



Georgia Department of Public Health

R-STaR

Responder Safety, Tracking, and Resilience and Hurricane Matthew

Presented by: **Laura Edison DVM, MPH**

CDC Career Epidemiology Field Officer
Georgia Department of Public Health, Epidemiology

May 16, 2017



We Protect Lives.

Why?

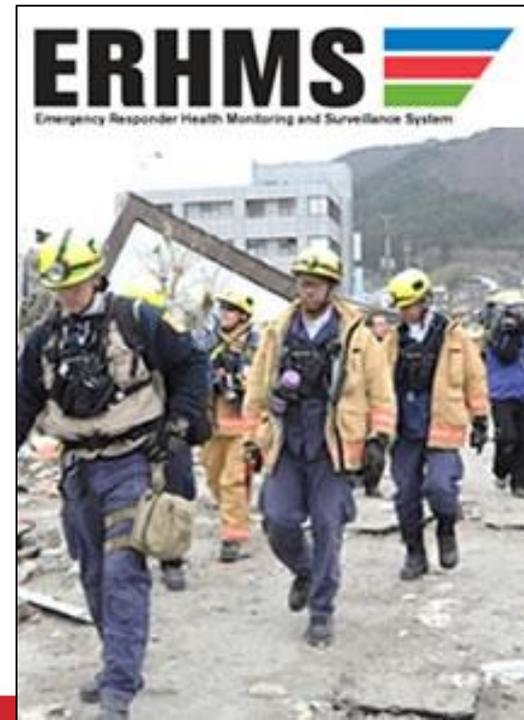
- During an emergency, Georgia depends on response workers who are prepared and trained to respond effectively and safely
- A plan for monitoring their health and safety is essential to protect them
- Responder safety and health is a core Public Health Emergency Preparedness capability
- Recent events have clarified the important of responder safety
 - 9/11, Deepwater Horizon, West Africa Ebola outbreak

CDC Public Health Emergency Preparedness Cooperative Agreement

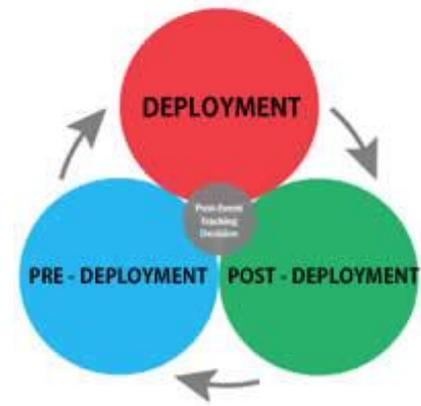
- Funds most public health preparedness activities in GA
- Responder Safety and Health is a core PHEP capability (Capability 14)
 - Protect public health agency staff responding to an incident
 - Support the health and safety needs of hospital and medical facility personnel, if requested
- Responders are defined as “public health agency staff”, but may also include first receivers (hospital and medical staff)
- Going beyond the capability... during a major incident public health may be called on to monitor a wide variety of responders

Monitor Responder Safety and Health Actions

- Conduct or participate in monitoring and surveillance activities to identify potential adverse health effects of public health responders
- Public Health should have access to a registry/database of responders
 - Document exposures or injuries
 - Should be updated as appropriate for each incident
- CDC's Emergency Responder Health Monitoring and Surveillance Framework serves as a model



R-STaR



- Georgia's answer to ERHMS
 - Responder Safety, Tracking, and Resilience
 - Responder health and safety monitoring framework
- Addresses the 3 stages of a response
 - Pre-deployment (prior to an emergency event): Roster and credential employees, vaccination status if applicable, know which responders are "ready" and available?
 - Deployment (during an emergency event): Where are the responders, what are their deployment duties, what are their hazardous exposures, and how is their health?
 - Post-deployment (after an event): How is their health now? Lesson learned?

