NAFDS report to Congress (2019):
<https://www.fda.gov/media/150367/download> (pdf)

National Security Memorandum on Strengthening the Security and Resilience of United States Food and Agriculture: <https://www.fda.gov/food/food-defense/national-security-memorandum-strengthening-security-and-resilience-united-states-food-and>

Appendix A: Overview

National Agriculture and Food Defense Strategy Survey

In compliance with the Paperwork Reduction Act, on November 14, 2024, the Office of Management and Budget (OMB) approved the information collection for the National Agriculture and Food Defense Strategy (NAFDS) survey (OMB Control Number 0910-0855) and extended the information collection's expiration date to November 30, 2027. The NAFDS survey is authorized under section 108 of the Food Safety Modernization Act (FSMA) (Public Law 111-353) and is a voluntary survey of state governments intended to gauge government activities in food and agriculture defense from intentional contamination and emerging threats. The data collected is included in this mandatory follow-up report to Congress. The authority for FDA to collect the information derives from the Commissioner of Food and Drugs' authority provided in section 1003(d)(2)(c) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 393(d)(2)(c)).

Protecting the nation's food and agriculture supply against intentional contamination and other emerging threats is an important responsibility shared by federal agencies and, state, local, tribal, and territorial (SLTT) governments, as well as by private sector partners. FSMA focuses on ensuring the safety of the United States' food supply by shifting the efforts of federal regulators from response to prevention and recognizes the importance of strengthening existing collaboration among all stakeholders to achieve common public health and security goals. FSMA identifies some key priorities for working with partners in areas such as reliance on federal, state, and local agencies for inspections; improving foodborne illness surveillance; and leveraging and enhancing state and local food safety and defense capacities. Section 108 of FSMA (NAFDS) requires the Department of Health and Human Services (HHS) and the United States Department of Agriculture (USDA), in coordination with the Department of Homeland Security (DHS), to work together with SLTT governments to monitor and measure progress in food defense.

The NAFDS charts a direction for how federal agencies, in cooperation with SLTT governments and private sector partners, protect the nation's food supply against intentional contamination. Not later than 4 years after the initial NAFDS report to Congress, and every 4 years thereafter, HHS, USDA, and DHS are required to revise and submit an updated report to the relevant committees of Congress. Section 108 of FSMA directs FDA to coordinate with the agencies to obtain information to complete the NAFDS report. An interagency working group—consisting of representatives from HHS, USDA, and DHS—conducts the survey and collects and updates the NAFDS as directed by FSMA, including developing metrics and measuring progress for the evaluation process. FDA is the agency primarily responsible for obtaining the information from federal and SLTT partners to complete the NAFDS report to Congress.

The voluntary survey of federal and state partners was used to determine what food defense activities, if any, federal/state agencies have completed (or are planning) from 2019 to 2023. Planning for the local, territorial, and tribal information collections will commence after the collection and reporting of federal and state agency-level data.

This voluntary survey will be repeated approximately every 2 to 4 years, as described in section 108 of FSMA for the purpose of monitoring progress in food and agricultural defense by government agencies.

Appendix B: National Broadcast Message

Office of Regulatory Affairs
Office of Communications and Project Management (OCPM),
Division of Communications

National Broadcast Message

SUBJECT: FSMA Section 108 National Agriculture and Food Defense Strategy (NAFDS) Survey of Federal and State, Local, Tribal, and Territorial (SLTT) Partners of Food Defense Activities 2021-2025.



Date: May 7, 2023

Dear Colleagues,

Protecting the nation's food and agriculture supply against intentional contamination and other emerging threats is an important responsibility shared by SLTT governments as well as private sector partners. On January 4, 2011, the President signed into law the FDA Food Safety Modernization Act (FSMA). FSMA focuses on ensuring the safety of the U.S. food supply by shifting the efforts of Federal regulators from response to prevention and recognizes the importance of strengthening existing collaboration among all stakeholders to achieve common public health and security goals. FSMA identifies some key priorities for working with partners in areas such as reliance on Federal, State, and local agencies for inspections; improving foodborne illness surveillance; and leveraging and enhancing State and local food safety and defense capacities.

Section 108 of FSMA is the National Agriculture and Food Defense Strategy (NAFDS), which requires the Department of Health and Human Services (HHS) and the U.S. Department of Agriculture (USDA), in coordination with the Department of Homeland Security (DHS), to work together with SLTT governments to monitor and measure progress in food defense.

- The survey of Federal and State partners will be used to determine what food defense activities, if any, Federal and/or SLTT agencies have completed (or are planning on completing) from 2021 to 2025.

- This is a voluntary survey of SLTT governments intended to gauge government activities in food and agriculture defense from intentional contamination and emerging threats. The collected information will be included in the mandatory NAFDS follow-up Report to Congress.
- Results will be consolidated by State (buckets).
- First and Last Name(s) of participants and/or email address(es) **will not** be included in any final report.
- The data-call will end on August 15, 2024.
- To access the Federal & State Survey, please click on the Launch Survey website: <https://www.fda.gov/food/food-defense-initiatives/national-agriculture-and-food-defense-strategy-nafds>.
 - Step 1. Click on “**Launch Survey**”
 - Step 2. FDA Alert (Click) “**I Accept**”
 - Step 3. Next (Click) “**New User**”
 - Step 4. Then enter **First, Last Name, and email address**. Then (Click) “**Register**.” You’ll receive a **temporary password** via your email.
 - Step 5. Lastly, Login and change your password
 - Step 6. Complete Survey (Click) “**Submit**”

The authority for us to collect the information derives from the Commissioner of Food and Drugs’ authority provided in section 1003(d)(2)(C) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 393(d)(2)(C)). The Agency is required to display the OMB Control Number (#0910-0855) and inform respondents of its legal significance in accordance with 5 CFR 1320.5(b).

We would like to thank the federal and SLTT regulatory and public health agency officials and key officials from national associations for your continued support. If you have additional or follow-up questions and comments regarding the NAFDS, please send questions/comments to FSMA108@fda.hhs.gov.

This message is being broadcast by the Division of Communications.

Thank you,

FDA/ORA
Office of Communications and Project Management
Division of Communications
Mailbox: DivComm-ORA@fda.hhs.gov



This report was prepared by FDA's Human Foods Program. For additional information, please contact:

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Silver Spring, MD 20993-0002

This report is available on FDA's home page at <https://www.fda.gov/>.



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