# FLHealthSystems

### SUPPORTING PREPAREDNESS, RESPONSE AND RECOVERY

### Bureau of Preparedness and Response Portfolio of Public Health and Health Care Preparedness Funded Information Systems FY 2017-2018



Florida Department of Health Division of Emergency Preparedness and Response Bureau of Preparedness and Response

Version 3, December 2017



Photos from FDOH response to Hurricane Irma -September, 2017



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### Introduction

When a public health incident or emergency threatens Florida's residents and visitors, the ability to collect precise detailed situational awareness, share data, and receive and deliver fast, accurate and consistent communications can save lives.

Florida faces many threats with the potential for large-scale health consequences, including disease outbreaks, natural disasters and terrorist attacks. Effective preparation and response to public health or related threats requires commitment and cooperation across state agencies and key partners.

The Florida Department of Health is the lead agency for the state's Health and Medical Emergency Support Function (ESF8) and coordinates preparedness and recovery efforts for incidents and events that impact public health and the health care system.

The Department has a diverse portfolio of innovative systems and applications that have been engaged and tested to maximize health situational awareness and support crucial preparedness, response and recovery activities.

The Department's fiscal year 2017-2018 portfolio of systems and applications includes responder and stakeholder alerting and notification, hospital and health care facility notification and status management, Geographic Information System mapping, resource tracking and management, and risk assessments. Also available are a series of systems for disease surveillance, tracking, reporting and communications.

The systems are designed to ensure maximum security and provide needed access and user rights. Public Internet pages are viewable by all persons; however, select individual applications require credentials and/or registration. Specific applications can assign multi-level roles and permissions ranging from administrator to read-only access.

This document describes each of the Division of Emergency Preparedness and Community Support, Bureau of Preparedness and Response, Public Health and Health Care Preparedness Program online data systems, applications and tools. For purposes of this document, the term system is used to reflect included data systems, applications or tools.

Requested changes, updates and enhancements to systems managed by the Bureau are governed by a Change Control Process. Standard requests for data, small changes or "system tweaks" do not require a review and are made to the systems as needed. Changes requested to system test, development, staging and production environments utilize a Change Advisory Board. This is an advisory group made of technical and subject matter experts, system users, stakeholders and decision makers who review and evaluate requests. Requests are reviewed to determine business requirements and desired outcomes, practicality, viability, necessity, priority, and unintended consequences of implementing the change. Findings and recommendations are provided to the Information Systems Program Manager for Bureau management decisions.

For more information on any of the systems, contact Victor Johnson, Administrator, Resources and System Management Section at <u>Victor.Johnson@flhealth.gov</u> or 850-245-4346.



### **Summary of Systems**

System or Function	Current Provider or Application	Funding Source	Approximate Current User Count
Alerting and Notification	Everbridge	CDC PHEP ASPR HPP APD**	52,000 DOH 63,000 APD
Communications and Resource Management	FLHealthSTAT	ASPR HPP	9,800
Emergency Preparedness Plans Central Library	DOH Maintained	N/A	N/A
Florida Health Alert Network	FLHAN	ASPR HPP	Unlimited Capacity
Florida Public Health Risk Assessment	FPHRAT	CDC PHEP	Admin Rights 10 Default Users 67 Read-only 250
Geographic Information Services	DOH Maintained GIS	CDC PHEP	225+ GIS developers, indeterminate public users
Information Technology Field Operations & Incident Response Resources	DPC	CDC PHEP	67 County Health Departments
Laboratory Information Management System (LIMS)	LabWare LIMS	CDC PHEP	579 - Increases expected in 2017
Project Management	Teamwork	ASPR HPP	100
Resource Tracking	TeeCards	CDC PHEP	15 licenses – each can be used by 2 concurrent users
Statewide Inventory Management	IRMS	ASPR HPP	250
Surveillance – Disease Outbreak Communications System	Epi-Com	CDC PHEP	1650 Users 50 Active Forums
Surveillance – Early Notification of Community- Based Epidemics	ESSENCE-FL	CDC PHEP	245 Hospitals 63 Urgent Care Centers 67 County Health Departments
Surveillance – Reportable Disease Case Reports	Merlin	CDC PHEP	580 users across 67 County Health Departments and Division of Disease Control

\*\*Agency for Persons with Disabilities added as a system partner sharing costs and functionality