Potential Benefits of R-STaR

- Roster and credential responders prior to an event
 - Record credentials, capabilities, trainings, immunizations, etc.
- Identify exposures and symptoms early in the course of a response
- Prevent or mitigate adverse physical and psychological outcomes
 - Take corrective action and evaluate protective measures
 - Identify responders for medical referral or long-term health surveillance
- Method of communicating rapidly with all responders
- Track resources/responders
- Meet PHEP capability requirements

Hurricane Matthew

- Anticipated major impact on coastal GA
- Public Health activated EOC and response teams
- Became clear many public health staff would be deployed to work on the response
- R-STaR electronic monitoring system was in the early stages of development, but we needed something immediately!



Creating a Monitoring System

- The hurricane hit Georgia late Friday Oct 7, 2016
- We started developing a monitoring system that morning, and deployed it Saturday
- Used the State Electronic Notifiable Disease Surveillance System (SendSS) web-based survey tool, with some modifications
- EOC section leads sent survey link to their responders to self-register in the system



Responder Registration Email

Hundreds of responders will go into the field in response to Hurricane Matthew. In order to ensure your health and safety, it is critical that we track your deployment activities to identify injury or illness during or after your deployment. Follow the below instructions to track your deployment activities:

Please complete the survey at this link to create a responder profile:
<https://sendss.state.ga.us/sendss/!dynamicsurvey.surveypublicprompt?pQATemplateId=4318>

Once this profile is created you will receive an email each day that will allow you to document your deployment activities, this will take less than a minute to complete each day.

If you have already been deployed, you can enter deployment activities that have already occurred when you create your responder profile.

Responder Registration

Responder Safety survey - Google Chrome
https://sendss.state.ga.us/sendss/dynamicsurvey.surveypublicprompt?pQATemplateId=4318&pStage=6

Responder Safety Survey

Responder

1 . Event Respondig To:

2 . Responder Status:

3 . Responder First Name:

4 . Responder Last Name:

5 . Responder Phone:

6 . Responder Email:

7 . Responder DOB:

8 . Emergency Contact (name and phone):

Worker Information

9 . Division \ Employer (i.e. DPH):

10 . Work area or section:

11 . If other work area, specify:

12 . Job Title:

13 . Office Address (street, city, state, zip):

14 . Supervisor (name, phone):

Readiness and Fitness

15 . Responder immunizations are up to date? Yes No Unknown

16 . Responder is fit for this deployment role? Yes No Unknown

17 . Responder can bring a two week supply of needed medications? Yes No Unknown

18 . Responder received just-in-time training? Yes No Unknown

Deployment

Deployment Health and Saffety History

Date	Status	Location	Exposures	Injuries
Health Checks Cannot be added until the survey has been Saved				

Deployment Notes

Comments Cannot be added until the survey has been Saved

Daily Reporting Email

The screenshot shows an email client window titled "Daily Responder Safety Health Check Request - Message (Plain Text)". The interface includes a ribbon with tabs for "FILE" and "MESSAGE", and a "McAfee E-mail Scan" status. The ribbon contains various action buttons such as "Ignore", "Delete", "Reply", "Reply All", "Forward", "More", "Meeting", "Ebola", "Team Email", "Reply & Delete", "To Manager", "Done", "Create New", "Move", "OneNote", "Actions", "Assign Policy", "Mark Unread", "Categorize", "Tags", "Translate", "Find", "Related", "Select", "Zoom", and "Zoom".

The email header shows the sender as "sendssupport@dhr.state.ga.us" with a profile picture icon, and the subject as "Daily Responder Safety Health Check Request". The recipient is listed as "Edison, Laura".

The email body contains the following text:

Dear Laura Edison,
Hundreds of responders will go into the field in response to Hurricane Matthew. In order to ensure your health and safety, it is critical that we track your deployment activities to identify injury or illness during or after your deployment. Please complete this very short survey every day you deploy for the Hurricane Matthew response.
<https://sendss.state.ga.us/sendss!/dynamicsurvey.surveypublicprompt?pQATemplateId=4338&QA117092=221164>

Please follow the link above, fill out the 3 questions, and click Submit.

Thank you!

