United States Department of Agriculture

Foreign Animal Disease (FAD) Response
Ready Reference Guide—Introduction to the
Emergency Management Response System 2.0 (EMRS2)

This document provides a brief overview of the Emergency Management Response System 2.0 (EMRS2). EMRS2 is the official system of record for animal health incidents for the USDA Animal and Plant Health Inspection Service (APHIS).

What is EMRS?

EMRS is a dynamic database used for information management in foreign animal disease (FAD) investigations, disease outbreaks, and other national animal health incidents and emergencies. EMRS provides a secure yet accessible system for data collection, management, analysis, and reporting.

What is EMRS2?

Efforts to modernize EMRS into a web-based Microsoft Dynamics CRM platform began in 2011. Just like in EMRS, EMRS2 users are able to quickly and accurately input data and manage the tasks involved with animal health incidents. EMRS2 is significantly more user-friendly than the older version and also offers greater capabilities. Because it is built on a Microsoft platform, it easily interfaces with other Microsoft programs that are used frequently, such as Word and Excel. In 2017, EMRS2 upgraded into the Microsoft Dynamics CRM 2016 platform that incorporated a new interface and enhanced features.

Why is EMRS2 important?

EMRS2 helps APHIS Veterinary Services and State Animal Health Officials provide timely and effective responses to animal health emergencies. It streamlines the collection, management, and analysis of data from FAD investigations and other incidents. EMRS2 facilitates animal traceability: managing and issuing permits and movements, tracing, animal records, animal identification, and premises and activity mapping.

EMRS and EMRS2 have been used in more than 20 outbreaks including, but not limited to: the 2002–2003 Exotic Newcastle Disease outbreak in California; the 2016–2017 New World Screwworm outbreak in Florida; the 2014–2015, 2016, and 2017 Highly Pathogenic Avian Influenza outbreaks; as well as in management of the 2018-2020 California virulent Newcastle Disease incident. EMRS2 is also being used for program diseases such as tuberculosis and emergencies such as the 2017 hurricanes.

The importance of EMRS2 in operations, reporting, and management has been well demonstrated. EMRS2 will continue to evolve based on the needs and requirements of emergency responders, disease managers (who can also use it for traceability), and animal health data analysts.

How is EMRS2 accessed?

EMRS2 is only accessed by users who have received their USDA eAuthentication Level 2 access; see www.eauth.usda.gov for more information. Once granted, EMRS2 can be accessed through your web browser (https://emrs2.aphis.usda.gov/), and requires a LincPass for APHIS employees and contractors or an eAuthentication password for other users.

How else can EMRS2 be utilized?
- *EMRS2 Customer Permit Gateway* is an interactive, secure web-application, where registered producers can create a permit request for movement. For further information, see *FAD PReP Manual 6-0 Permitted Movement.*
- *EMRS2GO* is an IT platform, more commonly known as an "app," that allows authorized users the ability see certain EMRS2 information from a mobile device, collect new data off-line within the app, and then upload the new information into EMRS2 when reconnected online. This app is fully operational and has been used in the California virulent Newcastle Disease incident as well as in all States for FAD investigations.

What does EMRS2 do?

EMRS2 is divided into five general functions:

What can users do in EMRS2?

Users are assigned various roles. A user's role determines what records they are able to see and/or edit, which also may be geographically limited if they are State or field-based users. Users that have permission can enter data through streamlined wizards, also known as custom dialogs. The snapshot to the right is an example of a single step in the EMRS2 wizard guided interface to create a new premises record.

Federal and State veterinary medical officers, animal health technicians, and various disease specialists and epidemiologists (State and Federal), based on their role, will be able to

- collect, enter, and view animal disease data,
- manage activities like FAD investigations,
- manage and track resources (personnel & equipment),
- monitor progress of response operations,
- create reports, and
- create maps.

What is the functionality within EMRS2?

EMRS2 Home provides the starting place for EMRS2 users. It references general announcements and training materials. Additionally, inspection tasks—used often by field employees—are managed here to help aid in organization and completeness.

Disease Management manages information related to incidents and investigations (e.g., premises statuses during an outbreak), providing actionable information, which allows rapid decisions to be made in order to protect U.S. agriculture, animal health, public health, the environment, and the economy.

Resource Management manages personnel and equipment deployed during an incident. During incidents, many activities are ongoing simultaneously and need to be tracked and positioned strategically for increased efficiency and coordination.
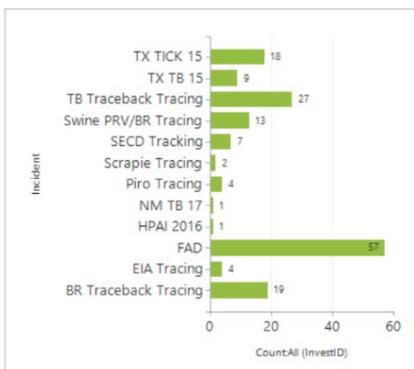
Knowledge Management manages documentation and makes it accessible to all users. It provides overarching information on incident response conducted within the National Response Framework as well as incident specific documentation from the field. EMRS2 training and job-aids are also available.

Enterprise Reporting provides tools needed to assist in creating the critical common situational picture amongst officials and responders. EMRS2 provides extensive capabilities for advanced queries and user-generated reports. It can also spatially map premises and disease information, and offer targeted reporting for local, State, regional, or national audiences.

What capabilities does EMRS2 have for visualization?

EMRS2 can generate graphs, charts, and other visualizations to report the current state of events and to project anticipated requirements for incident management and resource management. This allows decision makers, as well as Incident Management Teams to respond appropriately. Below are some examples of these capabilities.

Note: Sample data provided.