System or Function	Provider or Application	Brief Description
Alerting and	Everbridge	An online alerting and notification system capable of rapid distribution of emergency and non-emergency health messages to targeted groups. The externally-hosted system provides public health professionals and key response partners timely and relevant
Notification		access to information necessary to respond to incidents or events that may be of urgent health or related consequences. The Agency for Persons with Disabilities has been added as a partner to the system sharing costs and functionality.
Communications and Resource Management	FLHealthSTAT	A secure information sharing solution for determining health care facility status, bed availability and situational awareness. The externally hosted system serves as the Agency for Health Care Administration (AHCA) statutorily designated online database system for reporting information regarding licensed health care provider emergency status.
Emergency Preparedness Plans	Emergency Preparedness Plans Central Library	An internal online central library for approved public health and medical related response plans. The central library includes Department of Health state and county plans and other non- departmental plans relevant to health and medical preparedness, response, and recovery.
Florida Health Alert Network	HAN	An online web-based gateway to applications which support key preparedness, response and recovery activities for health and medical emergency management. The externally hosted system provides access to systems such as FLHealthSTAT, Everbridge, the Florida Medical Reserve Corp Network and provides access to current situational awareness subjects of interest. The application also performs daily verification of responder license information through automated daily verification.
Florida Public Health Risk Assessment	FPHRAT	An online tool for the assessment of hazard risks as well as capabilities and resources available to counteract hazards. The tool assesses the risk of 36 hazards relevant to public health for the state and each county and region. The tool, hosted by the Department, includes a feature to calculate the social, medical and hazard vulnerabilities for each Florida census tract, city and county.
Geographic Information Services	DOH Maintained GIS	A system hosted on a Department server for capturing and storing environmental health, public health and health care facilities' geospatial data, providing analytical tools to turn data into geographical information and communicating that information effectively. The system and its products have been adopted for all phases of emergency management.
Information Technology Field Operations and Incident Response Resources	DPC	An Information Technology (IT) Field Operations Incident Response Team of Disaster Preparedness Consultants (DPC) to ensure critical local systems remain available and operational during and after any incident or event. DPCs assist the Department in meeting its responsibility for ensuring the availability of IT resources related to mission-essential functions.
Laboratory Information Management System (LIMS)	LabWare LIMS: Version 7	A Laboratory Information Management System used to log, access and manage samples and associated data. The system supports laboratory operations and provides secure electronic reporting of specimen and test result data to public health partners. Technical support and maintenance is provided by LabWare LIMS: Version 7.



System or Function	Provider or Application	Brief Description
Project Management	Teamworks	A web-based application that provides a method to track projects and daily operations efficiently and effectively. Teamwork Projects is a software application providing organization tools that can reduce meetings and monitor project development.
Resource Tracking	TeeCardsPlus	A web-based application for tracking personnel and material assets in the field during a public health emergency.
Statewide Inventory Management	IRMS	An online statewide inventory management system. The system provides real-time visibility of inventory levels in multiple locations across the state. The system has radio-frequency identification capability and allows global viewing of assets for preparedness considerations during all stages of an incident or event. Multiple users can access the system simultaneously.
Surveillance – Disease Outbreak Communications System	Epi-Com	An outbreak communications system and moderated message board. EpiCom offers staff and partners the ability to post and receive messages related to contagious diseases or outbreaks of public health significance. Users can post follow-up messages to report similar or related disease activity in their area. The system is used to communicate essential information regarding public health issues.
Surveillance – Early Notification of Community- Based Epidemics	ESSENCE-FL	An Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). ESSENCE provides state and local epidemiologists access to data, analytic tools and data visualizations that enhance their ability to detect outbreaks of disease in a timelier manner. It also provides the ability to conduct routine descriptive epidemiologic analysis, and monitor morbidity and mortality trends across multiple data sources. The system provides data and tools to identify outbreaks or unusual trends before they would otherwise be detected, leading to a quicker public health response.
Surveillance – Reportable Disease Case Reports	Merlin	A web-based reportable disease surveillance system that serves as the state's repository of reportable disease case reports for approximately 100 different reportable diseases. The system is used daily by all 67 county health departments to perform core disease surveillance and control work and to submit data to the Centers for Disease Control and Prevention.



### What are the Systems Primary Purposes and Features?

- Distribute timely messages, across jurisdictions using a variety of communication devices, with information needed to respond to public health incidents or related events
- Determine health care facility status, bed availability and share situational awareness and communications for a public health incident or related event
- Provide an online central library of public health and medical-related response plans
- Offer an online gateway to applications supporting public health preparedness, response, and recovery activities
- Assess hazards, risks, capabilities, resources and population vulnerability
- Display information in a visual easily understood mapping format
- Ensure the availability and operation of critical systems during and after an incident or event
- Handle laboratory tests for the Bureau of Public Health Laboratories
- Manage, plan, and track the progress of projects
- Track personnel and material assets deployed during a public health incident or event.
- Maintain real time visibility and management of inventory available for all stages of a public health incident or related event
- Communicate essential information regarding public health issues and share information regarding disease outbreaks
- Guide to a timelier public health response by providing data and tools needed to identify outbreaks or unusual trends
- Identify disease trends, track cases and improve disease prevention programs

#### Who Uses the Systems?

- Florida Department of Health state and county staff
- Health Care Coalitions
- State and local agency and organization public health partners and stakeholders
- State Medical Response System
- Florida Medical Reserve Corps
- Florida Emergency Mortuary Operations Response System
- Florida Division of Emergency Management and Emergency Support Function 8 (health and medical) partners
- Local emergency medical services
- Hospitals and other health care facilities
- Centers for Disease Control and Prevention
- State, hospital, and private laboratories



### Acronyms

The following acronyms are used in this portfolio.