Daily Reporting of Deployment Duties, Exposures, and Injuries

Daily Deployment Health and Safety Check

Health and Safety Check

Please select your name from the list, then provide your current status and any updates on your location and health status

- 1 . Please select your name: Edison, Laura ▼
- 2 . Current Status: No Longer Deployed ▼
- 3 . Date of Safety Check 11 / 01 / 2016
- 4 . Deployment Roles and Duties Epi, EOC
- 5 . Deployment County (if more than one, enter primary here and indicate others below) Fulton ▼
- 6 . Length of your deployment in hours:
- 7 . Deployment Location (City, Facility, etc.) 2 PT

Exposure / Injury Information

- 8 . Potential Exposures Yes No Unknown
- 9 . Injuries Sustained Yes No Unknown
- 10 . Notes (please record any exposures, injuries or other items of note):

Save

Monitoring Responder Reports

Survey Response Search Results

Enter a new response Frequencies Grid Export Data Dictionary (.csv)

Response ID	Event Respondig To:	Responder Status	Responder First Name	Responder Last Name	Work area or section:	Dep1 Location (County, Ci...	Dep1 Potential Exposures	Dep1 Injuries Sustained	Last Update Date
221511	HURRICANE	NO LONGER DEPLOYED			NURSING	Laurens	0	0	10/11/2016
221946	HURRICANE	READY TO DEPLOY			NURSING	Richmond	0	0	10/17/2016
221271	HURRICANE	NO LONGER DEPLOYED			NURSING	Bibb	0	0	10/10/2016
221274	HURRICANE	NO LONGER DEPLOYED			NURSING	Bibb	0	0	10/09/2016
221326	HURRICANE	NO LONGER DEPLOYED			OTHER	Laurens	0	0	10/09/2016
221218	HURRICANE	CURRENTLY DEPLOYED			NURSING	Richmond	0	0	10/08/2016
221221	HURRICANE	NO LONGER DEPLOYED			NURSING	Richmond	0	0	10/10/2016
221225	HURRICANE	NO LONGER DEPLOYED			NURSING	Richmond	0	0	10/08/2016
221367	HURRICANE	NO LONGER DEPLOYED			NURSING	Peach	0	0	10/10/2016
221164	HURRICANE	NO LONGER DEPLOYED			EPI	Fulton	0	0	10/07/2016
221233	HURRICANE	NO LONGER DEPLOYED			NURSING	Richmond	0	0	10/11/2016
221236	HURRICANE	NO LONGER DEPLOYED			NURSING	CHOOSE ONE	0	0	10/11/2016
221370	HURRICANE	NO LONGER DEPLOYED			NURSING	CHOOSE ONE	0	0	10/17/2016
221202	HURRICANE	NO LONGER DEPLOYED			EH	Bibb	0	0	10/08/2016
221216	HURRICANE	NO LONGER DEPLOYED			NURSING	Bibb	0	0	10/08/2016
221259	HURRICANE	NO LONGER DEPLOYED			NURSING	Columbia	0	0	10/08/2016
221437		NO LONGER DEPLOYED			NURSING	CHOOSE ONE	0	0	10/19/2016
221375	HURRICANE	NO LONGER DEPLOYED			NURSING	Bibb	0	0	10/10/2016
221204	HURRICANE	NO LONGER DEPLOYED			EH	Bibb	0	0	10/09/2016
221228	HURRICANE	READY TO DEPLOY			NURSING	Bibb	0	0	10/08/2016
221234	HURRICANE	NO LONGER DEPLOYED			NURSING	Richmond	0	0	10/11/2016
221268	HURRICANE	NO LONGER DEPLOYED			NURSING	Bibb	0	0	10/11/2016
221334	HURRICANE	NO LONGER DEPLOYED			IMMUNIZATION	Fulton	0	0	10/17/2016
221328	HURRICANE	NO LONGER DEPLOYED			OTHER	Laurens	0	0	10/09/2016
221372	HURRICANE	NO LONGER DEPLOYED			NURSING	Richmond	0	0	10/10/2016

Individual Responder Reports

Responder Safety Survey - Google Chrome
https://sendss.state.ga.us/sendss/dynamicsurvey.surveypublicprompt?pQATemplateid=4318&pQAResponseId=221

