

Promoting a whole community approach to emergency planning; outcomes of the Smart911 program

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Pacific ADA Center



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Image 1. Acknowledging contributions of Missoula county OEM and the Access and Functional Needs Committee. Nick Holloway is featured in this photograph with an evacuation map from the Lolo Peak Fire.

Overview

- Whole Community Approach
- Smart911
 - Promotional Strategies
 - Missoula County's Access and Functional Needs (AFN) committees' targeted social marketing strategies
 - Components
 - Safety Profiles
 - SmartPrepare
 - Rave Alerts
- Targeting AFN Support

A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action

- Presents a foundation for increasing individual preparedness and engaging with members of the community as collaborative resources to enhance the resiliency and security of our Nation through a Whole Community approach.
- Document available at:
<https://www.fema.gov/media-library/resources-documents/collections/21>

Missoula Access & Functional Needs (AFN) Group

- Subcommittee of the LEPC, both meet quarterly
- I chair the meeting, both as a requirement for our PHEP grant, and in support of the partnership between Public Health and the Office of Emergency Management
- Vision of the group is “to enhance the capability of individuals and families with access and functional needs to plan for, survive, and recover from emergencies and disasters in Missoula County. ”

Missoula Whole Community Profile

- Missoula County population – 111,309
- 12% live with one or more disability
- 5.2% have a mobility functional need
- 12% have a communication functional need
- 8.8% have a daily living functional need
- 1.1% are zero car households
- 42% are estimated to be WIC eligible (family of 4 makes \$25,100 or less)

Missoula AFN Subcommittee Membership - Successes & Challenges

- Maintaining robust membership
 - Most of the member organizations perform case work. It is difficult for them to regularly attend.
 - Important to have relevant presentations each meeting to keep members engaged and interested in coming.
- Whole Community representation
 - Difficult to gain thorough representation.
 - Seek out organizations serving populations not currently represented at the AFN meetings. Have to diligently recruit.
 - Recently filled a gap for Limited English Proficiency populations with a new member that works with refugee populations.

AFN Bottom Line

- The AFN meeting is invaluable for Missoula.
- By providing a regular venue for networking and fostering open lines of communication between Public Health, OEM, and community organizations, it greatly increases the efficacy of our efforts to address AFN populations in emergency planning.

Priority Risk Assessment for Missoula County

- Wildfire
- Hazardous Material Incidents and Railroad Derailments
- Flooding
- Severe Weather and Drought
- Communicable Disease
- Avalanche
- Earthquake
- Dam Failure

From 2017 Missoula County Pre-Disaster Mitigation Plan



Plan Ahead For Any Emergency

Give 9-1-1 the information they need to help you fast.

SIGN UP TODAY

Already have an account? [Sign In](#)

Smart911 currently protects over 45 million people nationwide, across 44 states and 3,100 communities. More information is available at:

<https://www.smart911.com/>



Smart911

- **WHEN:** Missoula County acquired Smart911 in February 2012.
 - SmartPrepare and Rave Alerts came later.
- **WHY:** Over 70% of calls made to 9-1-1 come from mobile phones, yet only voluntarily registered mobile devices are in the Missoula County OEM alert system.
 - All landlines are pre-loaded into the emergency alerting system. There is a growing hole in emergency alerting as people increasingly move from registered landlines to mobile devices only, which are largely unregistered.
 - A key public health message: *People who no longer have a landline(s) are no longer in the emergency alert system automatically. They need to sign up for emergency alerts to be in the system automatically.*
 - Inclusive approach to 'special registries' (More information is available in Kailes & Enders web report at: <http://www.jik.com/d-rgt.html>)

Smart911 Components: Safety Profiles

- AFN elements rise to top in communications with emergency responders
- Three categories in Safety Profiles.

+ Address

+ People

+ Animals

- Address

+ Alert Opt-In

+ Has 72 hour food supply

+ Has 72 hour water supply

+ Evacuation Order: alternative address radius

+ Shelter-in-Place/Weather

+ Shelter-in-Place/Hazmat

+ Has generator or other backup electricity

+ Emerg Resources

+ Shelter-in-Place/Weather or HazMat

- People
- No Transportation
- Trained Responder
- Implanted Medical Devices
- Breathing Problems
- Med Therapies/Equip
- Mobility Limitations
- Powered Medical Devices

