



HHS emPOWER PROGRAM

Translating Research into Practice

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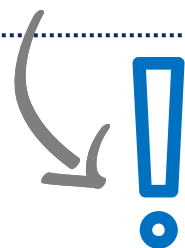
2018

Why HHS Created the emPOWER Program

Identifying and Addressing At-Risk Population Needs

How can we help communities **reduce system stress, ensure continuity of care**, and better **protect** their at-risk populations from adverse health outcomes?

In the event of an **incident, public health emergency** or **disaster**, at-risk populations often seek immediate care from first responders (e.g., EMS), hospitals, and shelters



This leads to **surges in health care demand** and **stress** on the health care system and shelters

Millions of Americans, including over **3.9 million** Medicare beneficiaries,



rely on electricity-dependent medical equipment and health care services to live independently in their homes

Can Centers for Medicare and Medicaid Services (CMS) data help communities **anticipate, plan for, and address** the unique needs of the electricity and health care dependent population?

Evidence for the HHS emPOWER Program

Medicare claims data is a reliable resource for locating at-risk individuals, enabling emergency responders to reach the **right people** at the **right time** during an emergency

The Pilot

ASPR and CMS partnered with the City of New Orleans (NOLA) Health Department to **test if Medicare claims data were current enough to locate NOLA residents** that use oxygen electricity-dependent medical equipment during emergencies

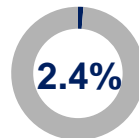


Figure 1. Medicare beneficiaries in the City of New Orleans with a claim for ventilator, oxygen concentrator, and/or oxygen tank.

The Results

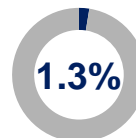
- **611 individuals** had a claim for oxygen concentrator or ventilator
- Data were **93% accurate** in identifying the medical equipment used by the **191 individuals visited***
- Drill also revealed gaps in emergency preparedness:

Only 15 people



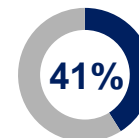
were enrolled in the city's special needs registry

Only 8 people



were enrolled in the electric company's registry

Almost half



did not have an emergency plan

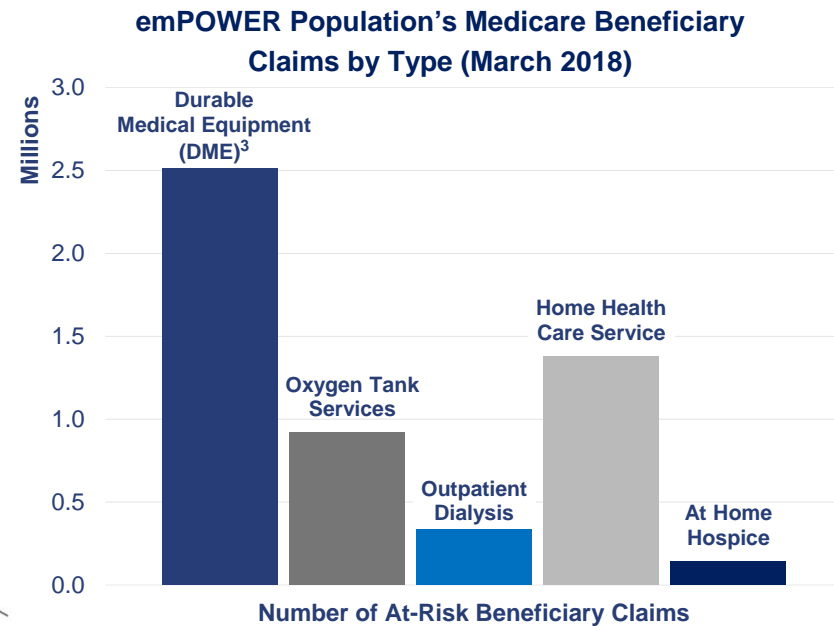
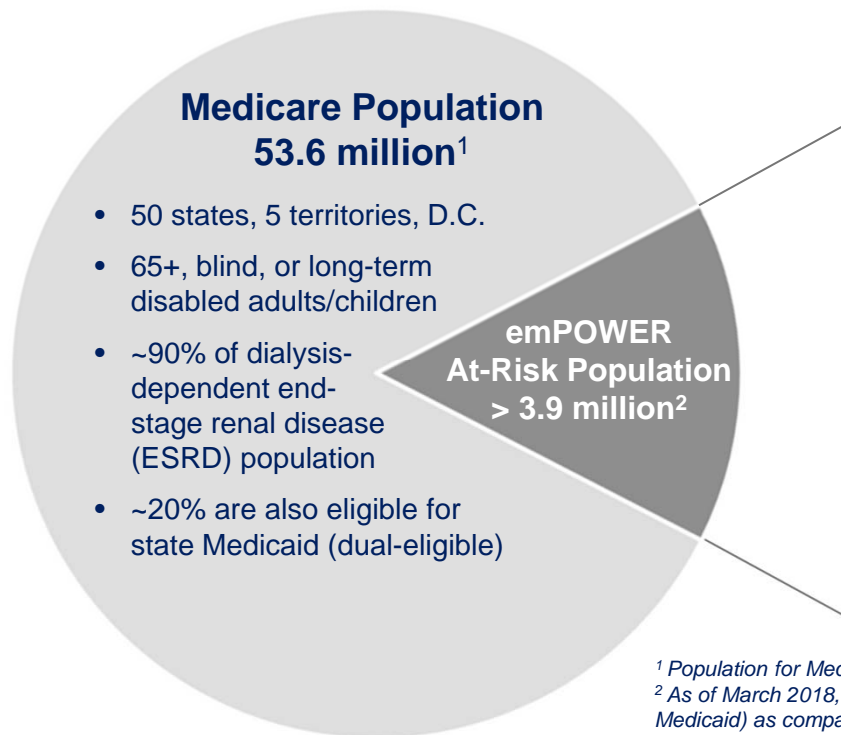
Over half