Acronym	Meaning
AHCA	Agency for Health Care Administration
APD	Agency for Persons with Disabilities
ASPR	Assistant Secretary for Preparedness and Response
BP	Budget Period
BPHL	Bureau of Public Health Laboratories
BPR	Florida Department of Health, Division of Emergency Preparedness and Community Support, Bureau of Preparedness and Response
BRACE	Building Resilience Against Climate Effects
CDC	Centers for Disease Control and Prevention
COOP	Continuity of Operations Plan
COP	Common Operating Picture
DOH	Florida Department of Health
DPC	Disaster Preparedness Consultant
EMS	Emergency Medical Services
ESF8	Emergency Support Function Health and Medical
ESSENCE-FL	Electronic Surveillance System for the Early Notification of Community- Based Epidemics
FAC	Florida Administrative Code
FAQ	Frequently Asked Questions
FEMORS	Florida Emergency Mortuary Operations Response Systems
FLHAN	Florida Health Alert Network
FPHRAT	Florida Public Health Risk Assessment Tool
GIS	Geographic Information System
HAZMAT	Hazardous Materials
HL7	Health Level 7
HPP	Hospital Preparedness Program
HVDE	Hazard Vulnerability Data Explorer
IRMS	Inventory Resource Management System
IT	Information Technology
JIC	Joint Information Center
LIMS	Laboratory Information Management System
MRC	Medical Reserve Corps
MRP	Mission Ready Packages
PAHPRA	Pandemic and All Hazards Preparedness Reauthorization Act



Acronym	Meaning
PHEP	Public Health Emergency Preparedness
PHHP	Public Health and Healthcare Preparedness
PHMP	Public Health and Medical Preparedness
PIO	Public Information Officer
PSA	Public Service Announcement
RERA	Regional Emergency Response Advisor
RFID	Radio-Frequency Identification
SERVFL	State Emergency Responders and Volunteers of Florida
SMRS	State Medical Response System
SOP	Standard Operating Procedures
SOG	Standard Operating Guide



### **Alerting and Notification**

**Purpose:** The Florida Department of Health has an established online alerting and notification system capable of rapid distribution of emergency and non-emergency public health messages to targeted individuals. The current application for the network that provides real-time secure communications is the



Everbridge Mass Notification System. The system provides public health professionals and key response partners timely and relevant access to information necessary to respond to incidents or events that may be of urgent public health consequence.

#### **Primary Features:**

- Sends notifications across multiple jurisdictions utilizing multiple devices; email, telephone, text message and fax
- Provides a mobile application for smart phones and tablets
- Provides the ability to confirm receipt of notification
- Provides an online training module
- Provides secure access with user name and password

#### Who Uses Everbridge?

- Florida Department of Health
- Florida Medical Reserve Corps
- Health Care Coalitions
- Florida Emergency Mortuary Operations Response System (FEMORS)
- Local community partners
- Agency for Persons with Disabilities (APD)

Year Implemented	Funding Source	Current User Count
The DOH Notification System was established in 2006. Everbridge became the provider in 2014.	CDC – Public Health and Emergency Preparedness (PHEP) and Office of the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP) Cooperative Agreements	52,000 DOH 63,000 APD*
Authorities/Regulations	42 U.S.C. 247d Public Health Emergencies; Chapter 252, Florida Statutes – Emergency Management; Chapter 381, Florida Statutes – Public Health: General Provisions; Department of Health Policy 310-1 Florida Health Alert Network	
Future Planning	Continue to review how the notification system can be maximized to increase the ability of public health agencies to electronically exchange data and information. Plans are in place to add partner agency users, expand capacity and reduce costs.	
Capability	HPP Capability 2 - Health Care and Medical Response Coordination PHEP Capability 6 - Information Sharing	

\*APD has been added as a partner to the system, sharing costs and functionality

**Contact Information:** For more information, contact <u>Beverly.Elliott@flhealth.gov</u> or <u>floridahealthsystems@flhealth.gov</u>. Also visit <u>www.floridahealthalertnetwork.com</u>.



### **Communications and Resource Management**

**Purpose:** The Florida Department of Health provides Emergency Support Function 8 (ESF8) health and medical partner's access to an interoperable, secure information sharing solution for determining health care facility status, bed availability, situational awareness, and communications with health care facilities and local, regional and



state emergency partners. Section 408.821(4), Florida Statutes requires that licensed health care facilities providing residential or inpatient services use an online database approved by the Agency for Health Care Administration (AHCA) to report information regarding the provider's emergency status, planning or operations. AHCA designated FLHealthSTAT as the approved online database, as of July 1, 2017 replacing EMResource. The system is co-managed by the Department and AHCA.

#### Primary Features:

- Uses a direct interface for uploading of licensure data from AHCA's VERSA database
- Performs text and email emergency event alerting, health alert broadcasting, be on the lookout messages from law enforcement and other notifications
- Provides method to enter and display bed availability and facility data
- Allows for easy reporting for health care facility users
- Offers customized dashboards
- Provides dynamic jurisdictional Geographic Information Services (GIS) maps
- Uses color coded symbols based on status type
- Provides canned and dynamic reporting capability

### Who Uses FLHealthSTAT?

- Florida Department of Health
- Agency for Health Care Administration
- Health Care Coalitions
- Health care facilities
- Local 911 call centers

- Local emergency medical services
- Local law enforcement
- Local emergency management
- Local community partners

Year Implemented	Funding Source	Current User Count
2017 Replaced previous systems established in 2009.	Office of the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP) Cooperative Agreements	9,800
Authorities/Regulations	Section 319C-2 Public Health Service Act as amended by the Pandemic and All Hazards Preparedness Reauthorization Act (PAHPRA) of 2013, Public Law 113-5; Chapter 252, Florida Statutes - Emergency Management; Section 408.821(4), Florida Statutes – Emergency management planning; emergency operations	
Future Planning	Continue to market and provide training to expand partner u throughout the state with continual enhancements and deve system expansion.	
Capability	HPP Capability 2 – Health Care and Medical Response Coo HPP Capability 4 – Medical Surge	ordination

**Contact Information:** For more information, contact <u>Marnie.FlaniganLyle@flhealth.gov</u> or <u>Adam.Clay@flhealth.gov</u>. Questions concerning system capabilities can be sent to <u>FLhealthsystems@flhealth.gov</u>.



