Animal and Agriculture Emergency Response Software Portfolio (20180172)

Facilitates and coordinates animal and agriculture emergency response

A software portfolio that leverages previous technologies facilitates and coordinates animal and agriculture emergency response. Together they respond to an emergency response situation by managing supply chains, identifying early outbreaks of disease, and quickly identifying and coordinating with qualified response experts. 20180170: CRISTAL RESPOND uses CRISTAL software technology (Case ID 20130206) to manage humanitarian supply chains in emergency response situations. It is a geo-spatial web application that facilitates critical information sharing across public and private stakeholders related to supply needs, availability, and movement of product. 20180171: Disease Watch is a web application that leverages FIDES' big data analysis technology (Case ID 20150084) by ingesting real-time open source media to identify and characterize global disease outbreaks or precursor events. While valuable data exists to detect emerging disease outbreaks, analyzing and monitoring both the sheer amount of information and differences in data structure across systems poses significant challenges. The innovative Disease Watch technology overcomes these difficulties and improves infectious disease surveillance and situational awareness. The technology pulls daily updates from many different sources and, through predictive analytics and machine learning, identifies emerging disease outbreaks from disparate data sources. 20180172: Emergency Response FRAME uses the FRAME online software training system (Case ID 20160047) to train animal agriculture emergency responders to quickly identify and coordinate with qualified response experts during an emergency response situation. An attack against United States food and agriculture systems (e.g., diseases, pests, poisonous agents either unintentionally introduced or intentionally delivered by an act of terrorism) could have catastrophic health and economic effects. The Emergency Response FRAME technology provides an interactive, online framework to train every emergency responder in an Incident Command System to efficiently respond to an animal agriculture emergency. The training framework will serve the vision of the national preparedness system by establishing a skilled team of emergency responders.

Phase of Development

• Beta Applications.

Benefits

- Trains emergency responders to efficiently respond to an animal agriculture emergency
- · Quickly identifies and coordinates with qualified response experts
- Establishes a skilled team of emergency responders

Features

Technology ID

20180172

Category

Software & IT/Education & Training Software & IT/End User Software Software & IT/Health IT

View online page



- Interactive, online framework/applications
- Leverages existing technologies
- Visualizes estimated supply needs and supply availability
- Identifies and monitors active outbreaks and precursor events
- Maps key supply chain locations
- Reports incoming shipments to support logistics planning
- Collects inventory data from field locations
- Layers real-time information with reference data; references past outbreaks and events

Applications

- Animal and agriculture emergency response
- Early outbreaks of disease
- Global disease outbreak
- Training
- Software

Desired Partnerships

This technology is now available for:

- License
- Sponsored research
- Co-development

Please contact TLO to share your business' needs and learn more.

Researchers:

<u>Amy Kircher, DrPH</u>, Director, Food Protection and Defense Institute; Assistant Professor, Veterinary Medicine

Erin Mann, MPH, Food Protection and Defense Institute; GHSR Global Collaborations Coordinator

Ted Steinmann, BBA, IT Manager, Food Protection and Defense Institute