would need assistance in an emergency

*Similar results were observed in an exercise in Broome County, New York

Characteristics of the HHS emPOWER Population



¹ Population for Medicare (Parts A/B) and Medicare Advantage (Part C) as of March 2018.

² As of March 2018, 27% of the emPOWER population is dual-eligible (beneficiary is enrolled in Medicare and state Medicaid) as compared to the national average of 17.1%.

³ Total counts Medicare beneficiaries only once, even if they have more than one piece of electricity-dependent DME.

Elements of the HHS emPOWER Program

Innovative Use of CMS Data

ASPR and CMS partnered to create the HHS emPOWER Program, which leverages CMS Medicare beneficiary data to populate innovative program tools, including datasets, Geographic Information Systems (GIS) maps, and GIS Representational State Transfer (REST) Services, to provide communities with the **right data** in the **right tool** to the **right person** at the **right time**



Data

Electricity-Dependant		
States/Territories	Counties	ZIP Codes
Geographic Area	Beneficiaries	Electricity-Dependent Beneficiaries
Alabama	938,816	53,124
Alaska	81,873	2,768
American Samoa	2,634	17
Arizona	1,126,976	56,185
Arkansas	675,049	41,926
California	5,373,981	171,766
Colorado	776,225	91,926
Connecticut	592,900	19,804
Delaware	180,876	7,562



Dataset Tools

Services	Services	Services	All Power Dependent			
# O2 services (13 months)	# Home health (3 months)	# At-Home Hospice (3 months)	# Electricity-Dependent Devices and DME	# Cardiac Devices (5 years)	# Ventilators (13 months)	# BIPAPs (13 months)
15	22	11	46	50	11	11
INDIVIDUAL LEVEL DATASET - All At-Risk Individuals POPULATION: Medicare population is restricted to alive beneficiaries as of November 2014 who are enrolled in Medicare Part A and B or MA indicates that the at-risk population is not included in this request. NOTE: All data are fictitious and used for illustrative purposes only.						
Initial Sorting Order	First Name	Last Name	Date of Birth	Enrollment/Plan Type	PO Box or Address	"Care Of" Indicator
1	Anne	Smith	November 4, 1948	PPS	0	0
2	Amy	Brown	February 18, 1955	MA	0	1
3	John	Taylor	December 25, 2018	MA	0	0
4	Jane	Doe	March 4, 1966	PPS	0	0
5	Robert	Walker	May 20, 1930	PPS	0	0
6	Mary	Johnson	September 14, 2012	PPS	0	0
7	William	Jones	December 1, 1933	PPS	0	0
Address Indicators			Address			
			Solution	Street Address 1		
			Adm Park Manor Home Fr	57 Coney Island Dr		
			C/O Geriatric Care Ctr	150 Dean Street		
				1800 W 20 St		
				2800 Bay Ridge Ave		
				1900 E 10th St		
				27 E 22nd Place		
			Dev Chr Par David Robbins	280 E 205 St		