### **Emergency Preparedness Plans Central Library**

**Purpose:** The Florida Department of Health, Bureau of Preparedness and Response has established an Emergency Preparedness Plans Central Library. This resource is designed to serve as a central location for all approved public health and medical-related response plans. The central library includes Department of Health state and county plans and other non-departmental plans relevant to health and medical.



### Primary Features:

- Provides an online central library for public health and medical-related plans
- Includes Base plans, Functional or Incident annexes or playbooks, planning guides, contingency plans, Standard Operating Procedures (SOP) / Standard Operating Guides (SOG) Continuity of Operations Plans (COOP), Mission Ready Packages (MRP) and job aids
- Allows for a search of plans by jurisdiction, plan type or keyword
- Provides secured computer access within the Department's network
- Serves as a preparedness tool. Does not contain incident action plans or incident specific response plans developed during an incident
- Contains more than 1,000 plans
- Updated on a routine basis with new and revised plans

### Who Uses the Emergency Preparedness Plans Central Library?

- Florida Department of Health Bureau of Preparedness and Response
- Florida Department of Health employees
- County Health Department preparedness planners and public information officers.

Year Implemented	Funding Source	Current User Count
2017 Replaces Plans Search Engine established 2014.	N/A	N/A
Authorities/Regulations	No regulatory authority	
Future Planning	Continue to maintain, enhance and update the central library and seek additional relevant health and medical planning resources.	
Capability	Supports all Office of Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP) and Centers for Disease Control and Prevention (CDC) PHEP capabilities.	

Contact Information: For more information, contact Kim.Bowman@flhealth.gov.



### **Florida Health Alert Network**

**Purpose:** The Florida Department of Health has established the Florida Health Alert Network (FLHAN) as an online web-based gateway to applications which support key preparedness, response and recovery activities for health and medical emergency management.

### **Florida**HealthAlertNetwork

#### **Primary Features:**

- Provides situational awareness on the Department's web page
- Performs daily verification of responder license information through automated daily verification; verification includes license status, license holder identity and suitability for emergency duty deployment. Once verification is completed, automated interfaces between the HAN and Everbridge ensures verification data is updated in the Everbridge Mass Notification system
- Provides access to reporting functions and dashboards to display data
- Provides information and resources for Emergency Support Function 8 (ESF8), Health and Medical responders and volunteers for the Florida Medical Reserve Corps (MRC)
- Requires password for access to internal applications such as EpiCom and Everbridge
- Provides access to FLHealthSTAT, the health care facility status system

#### Who Uses the FLHAN?

- Florida Department of Health
- Emergency Support Function 8 Health and Medical response partners
- Everbridge Administrators and Group Managers
- Local community partners

Year Implemented	Funding Source	Current User Count
The Florida Health Alert	Office of the Assistant Secretary for Preparedness and	
Network was deployed in	Response (ASPR) Hospital Preparedness Program (HPP)	Unlimited Capacity
2015.	Cooperative Agreements	
	42 U.S.C. 247d Public Health Emergencies; Chapter 252, Fl	orida Statutes –
Authorities/Regulations	Emergency Management; Chapter 381, Florida Statutes – Public Health: General	
	Provisions; Department of Health Policy 310-1, Florida Health	th Alert Network
Future Planning	Continue to expand the capability of the system to better ser responders and partners.	rve the needs of
Capability	HPP Capability 2 – Health Care and Medical Response Coo	rdination

**Contact Information:** For more information, contact <u>Beverly.Elliott@flhealth.gov</u> or <u>floridahealthsystems@flhealth.gov</u>. Also visit <u>http://www.floridahealthalertnetwork.com/</u>.



### **Florida Public Health Risk Assessment**

**Purpose:** The Florida Department of Health developed a tool for the assessment of hazard risk, and the capabilities and resources available to counteract hazards. The Florida Public Health Risk Assessment Tool (FPHRAT) assesses the risk of 36 hazards relevant to public health for the state and each county and region. The online tool includes a feature to calculate the social, medical and hazard vulnerabilities for each census tract, city, and county across Florida.



### Primary Features:

- Produces a jurisdictional risk assessment (Hazard probability, social and medical vulnerability indexes, public health impact, health care and behavioral impact scores, critical infrastructure index, capabilities, resources, and community resilience indexes, hazard risk and residual risk)
- Generates aggregated and non-aggregated reports:
  - Jurisdictional risk assessment and all its variables
  - Capability Assessment, Capability Gaps and Capability Hazard Component
  - Hazard Risk Index and Hazard Risk Index Aggregated
  - Resource Gap (resource readiness gap) and Resource Gap Aggregated
  - Resources Worksheet and Resources Worksheet Aggregated
- Includes the Hazard Vulnerability Data Explorer (HVDE) Parsing Tool that provides population counts for census tracts, cities, and counties in Florida in areas of high, medium, and low social, medical, and all hazards vulnerability. The tool also includes population estimates related to natural hazards and storm surge
- Contains guidelines
- Provides tools for County Capability Assessments and County Resources Assessments
- Provides secure access through log in and password with an option for read-only user log in

### Who Uses FPHRAT?

- Florida Department of Health and County Health Department preparedness staff
- Health Care Coalitions
- Emergency Support Function 8 Health and Medical response partners
- Florida Division of Emergency Management

Year Implemented	Funding Source	Current User Count
2013-2014	CDC – Public Health and Emergency Preparedness (PHEP) Cooperative Agreement	Administrative rights: 10 Default users: 67 Read-only users: 250
Authorities/Regulations	Public Health and Emergency Preparedness (PHEP) Cooperative Agreement	
Future Planning	Continue marketing, maintenance, and improvement of the tool.	
Capability	PHEP Capability 1 – Community Preparedness	

**Contact Information:** For more information, contact <u>Sonia.McNelis@flhealth.gov</u>. Also visit <u>https://flphrat.com</u>.