- People
- No Transportation
 - Evac Vehicle Type
- Trained Responder
- Implanted Medical Devices
 - Artificial Joints
 - Cochlear Implant(s)
 - Heart Valve Prosthesis / Artificial Heart Valve
 - Implanted Defibrillator
 - Left Ventricular Assist Device (LVAD)
 - Pacemaker
 - Tracheotomy

☐ Mobility Limitations

- Amputee
- Confined to Bed
- Electric Wheelchair or Scooter
- Manual Wheelchair
- Paraplegia
- Quadriplegia
- Requires Walker / Cane / Crutches
- Requires Wheelchair
- Weight over 300 lbs
- Other Mobility Impairment

☐ Powered Medical Devices

- Apnea Monitor
- I.V. Pump
- Kidney Dialysis
- Life-Sustaining Medication Requiring Refrigeration
- Nebulizer for Breathing Problems
- Oxygen Concentrator
- Sleep Apnea / CPAP or BPAP Device
- Ventilator / Respirator
- Other Life-Sustaining Dependency on Electricity

<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Breathing Problems <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Asthma <input checked="" type="checkbox"/> Chronic Obstructive Pulmonary Disease (COPD) <input checked="" type="checkbox"/> Congenital or Chronic Upper Airway Disease <input checked="" type="checkbox"/> Cystic Fibrosis <input checked="" type="checkbox"/> Emphysema <input checked="" type="checkbox"/> Other breathing problem <input checked="" type="checkbox"/> Med Therapies/Equip <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Home Health Care / Visiting Nurse / Non-Medical Caregiver <input checked="" type="checkbox"/> Home Health Care / Visiting Nurse / Non-Medical Caregiver (around-the-clock) <input checked="" type="checkbox"/> In-home life sustaining medication or treatment <input checked="" type="checkbox"/> Requires Airway Suctioning <input checked="" type="checkbox"/> Uses Oxygen Tank 	
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Smart911 Components

- Rave Alerts (like reverse 911)
 - Target geographies (polygons, radius, streets)
 - Alerts meet these three criteria:
 - Accurate
 - Timely
 - Actionable
 - Potential during smoke to channel public health recommendations and/or planning information.

<input type="checkbox"/>	Address
<input checked="" type="checkbox"/>	Alert Opt-In
<input checked="" type="checkbox"/>	Has 72 hour food supply
<input checked="" type="checkbox"/>	Has 72 hour water supply
<input checked="" type="checkbox"/>	Evacuation Order: alternative address radius
<input checked="" type="checkbox"/>	Shelter-in-Place/Weather
<input checked="" type="checkbox"/>	Shelter-in-Place/Hazmat
<input checked="" type="checkbox"/>	Has generator or other backup electricity
<input checked="" type="checkbox"/>	Emerg Resources
<input checked="" type="checkbox"/>	Shelter-in-Place/Weather or HazMat

Smart911 Components: SmartPrepare

- SmartPrepare
 - Planning– How emergency managers are staging resources to support Emergency Support Functions
 - Response– Communicating with public and targeting communication to members of the public with AFN
 - Recovery– After action reviews (process evaluation of communications on AFNs)

Promoting Smart911 in Missoula

- Identify three social marketing strategies developed to promote Smart911 to people with disabilities
 1. Improve the inclusivity of public communications
 2. Integrate communications about Smart911 into disability service organizations communications with persons with disabilities
 3. Integrate communications about Smart911 into public health and community programs with reach to individuals with disabilities and/or access and functional needs

Promotional strategies

- Identify three social marketing strategies developed to promote Smart911 to people with disabilities.
 1. Improve the inclusivity of public communications
 - Non-traditional partners, accessibility of communications, images of persons with disabilities
 - Images of persons with disabilities
 - Accessible formats
 - Expanded supports to sign up

Promotional strategies

- Identify three social marketing strategies developed to promote Smart911 to people with disabilities.
 2. Integrate communications about Smart911 into disability service organizations communications with persons with disabilities
 - One-to-one meetings (e.g., person-centered planning meetings)
 - Peer support classes and meetings

Promotional strategies

- Identify three social marketing strategies developed to promote Smart911 to people with disabilities.
 3. Integrate communications about Smart911 into public health and community programs with reach to individuals with disabilities and/or access and functional needs
 - One-to-one meetings (e.g., Asthma home visiting programs)
 - Community programs and classes (e.g., Library, Food Bank, YMCA, Parenting classes, chronic disease self-management classes)

MTDH Emergency Medical Information Kit, available at: http://mtdh.ruralinstitute.umt.edu/?page_id=6945

- Checklist that parallels the Smart911 Safety Profile
- Information and Assent form
- Bag for completed form with magnet hook to hang kit on refrigerator



Montana Disability and Health program has created an *Emergency Medical Information Kit* to improve communications about medical and functional needs during an emergency. The kit also promotes awareness of Smart911 and offers support for people with disabilities that may need help creating their profiles; as well as provide information about available emergency preparedness materials. The kit materials include a plastic bag, an Emergency Medical Information form, and a magnetic hook.