Mapping Tools



The HHS emPOWER Program

emPOWERing Communities, Saving Lives

The HHS emPOWER Program provides dynamic data and mapping tools to help communities protect more than **3.9 million** Medicare beneficiaries who rely on electricity-dependent medical equipment and health care services

emPOWER Map and REST Service



Publicly available at
<https://empowermap.hhs.gov>

emPOWER Emergency Planning De-identified Dataset

Services	All Power Dependent	
# At-Home Hospice (3 months)	# Electricity-Dependent Devices and DME	# Cardiac Devices (5 years)
11	44	50
50	13	11
50	13	11
11	44	50

Restricted to public health authorities and relevant partners

emPOWER Emergency Response Outreach Individual Dataset

INDIVIDUAL LEVEL DATASET - All At-Risk Individuals					
POPULATION - Medicare population is restricted to alive beneficiaries as of November 2014. NA indicates that the at-risk population is not included in this request.					
NOTE: All data are fictitious and used for illustrative purposes only					
Name			Other Information		Address
Initial Sorting Order	First Name	Last Name	Date of Birth	Enrollment/Plan Type	PO Box or Unknown Address
1	Anne	Smith	November 4, 1944	FFS	0
2	Amy	Brown	February 19, 1955	MA	0
3	John	Taylor	December 20, 2028	MA	0
4	Jane	Doe	March 4, 1966	FFS	0