### **Geographic Information Services**

**Purpose:** Florida Department of Health personnel and response partners need information displayed in a format that can easily be understood. Mapping makes complex information instantly comprehensible in a way not possible with text or tables. A common Geographic Information System (GIS)-based server network makes data maintained by various DOH divisions readily accessible for analysis and visual displays, both within the Department and externally. This includes map feeds to the Florida Division of Emergency Management Geospatial Assessment Tool for Operations and Response (GATOR). GIS has been adopted for use in all



phases of emergency management - preparedness, response, recovery and mitigation as well as yearround training and exercise - not just response activities. Wireless technologies and web-based GIS applications have also enhanced the coordination of response efforts.

### Primary Features:

- Provides more than 20 category sets of health care provider locations available to internal and external GIS developers
- Provides more than 18 category sets of environmental health locations available to internal and external GIS developers
- Provides more than 26 published map services that are available to internal and external GIS developers
- Provides more than 7 web-based map services that are hosted by the Department's Internet and external servers
- Provides GIS developers for ad hoc mapping and geographical analysis

#### Who Uses GIS Services?

- Florida Department of Health planners and GIS developers
- Florida Division of Emergency Management GIS developers (GATOR)
- Emergency Support Function 8 Health and Medical response partners

Year Implemented	Funding Source	Current User Count
2004 Prior to 2004 GIS existed as individual unit applications.	CDC – Public Health and Emergency Preparedness (PHEP) Cooperative Agreement	225+ GIS developers, indeterminate public users
Authorities/Regulations	42 U.S.C. 247d Public Health Emergencies; Chapter 252, Florida Statutes – Emergency Management; Chapter 381, Florida Statutes – Public Health: General Provisions; Department of Health Policy 310-1 Florida Health Alert Network	
Future Planning	Maintain system hardware and software to current star Develop and deploy wireless applications for editing ar	
Capability	PHEP Capability 6 – Information Sharing PHEP Capability 7 - Mass Care PHEP Capability 13 - Public Health Surveillance & Epi	demiological Investigation

**Contact Information:** For more information contact <u>Marnie.FlaniganLyle@flhealth.gov</u>. Also refer to <u>https://gis.flhealth.gov/ESF8PlanningMap/</u>.



# Information Technology Field Operations and Incident Response Resources

**Purpose:** The Florida Department of Health has established an Information Technology (IT) Field Operations Incident Response Team of Disaster Preparedness Consultants (DPC) to ensure critical local systems remain available and operational during and after any incident or event. During a public health emergency, the Department is responsible for ensuring the availability of IT resources related to mission essential functions. The Centers for Disease Control and Prevention (CDC) funds equipment and supplies necessary to



support the team and sustain IT disaster preparedness and recovery equipment.

### Primary Features:

- Offers on-call IT readiness and response
- Supports continuity of operations mission essential functions, critical applications and communication needs
- Works closely with local System Administrators, Continuity of Operations Plan (COOP) Planners and Regional Emergency Response Advisors (RERAs) in implementing health preparedness technical requirements into IT infrastructure
- Supports local, regional, and state setup and reestablishment of IT Infrastructure
- Includes mobile recovery service equipment and software
- Conducts exercises and tests of equipment and ability to recover services and applications
- Provides satellite data services, temporary Intranet/Internet services, asset and data recovery services, voice and video conferencing, radio communications, alternate location and field response, and portable power generation capability
- Provides mobile communication units

### Who Uses IT Field Operations and Resources?

- Florida Department of Health
- County Health Departments
- Emergency Support Function 8 Health and Medical deployed teams

Year Implemented	Funding Source	Current User Count
2003	CDC – Public Health and Emergency Preparedness	67 County Health
	(PHEP) Cooperative Agreement	Departments
Authorities/Regulations	Chapter 282, Florida Statutes – Communications and Data Processing Chapter 252, Florida Statutes – Emergency Management	
	Chapter 74-2, Florida Administrative Code - Information Technology Security	
Future Planning	Continue to explore ways to effectively consolidate equipment and maximize use of equipment and resources.	
Capability	PHEP Capability 6 – Information Sharing	

Contact Information: For more information, contact the DPC team at IRMRDPC@flhealth.gov.



### Laboratory Information Management System (LIMS)

**Purpose:** The Florida Department of Health uses a Laboratory Information Management System (LIMS) to log, access and manage samples and associated data. This system supports laboratory operations and provides secure electronic reporting of specimen and test result data to public health partners. Technical support and maintenance is provided by LabWare LIMS:Version 7, a Laboratory Information Management System utilizing a contemporary, scalable platform.