10. Responder received job-specific training: Yes No Unknown

Deployment

Deployment Health and Safety History

Date	Status	Location	Exposures	Injuries	
10/13/2016	Currently Deployed	Fulton - 2 peachtree	No	No	Remove
10/08/2016	Currently Deployed	Cobb - Home	No	No	Remove
10/07/2016	Currently Deployed	Cobb - Home	No	No	Remove
10/06/2016	Currently Deployed	Cobb - 2 Peachtree	No	No	Remove
10/05/2016	Currently Deployed	Cobb - Home	No	No	Remove

Health and Safety Check

Please select your name from the list, then provide your current status and any updates on your location and health status

- Please select your name: Edison, Laura
- Current Status: Currently Deployed
- Date of Safety Check: 10/28/2016
- Deployment Roles and Duties: Technical
- Deployment County (if more than one, enter primary here and indicate others below): Fulton
- Length of your deployment in hours: 10
- Deployment Location (City, Facility, etc.): 2 peachtree

Exposure / Injury Information

- Potential Exposures: Yes No Unknown
- Injuries Sustained: Yes No Unknown
- Notes (please record any exposures, injuries or other items of note):

[Close](#) [Save](#)

[Add Safety Check](#)

Deployment Notes

10/07/16 09:26:32	ksoetebier	Sample Notes Part2
10/07/16 09:14:51	ksoetebier	Sample Comment on Deployment

[Add New Comment](#)

[Save](#)

Results

- System deployed the day the storm hit
- 128 responders registered and reported
 - 11 Health Districts, and >30 Counties
 - Nursing, Environmental Health, Epidemiology, EMS, WIC, Immunizations, other
- 6 responders reported potential exposures
 - Contacted each responder to determine health status and if additional follow-up was needed

Post-Deployment Responder Survey

Responder Survey

Thank you for all your hard work during the Hurricane Matthew response, and thank you for participating in our Responder Safety Survey. We are in the process of developing a more robust responder safety system, and are interested in your feedback about using the survey, and about your deployment experience. Please take a couple minutes to complete this short survey to help us design a better responder safety system, and improve your deployment experience in the future.

1 . The responder safety survey was easy to use Yes Somewhat No

2 . Please describe strengths and weakness of the system and how it could be improved, or additional functionality you would like to see:

3 . I liked having my deployment activities tracked Yes Somewhat No

4 . Notes:

5 . I received just-in-time training and felt prepared for my deployment role Yes Somewhat No

6 . Notes:

7 . I felt safe while deployed: Yes Somewhat No

8 . Notes:

9 . I had the supplies and equipment I needed for my deployment: Yes Somewhat No

10 . Notes:

11 . My family and I were prepared for the disruption in our routine caused by the incident Yes Somewhat No

12 . Notes:

13 . I engage in self-care activities during my deployment (Some examples are: staying hydrated, eating right, getting enough sleep/rest, and exercising) Yes Somewhat No

14 . Barriers to self-care included:

15 . After my deployment I experienced (am experiencing) lingering signs of stress, such as unpleasant memories of your experience, changes in sleep patterns and appetite, and trouble concentrating. Yes Somewhat No

16 . Notes:

R-STaR Strengths

- R-STaR was very well received and easy to use, despite last minute roll out and no training
- **Responders like knowing someone is looking out for them!**
- **Supervisors like being able to monitor their responders!**
- R-STaR will allow us to
 - Track who is responding, where, and for how long
 - Monitor the health and safety of responders
 - Meet SNS dispenser monitoring, and PHEP capability 14 requirements

Tracking Resources

- During a declared emergency, it is critical to track resources used for the response
 - Reimbursement based on accurate tracking
 - There is currently no efficient way to track who is deployed, where they deployed to, or their deployment hours
 - Many responders consider their “deployment” part of their routine duties and don’t check in
- R-STaR will enable us to accurately track the human resources used to respond to an event