Secure, restricted to authorized public health authorities

Mitigation



Preparedness



Response



Recovery



Slide 6

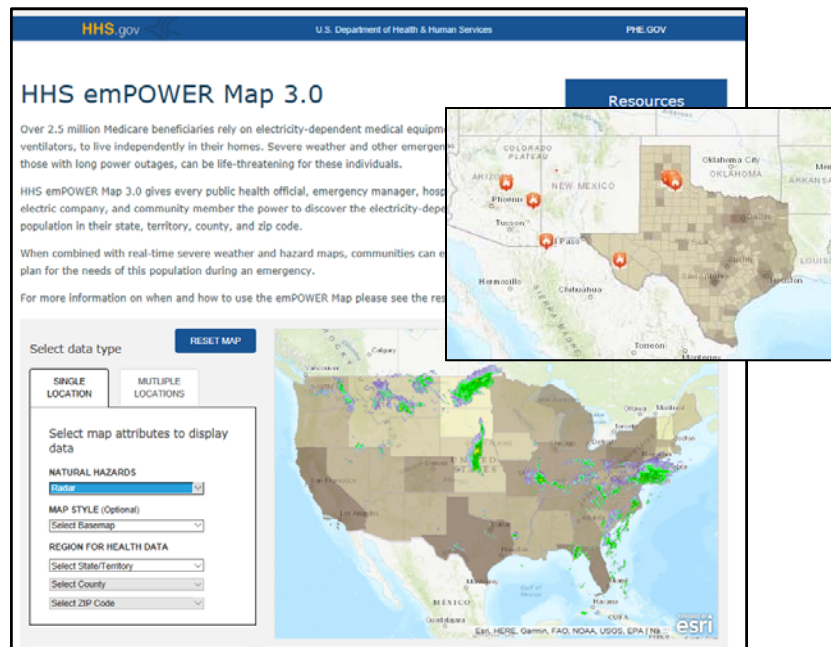
SR261

Update respository (and leader??) slides

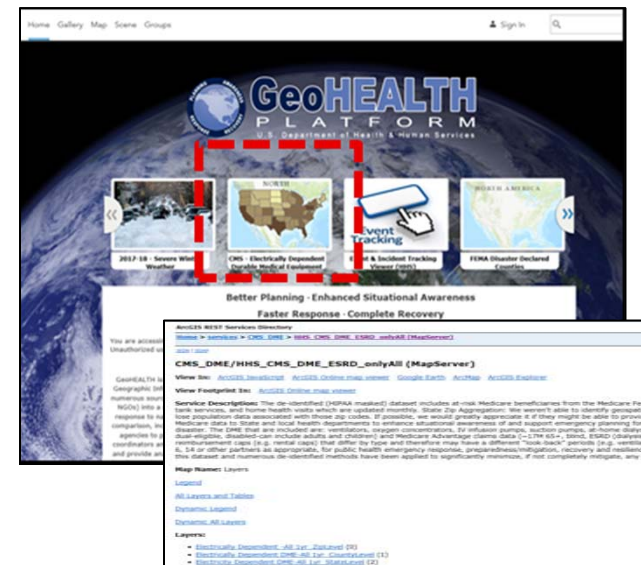
Rollet, Shelley, 4/4/2018

What are the emPOWER Map and REST Service?

ASPR is helping communities by providing de-identified at-risk Medicare beneficiary data on the interactive HHS emPOWER Map, and through an emPOWER REST service via ASPR's GeoHEALTH Platform



Publicly accessible at <https://empowermap.hhs.gov>

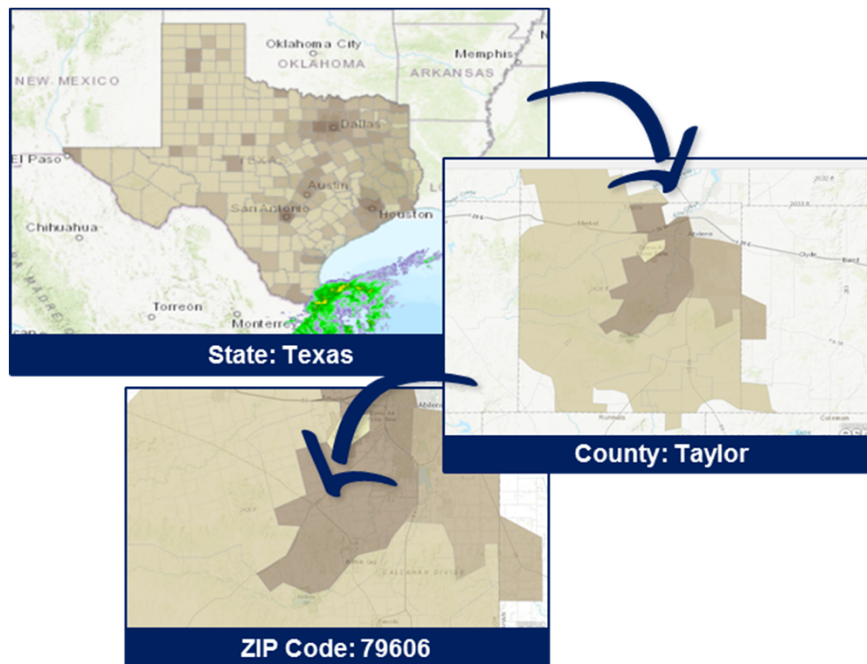







Publicly accessible at <https://geohealth.hhs.gov>

HHS emPOWER Map and REST Service

How can I use the emPOWER Map and REST Service?

The map and REST Service provide a starting point for estimating the electricity-dependent population in a geographic area prior to, during, or after an emergency

