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Responder Safety, Tracking, and Resilience — Georgia, 2016 –2017

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Objective

To better understand the importance of monitoring responders during public health emergencies and to learn how the Georgia Department of Public Health (DPH) developed and deployed an electronic responder monitoring tool.

Introduction

During an emergency, the state of Georgia depends on public health staff and volunteers to respond. It is imperative that staff are safe before, during and after deployment. Emergency response workers must be protected from the hazardous conditions that disasters and other emergencies create[1]. In October 2016 and September 2017, Hurricanes Matthew and Irma caused widespread evacuation of Georgia residents, initiating a tremendous sheltering effort. Hundreds of public health responders were deployed to assist with sheltering and other aspects of the response. DPH rapidly developed a novel electronic Responder Safety, Tracking and Resilience module, which was used to track public health responders and monitor their health and safety while deployed.

Methods

DPH rapidly developed a novel electronic Responder Safety, Tracking, and Resilience module (R-STaR), within the existing State Electronic Notifiable Disease Surveillance System to monitor the health and safety of responders. R-STaR was originally used during Hurricane Matthew, where it was launched the day of the storm, and was launched again four days before Hurricane Irma made landfall. Responders were emailed a web-based link to register, indicating demographic information, contact information, work location, subject area, vaccination status, and whether they considered themselves mentally and physically fit to deploy. Responders then received a daily email with a link to document their daily deployment location, duties, and whether they had any hazardous exposures, illness, or injuries while deployed. A post-deployment survey was sent to responders after Hurricane Matthew to solicit feedback about the responder safety module.

Results

During Hurricane Matthew, 128 responders representing 11 Georgia Public Health Districts registered in R-STaR. Seven responders reported illness or injury and were contacted to determine if medical services were needed; all remained healthy post-deployment. During Hurricane Irma, 1240 responders representing DPH and 16 Public Health Districts, and other employers, including law enforcement, fire, and education, registered in R-STaR. Of 472 responders completing daily health checks during their Irma deployment, 48 reported an injury, illness, or exposure, and were contacted to determine if services were needed. The daily health checks led to the identification of an outbreak of influenza in one of the shelters and resulted in vaccination or antiviral prophylaxis administration to 76 responders. Fifty responders to Hurricane Matthew completed the post-deployment survey; 95% found R-STaR easy to use, and 92% indicated that they liked being monitored. Supervisors indicated that the module could be used to: 1) roster and credential responders prior to an event; 2) track where responders are, monitor their health and safety during an event, and quantify the human resources deployed during a declared emergency; and, 3) to distribute post-response responder resources, monitor responder health, and gather information for after-action reports.

Conclusions

R-STaR was widely used and well received despite being implemented with no prior training, with a dramatic increase in the number of responders registering from the first implementation in 2016 to the second implementation in September 2017. Monitoring responder health and safety is crucial to responding to and preventing outbreaks during a response, and ensuring responders get appropriate mental and physical support after a deployment. Lessons learned from both events will be used to create a just-in-time training curriculum, and develop a more robust R-STaR, which will enable responder rostering, credentialing, tracking and monitoring before, during, and after an event to ensure the health and safety of our responders as well as for future planning.

Keywords

Responder; Hurricane; Health Monitoring

References

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