### Primary Features:

- Handles 76 percent of all Bureau of Public Health laboratories (BPHL) laboratory tests
- Receives and reports, electronically between different software applications as Health Level-7 (HL7) messages, 89 percent of all testing allowing for real-time reporting
- Uses a scalable platform allowing multiple modulary developed add-ons
- Includes Clinical Health Template:
  - o Designed to address the needs of state and local public health laboratories
  - Allows BPHL to add functionality as the need arises
- Produces reports for test results, as well as statistical analysis reports for sample submitters and physicians, and a wide-array of utility reports
- Interfaces with laboratory instruments allowing for direct results reporting from instruments to LabWare LIMS, dramatically reducing the risk of preventable medical errors
- Supports centralized, decentralized or regionalized installations
- Supports desktop workstations, tablets and smart phones
- Provides fully integrated configuration tools to adapt the software to end-user requirements without compromising support or future upgrades

### Who Uses LabWare LIMS?

- Florida Department of Health Bureau of Public Health Laboratories, Bureau of Epidemiology
- County Health Departments

Year Implemented	Funding Source	Current User Count
In 2007 LabWare replaced the lab's proprietary MUMPS LIMS.	CDC – Public Health and Emergency Preparedness (PHEP) Cooperative Agreement	579 with expected increase of doctor's offices, clinics and hospitals upon deployment of WebLIMS web portal in 2017
Authorities/Regulations	Section 381.0031, Florida Statutes – Epidemiological research; report of diseases of public health significance to department; PHEP BP1 Cooperative Agreement Guidance – Public Health Information Systems	
Future Planning	Agreement Guidance – Public Health Information SystemsComplete work on the LabWare Web Portal to all providers to order laboratory tests. Test ordering through the Portal will enable providers to fill out a form with required demographic information and other required information for the test being ordered including pregnancy status, travel history, and known exposures. The Portal will have the capability of generating a printed laboratory requisition. A unique barcoded order identification number will be created for each order and will print on the requisition in label format. The Portal will be mobile friendly, allowing the user the option to scan and use pre-printed barcode labels in lieu of the application generated number. This will allow use of the system from tablets in outreach settings such as uro-survey and sero-survey field sample collection.	
Capability	PHEP Capability 12 - Public Health Laboratory Testing	

Contact Information: For more information, contact Robin.Lusk@flhealth.gov.



### **Project Management**

**Purpose:** The Florida Department of Health, Bureau of Preparedness and Response uses Teamwork to help manage a multitude of projects. Teamwork is a web-based application that provides a method to track projects and



daily operations efficiently and effectively. Teamwork Projects is a software application providing organization tools that can reduce meetings and monitor project development.

### Primary Features:

- Provides project management abilities to support the initiating, planning, executing, and controlling of projects to achieve specific goals and meet specific success criteria
- Allows for team management abilities for the administration and coordination of group tasks and performance measures
- Allows for task management through planning, testing, tracking, and reporting features
- Allows for a project portfolio enabling the centralization of processes and methods to collectively manage projects
- Provides file version control to manage documents and track change
- Allows for time tracking to measure, document, and record task and work hours
- Provides milestone relevancy to monitor and observe project progress
- Allows for messaging and the sharing of electronic communication

#### Who Uses Teamwork?

• Florida Department of Health Bureau of Preparedness and Response

Year Implemented	Funding Source	Current User Count
2017	Office of the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP) Cooperative Agreements	100
Authorities/Regulations	No regulatory authority	
Future Planning	Continue to utilize Teamwork to meet the project management needs of the Bureau of Preparedness and Response in an organized and structured manner providing a solution for efficient task management, project tracking, and appropriate prioritization.	
Capability	Supports all Office of Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP) and Centers for Disease Control and Prevention (CDC) PHEP capabilities.	

**Contact Information:** For more information, contact <u>Olajide.Thomas@flhealth.gov</u> or <u>floridahealthsystems@flhealth.gov</u>.



### **Resource Tracking**

#### Purpose:

The Florida Department of Health uses TeeCardsPlus as the application for tracking personnel and material assets in the field during a public health emergency or event. TeeCards is an online system based on the T-Card resource status system used by emergency services to record and visually display the status and location of personnel and material resources assigned to an incident. The system is an electronic version of a manual, physical T-Card system.



#### Primary Features:

- Operates as an online web-based application
- Provides boards and cards that are reusable and can be customized for different events
- Permits assignment of permission levels
- Allows customized color coding of cards to indicate status
- Changes card color when a mission is complete and resource is demobilized
- Provides the ability to move cards from one location to another
- Utilizes drag and drop functionality to move cards
- Contains the ability to create reports for all resource types
- Contains a memo field for including narrative, descriptive information

#### Who Uses TeeCards?

- Emergency Support Function 8 Health and Medical Resource Unit Personnel and Material Tracking specialists
- Emergency Support Function 8 Health and Medical Incident Management Team members

Year Implemented	Funding Source	Current User Count
2017	CDC – Public Health and Emergency Preparedness (PHEP) Cooperative Agreement	15 licenses – each license can be used by 2 concurrent users
Authorities/Regulations	42 U.S.C. 247d Public Health Emergencies; Chapter 252, Florida Statutes – Emergency Management; Chapter 381, Florida Statutes – Public Health: General Provisions.	
Future Planning	Refine and document the process for using the application and provide continued training to multiple staff to ensure they have the capability to fulfill the function during an emergency or event.	
Capability	PHEP Capability 6 – Information Sharing	

**Contact Information:** For more information, contact <u>Beverly.Elliott@flhealth.gov</u> or <u>floridahealthsystems@flhealth.gov</u>.