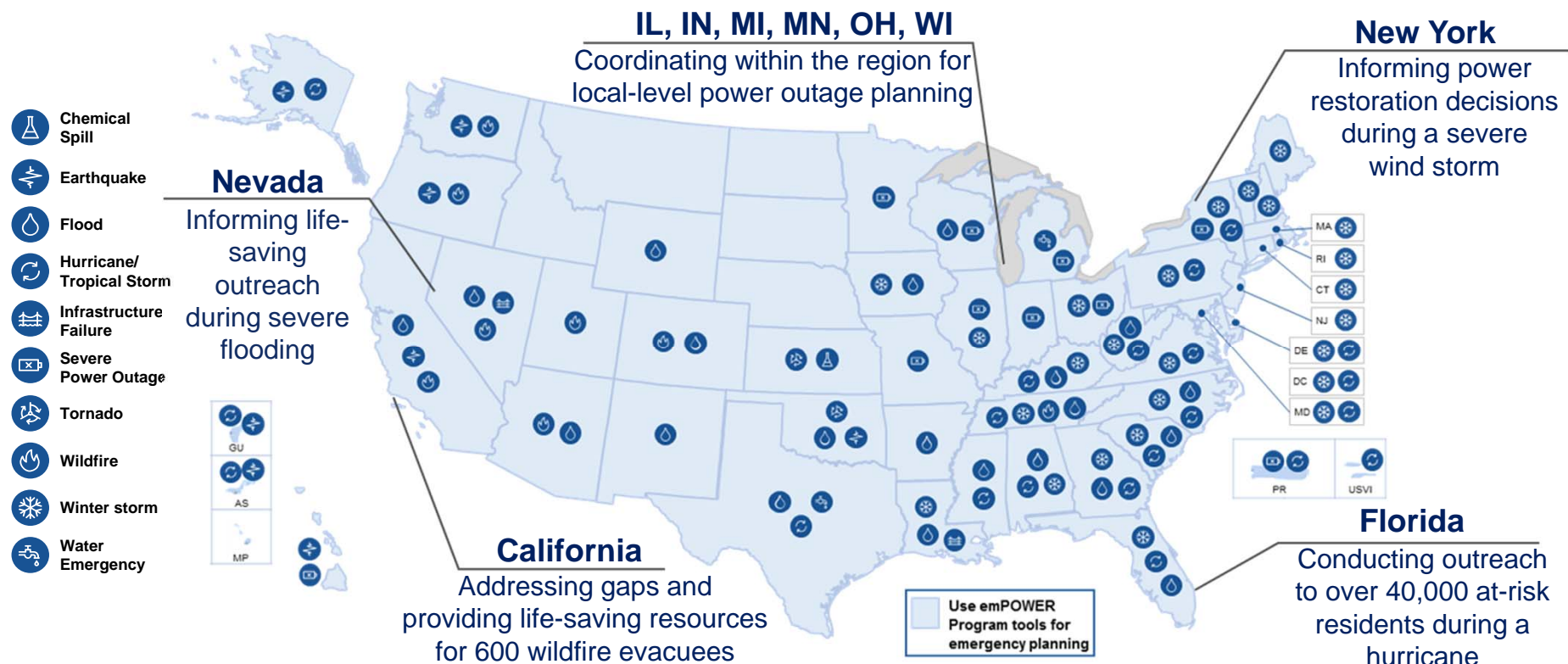


-  Gain population-based situational awareness
-  Identify health care resource needs and potential areas of hospital/EMS surge
-  Determine potential shelter locations and shelter resource needs
-  Plan for evacuations and identify evacuation routes
-  Inform public communications and foster community engagement and assistance

Bringing It All Together: The HHS emPOWER Program in Practice

HHS emPOWER Program in Action

Examples of Where the Program has been Used



HHS emPOWER Program Use Case

Hurricane Matthew in Florida

The HHS emPOWER Program helped Florida quickly identify and provide outreach to tens of thousands of at-risk individuals, setting the stage for life-saving emergency response

Planning and Preparedness

In anticipation of Hurricane Matthew, Florida Health used the emPOWER Emergency Response Outreach Individual Dataset to identify at-risk individuals in seven counties and perform a **reverse lookup of phone numbers**

Response

A life safety call was made to **over 40,000 residents** by the Florida Division of Emergency Management using the Statewide Alerting and Notification System

Impact

Staff **contacted the 169 individuals** who indicated they might have a health or medical need during and shortly after the hurricane



Supporting partners:

- Florida Division of Emergency Management
- Local Emergency Managers and Emergency Operations Centers

44,500 at-risk residents identified and called

17,000 residents responded to calls

169 individuals requested assistance

HHS emPOWER Program Use Case

Severe Flooding in Nevada

HHS emPOWER Program tools helped Carson City Health and Human Services (CCHHS) and Washoe County Health District (WCHD) assess its capacity to assist the at-risk population and engage partners to ensure coordinated outreach

Planning and Preparedness

In 2017, CCHHS used both emPOWER datasets to **identify and address gaps in resources** (e.g. oxygen tanks) for the at-risk population and **map evacuation routes** for beneficiaries in flood-prone areas

Outreach

CCHHS and WCHD used the emPOWER Emergency Response Outreach Individual Dataset to **identify at-risk individuals living in flood-prone, avalanche-prone, and remote areas**, and coordinated with Medical Reserve Corps volunteers to provide outreach