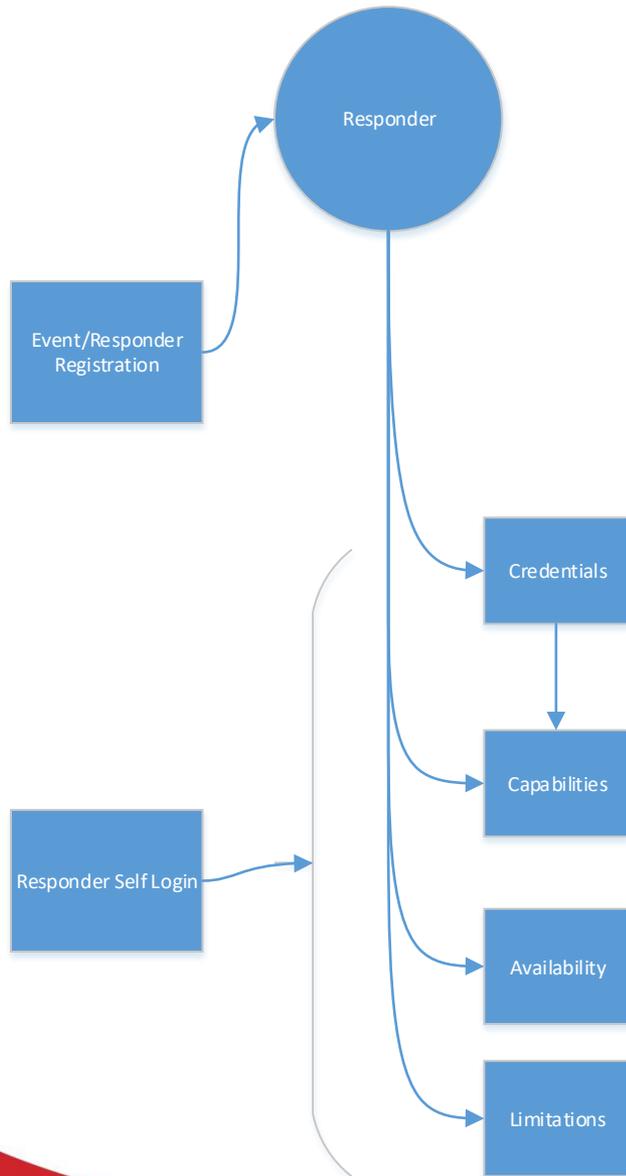
Lessons Learned

- Allowing responders to self-register and report daily increases system use and decreases resources needed for monitoring
- Monitoring responders is an appropriate role for Epidemiology
 - Section supervisors can have access to the system to track their responders or delegate Epi to do it
- We learned a lot from this trial run! Lessons learned are being used to build the new R-STaR Monitoring System
 - **Must be easy and instinctual to use** in order to reach busy responders with no prior training