### **Statewide Inventory Management**

**Purpose:** The Florida Department of Health has an online statewide inventory management system. The current application for this system is the Inventory Resource Management System (IRMS) 360 Enterprise by Aptean Supply Chain Solutions. IRMS is a supply chain inventory management system. The system provides real time visibility of inventory levels in multiple theaters across Florida. The system allows global viewing of assets for preparedness considerations during all stages of an incident or event.

### Primary Features:

- Has real-time visibility for increased inventory accuracy and operational efficiencies
- Allows global searches-multiple warehouses using same items list
- Includes Inventory lot control and expiration date management to monitor the validation and verification of products to ensure proper and safe handling of perishable and date-sensitive items as well as hazardous materials (HAZMAT)
- Has Radio-Frequency Identification (RFID) capability to wirelessly transfer data for identifying and tracking assets
- Allows multiple users access simultaneously
- Allows flexible naming and typing supporting all desired product definitions, including using National Drug Codes with optional integration to the First Data National Drug Directory
- Offers serialization supporting end-to-end medical and other equipment tracking
- Ensures end-to-end transaction auditing to U.S. FDA 21 CFR Part 11 standards providing a secure or cold storage chain of custody; as reverse logistics manages critical product recalls
- Offers the ability to receive supplies by line item off of a purchase order and track expenditures by grant and fiscal year

### Who Uses IRMS?

- Florida Department of Health Bureau of Statewide Pharmaceutical Services
- Florida Department of Health Bureau of Preparedness and Response
- County Health Departments and Health Care Coalitions
- State Medical Response System

Year Implemented	Funding Source	Current User Count
The DOH Inventory Management System was established in 2005. IRMS became the provider in 2009.	Office of the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP) Cooperative Agreements	250
Authorities/Regulations	42 U.S.C. 247d Public Health Emergencies; Chapter 252, Florida Statutes – Emergency Management; Chapter 381, Florida Statutes – Public Health: General Provisions	
Future Planning	Continue to review how the inventory system can be maxim recruit users at the county and health care coalition level in global picture needed for advanced planning.	
Capability	HPP Capability 4 – Medical Surge PHEP Capability 8 - Medical Countermeasure Dispensing PHEP Capability 9 - Medical Materiel Management and Dis	tribution

### Contact Information: For more information, contact <u>Sherry.Watt@flhealth.gov</u>.





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### **Surveillance – Disease Outbreak Communications**

**Purpose:** The Florida Department of Health uses EpiCom as a secure outbreak communications system and moderated message board. EpiCom offers staff and partners the ability to post and receive messages related to suspected, probable or confirmed contagious diseases or outbreaks of public



health significance. Users can post follow-up messages to report any similar or related disease activity in their area. The system is used to communicate essential information regarding public health issues to internal and external partners throughout the state. It is used to share information regarding disease outbreaks or unusual cases, exposure events, food and product recalls, and disasters during a public health response. The system also shares epidemiology newsletters, Centers for Disease Control and Prevention (CDC) health notifications and investigation guidance.

#### **Primary Features:**

- Combines an interactive, moderated message board with alerting capabilities
- Prevents accidental circulation of confidential or sensitive information through review of messages by subject matter experts prior to posting
- Provides secure and restricted forums for sharing information
- Allows users to set personal preferences to receive messages on topics of interest
- Offers users the option to receive immediate email notification of new posts or choose a daily batched recap of messages

#### Who Uses EpiCom?

- Florida Department of Health staff. Although it began as a Bureau of Epidemiology system, it is now used by the Bureaus of Immunizations, Public Health Laboratories, Environmental Health and Preparedness and Response
- County health department staff including epidemiologists
- Public health partners in Florida and the U.S. Virgin Islands
- · Hospital infection control practitioners and other key health care partners
- Centers for Disease Control and Prevention

Year Implemented	Funding Source	Current User Count
2003	CDC – Public Health and Emergency Preparedness (PHEP) Cooperative Agreement	1,650 Users 50 Active Forums
Authorities/Regulations	Section 381.0031, Florida Statutes – Epidemiological research; report of diseases of public health significance to department; Chapter 64D-3, Florida Administrative Code (FAC)	
Future Planning	Continue to maintain, enhance and promote use of the system	
Capability	PHEP Capability 13 – Public Health Surveillance and Epidemiological Investigation	

**Contact Information:** For more information, contact <u>EpiCom.Administrator@flhealth.gov</u> or go to <u>www.floridahealth.gov</u> and enter EpiCom in the search box. To register for access to the system, visit <u>http://servfl.com</u>, click on "EpiCom" on the left hand menu.



### Surveillance – Early Notification of Community-Based Epidemics

**Purpose:** The Florida Department of Health uses a series of systems for disease surveillance, reporting and notification. The Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE-FL) provides state and local epidemiologists access to data, analytic tools and data visualizations that enhance their ability to detect outbreaks of disease in a timelier manner. It also provides the ability to conduct routine descriptive epidemiologic analysis, and monitor morbidity and mortality trends across multiple data sources. This system of public health surveillance emphasizes the use of near real-time pre-diagnostic data and



statistical tools to detect and characterize unusual activity for further public health investigation. The objective is to provide the data and tools needed to identify outbreaks or unusual trends before they would otherwise be detected, leading to a quicker public health response.