Impact

CCHHS is expanding use of the emPOWER Individual dataset to help **set up mass care operations and inform umbrella contracts** with DME companies. WCHD and Washoe County GIS developed an effective way to process emPOWER data within 30 minutes



4 counties in Nevada benefitted from emPOWER Program data

300 homes in flood-prone areas contacted by CCHHS



Supporting partners:

- NV Division of Public and Behavioral Health
- NV Aging and Disability Services
- NV Division of Emergency Management
- NV National Guard
- Tribe Emergency Manager

Use Case: Severe Wildfires in Los Angeles, California

HHS emPOWER Program tools helped Los Angeles (LA) identify the needs of its at-risk population and connect with health care partners to improve continuity of care

Emergency Preparedness Planning

In December 2017, LA County Department of Public Health requested emPOWER data on behalf of the City of LA to support first responder efforts to identify and locate at-risk individuals in areas that had been evacuated due to wildfires

Recovery

Following the wildfires, LA County identified and engaged durable medical equipment (DME) and oxygen suppliers in the area, serving approximately 600 at-risk individuals. This effort helped ensure continuity of care for many wildfire evacuees

Impact

The City of LA is incorporating emPOWER data into emergency response protocols and plans. LA County and LA City are developing mapping applications for the data to provide first responders with current, actionable information on the at-risk population



~600 at-risk individuals impacted by wildfires



Supporting partners:

- LA Emergency Management Department
- LA Fire Department
- LA Police Department
- DME and Oxygen Suppliers

38 DME providers contacted, and 22 surveyed

emPOWERing Partners- New Tech, Training and Tools in 2018

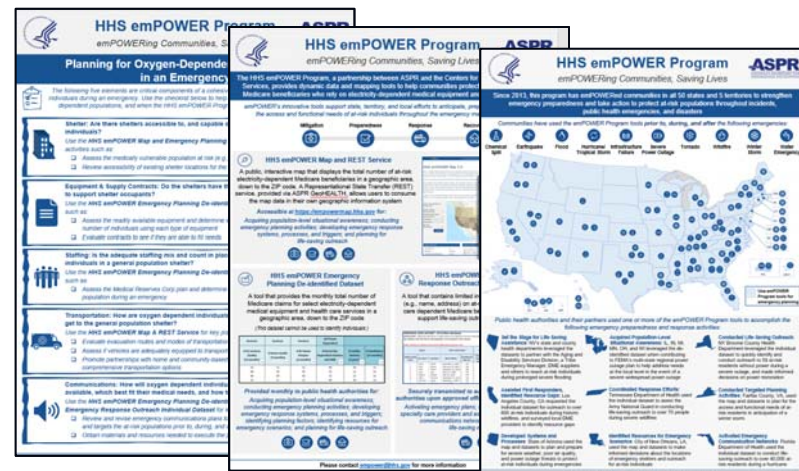
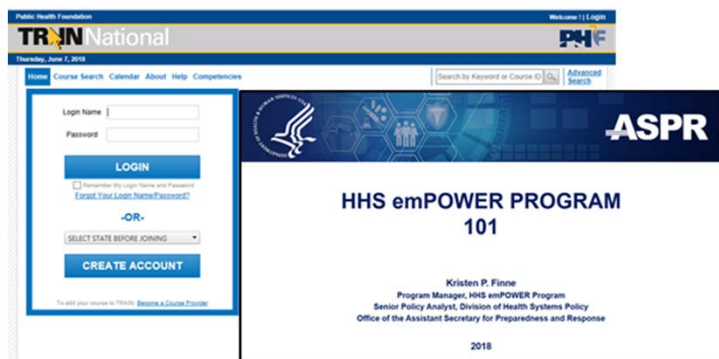
HHS emPOWER Program Communications

Training and New Resources on the emPOWER Portal

In **fall 2018**, new trainings and communications materials will be available for stakeholders interested in **strengthening emergency preparedness and response** in their state, territory, county, or major metropolitan area

An emPOWER training will be available on TRAIN, and an emPOWER 101 presentation will be accessible on the forthcoming emPOWER Portal

New grab-and-go materials, including fact sheets, job aids, journey maps, and guides for the emPOWER Program tools will be available on the emPOWER Portal



HHS emPOWER Program

Contact Information

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