R-STaR Monitoring System

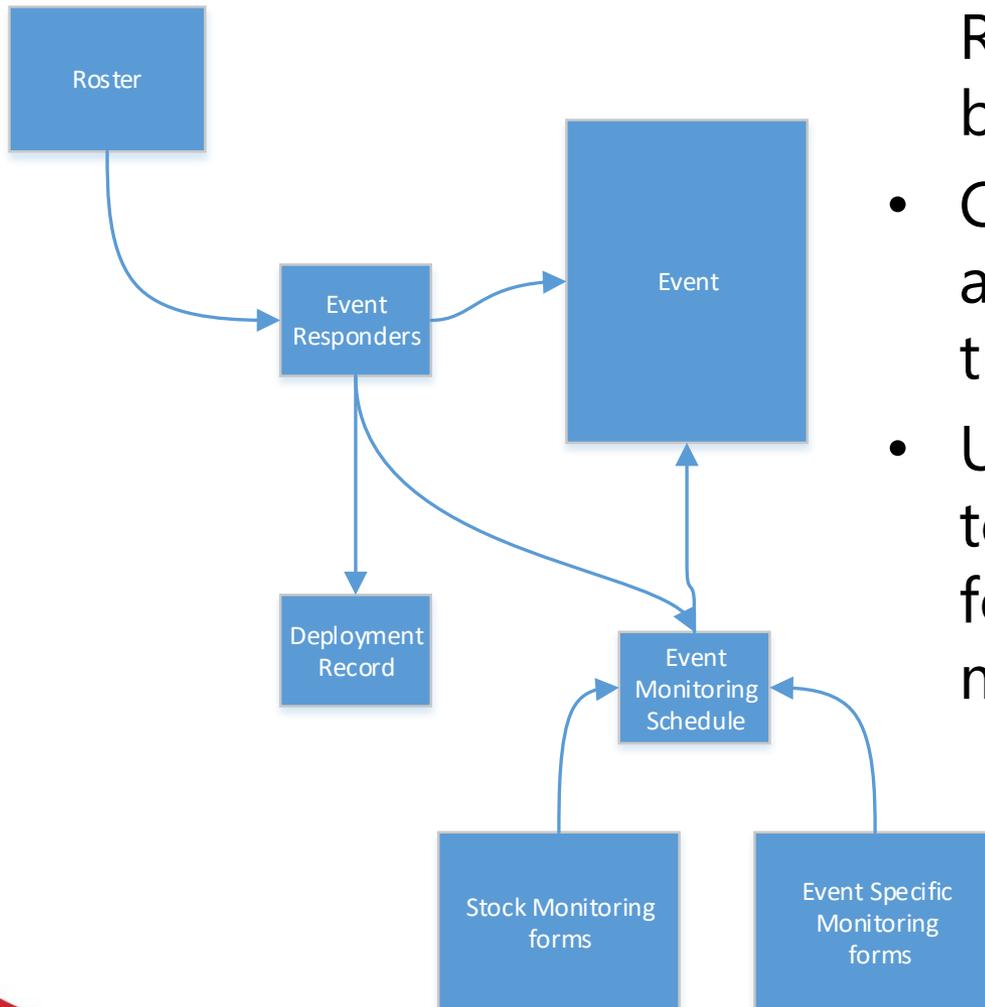
- Coming This Summer!
- Housed in SendSS
 - Web based (can be used in the field)
 - Controlled privileges
- Will have several components that interact with each other to roster, credential, track and monitor responders before, during and after an event
- Designed to be flexible to accommodate various responder categories, and diverse events
- Composed of a Responder Module, and an Event Module

R-STaR Responder Module



- Roster staff
- Tracks credentials and capabilities
- Allows self-registration and a basic health screening
 - Self-reported limitations
 - Vaccination status if applicable
 - Respiratory fit testing
- Allows ongoing self-maintenance by responder

R-STaR Events Module



- Tool for Administrators of R-STaR (not generally seen by responders)
- Create an event and associate responders with the event
- Use custom data capture tools during the event and for post-deployment monitoring

Deployment

- Create an event/incident
 - Create a customizable event specific registration and monitoring forms that gather information from potential responders
- Track
 - Just-in-time training and PPE dispensed
 - Deployment location, hours, and duties
 - Potential exposures, injuries, and if responders were personally affected and have additional needs, etc.
- Epidemiology
 - Monitors responders
 - Follows-up with those reporting exposures or injury
 - Communicates exposures, health monitoring and surveillance data out to partners

Post-Deployment

- Post-event responder health tracking
- Follow-up with exposed or injured responders
- Conduct long-term surveillance for delayed adverse effects (physical and mental health)
- Distribute resources to responders
- Conduct after-action assessments/reports

Post-deployment Responder Survey



Responder Information

1 . Division \ Employer (i.e. DPH)

2 . Work area or section:

Choose One ▼

3 . If other work area, specify

4 . Deployment role(s) and duties

Monitoring Responders

- When
 - Natural and manmade disasters, disease outbreaks
 - Routine operations
 - Rostering, availability, contact information
 - Track credentials, immunizations
 - Means to easily reach staff, collect and maintain data
- Who
 - Public Health Responders include
 - Epidemiologists, Nurses, WIC, Immunizations, Behavioral Health, EH, Regional EH Strike Teams, EPR, MRC, other volunteers, SNS dispensing staff, Pharmacy, and more.....
 - Infectious Disease Network, other first responders?

Thank You

Laura Edison

Georgia Department of Public Health

2 Peachtree Street NW

Atlanta, GA, 30303

404-657-6452

laura.edison@dph.ga.gov