#### **Primary Features:**

- Includes seven data sets; Acute care visits from hospital emergency departments and urgent care centers, Merlin reportable disease data, Florida Poison Information Center Network data, Florida Office of Vital Statistics mortality data, PRISM STD reportable disease data, National Weather and Air Quality data, and Assistant Secretary for Preparedness and Response (ASPR) mission data
- Uses near real-time data
- Offers diverse data visualizations and dashboards to help characterize current syndromic and disease trends
- Results in information that can be used for outbreak detection, situational awareness and surveillance of post event health issues such as hurricanes
- Allows the ability to export graphics and summary statistic tables to include in county reports to stakeholders

### Who Uses ESSENCE-FL?

- Florida Department of Health Epidemiologists
- County Health Department epidemiology staff
- Hospital and urgent care center staff from facilities who contribute data to the system

Year Implemented	Funding Source	Current User Count
2007	CDC – Public Health and Emergency Preparedness (PHEP) Cooperative Agreement	<ul><li>245 Participating Hospitals</li><li>63 Participating Urgent</li><li>Care Centers</li><li>67 County Health</li><li>Departments</li></ul>
Authorities/Regulations	Section 381.0031, Florida Statutes – Epidemiological research; report of diseases of public health significance to department; Chapter 64D-3, Florida Administrative Code (FAC).	
Future Planning	Continue to work to onboard remaining hospitals. Continue to encourage County Health Departments to initiate hospital and urgent care recruitments. Expand to include additional datasets helpful to perform surveillance.	
Capability	PHEP Capability 13 – Public Health Surveillance and Epidemiological Investigation	

**Contact Information:** For more information, contact <u>Essence.Help@flhealth.gov</u> or visit <u>www.floridahealth.gov</u> and enter "Surveillance Systems" in the search box.



### Surveillance – Reportable Disease System

**Purpose:** The Florida Department of Health uses Merlin as a webbased reportable disease surveillance system. Merlin serves as the state's repository of reportable disease case reports for approximately 100 different reportable diseases. The system is used daily by all 67 county health departments to perform core disease surveillance and control work and to submit data to the Centers for



Disease Control and Prevention. System automation has improved daily efficiencies.

#### **Primary Features:**

- Capitalizes on being part of an integrated surveillance and outbreak management system reducing redundancy in development costs
- Includes case management features, data quality reports, performance management features, data summary and visualization features
- Receives electronic laboratory reports from hospitals and private laboratories and the state public health laboratories
- Contains a fully functional and integrated outbreak management module
- Links electronic laboratory reports to cases in the outbreak module
- Uses reportable disease case data input daily by county staff
- Allows access to the system and tasks based on assigned user roles
- Evaluates every case through system-applied decision support algorithms to determine if it meets the surveillance case definition and automatically assigns a case classification of confirmed, probable or suspected
- Generates individual review of high priority diseases by a state-level subject matter expert to insure accuracy, completeness and to look for trends
- Provides automated work flows for some diseases allowing more time for investigation work

### Who Uses Merlin?

- Division of Disease Control staff from the Bureaus of Epidemiology, Immunizations, Communicable Diseases, and Public Health Laboratories
- County health department epidemiology staff

Year Implemented	Funding Source	Current User Count
2001	CDC – Public Health and Emergency Preparedness (PHEP) Cooperative Agreement	580 users across 67 county health departments and the Division of Disease Control
Authorities/Regulations	Section 381.0031, Florida Statutes – Epidemiological research; report of diseases of public health significance to department; Chapter 64D-3, Florida Administrative Code (FAC)	
Future Planning	Continue to maintain, enhance and promote use of the system, allow for rapid data collection during response events.	
Capability	PHEP Capability 13 – Public Health Surveillance and Epidemiological Investigation	

**Contact Information:** For more information, contact <u>Merlin.Helpdesk@flhealth.gov</u> or visit <u>www.floridahealth.gov</u> and enter "Surveillance Systems" in the search box.



# Resources and System Management Internal Support

**Purpose:** In addition to managing a portfolio of systems and applications to maximize health situational awareness and support preparedness, response and recovery activities, the Bureau of Preparedness and Response (BPR), Resource and System Management Section provides technical support to system users. The section also provides the Bureau miscellaneous technical assistance, support and problem solving activities.



#### **Primary Features:**

- Provides IT assistance for software and hardware malfunctions and problems
- Establishes IT resources for new employees
- Provides recommendations and guidance on IT equipment purchases
- Monitors internal and external web pages including SharePoint, Hurricane Resource Center and Emergency Preparedness and Response external website. Assists page owners in updating and maintaining pages
- Participates in web team webinars and training sessions
- Assists in set up and production of large meetings and webinars
- Offers guidance on preparing for meetings and conference calls
- Conducts training sessions on IT related topics
- Maintains administrator rights and provides final approval of entries to the BPR calendar
- Provides back up assistance to other Bureaus and Divisions as requested
- Helps to coordinate mass e-mailings

### Who Uses Internal Support?

- Bureau of Preparedness and Response staff
- Department of Health executive leadership

**Contact Information:** For more information, contact <u>Marnie.FlaniganLyle@flhealth.gov</u> or <u>Barbara.Liberti@flhealth.gov</u>.