Complete the form and keep it in the Emergency Medical Information Kit's plastic bag.

(Emergency Medical Information form can be downloaded as an electronic, fillable form here: [PDF](#), [Word](#))

You may choose to keep the bag on your refrigerator where trained emergency responders can find this information. If you need to go to the hospital or evacuate your home, you can take the Emergency Medical Information Kit with you.

You may want to add these items to your Emergency Medical Information Kit:

1. Recent photos of you, your family, and animals.
2. Your Living Will, Advanced Directive, Do Not Resuscitate orders (DNR), Physician Orders for Life Sustaining Treatment (POLST), or similar documents. These documents must be original and signed for emergency responders or doctors to act on your instructions.
3. A list of your current medications with the name of your pharmacy.



Smart 911 Sign Up in Service System Planning

Smart9-1-1 Assent Form for Adults with Intellectual Disabilities

Organization:
Contact Person:
Address:
City, State, Zip:
Phone:
Email:

This form has words in it that might be new to you. If you hear any words that you do not understand, please ask the person reading this form with you to tell you what the new words mean.

What is Smart 911?

Smart911 is a service that may help someone to be safer and more prepared when an emergency happens.

An emergency is any situation that requires immediate assistance from the police, fire department or ambulance. Examples include:

- A fire
- A crime, especially if it is happening at the time
- A car crash, especially if someone is hurt
- A medical emergency. A medical emergency means that someone needs medical help fast. Some examples of medical emergencies include when a person is not breathing, is unconscious, is having chest pain, or can't stop bleeding.

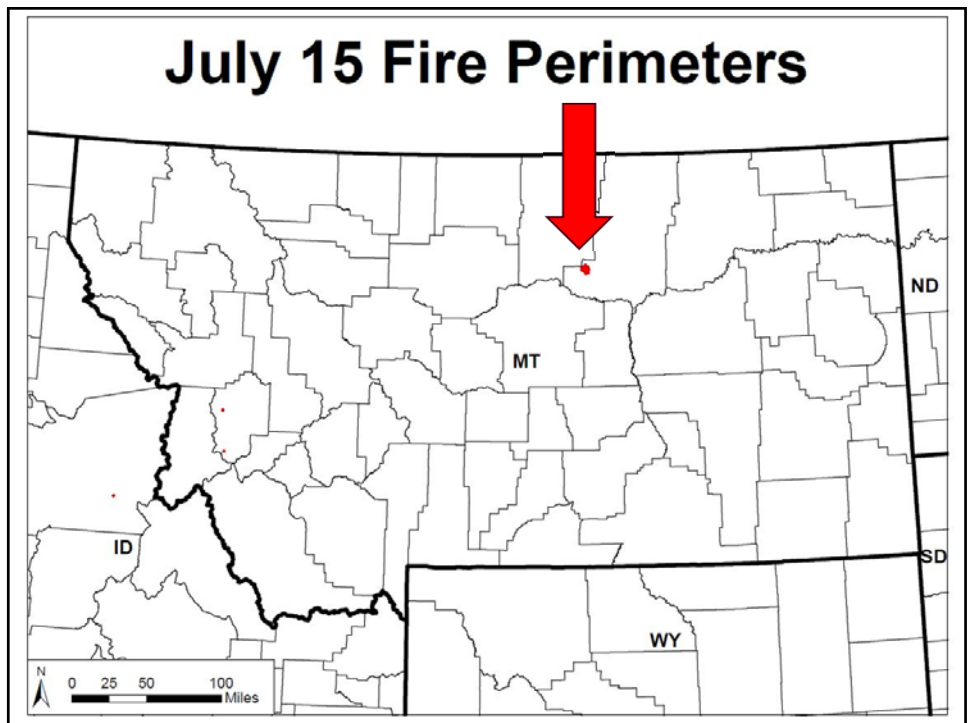
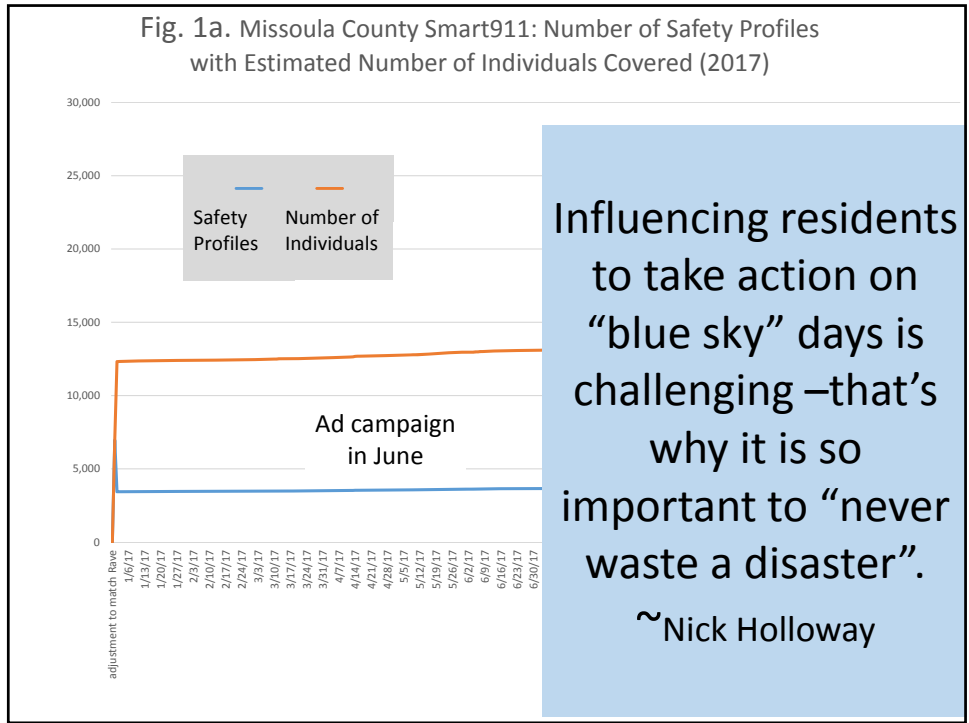
This Assent Form:

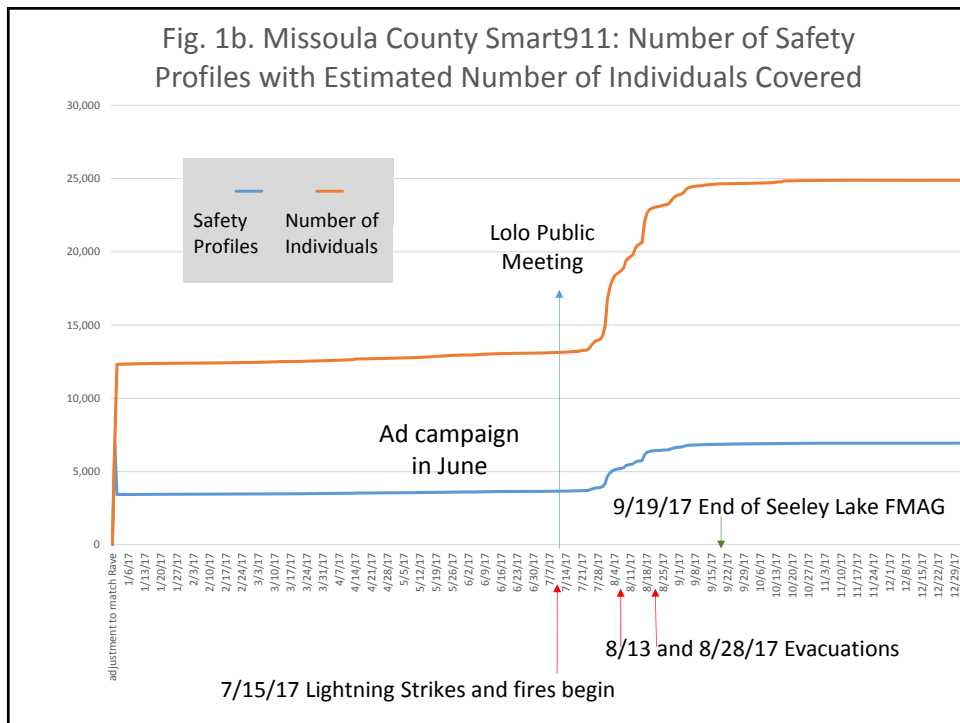
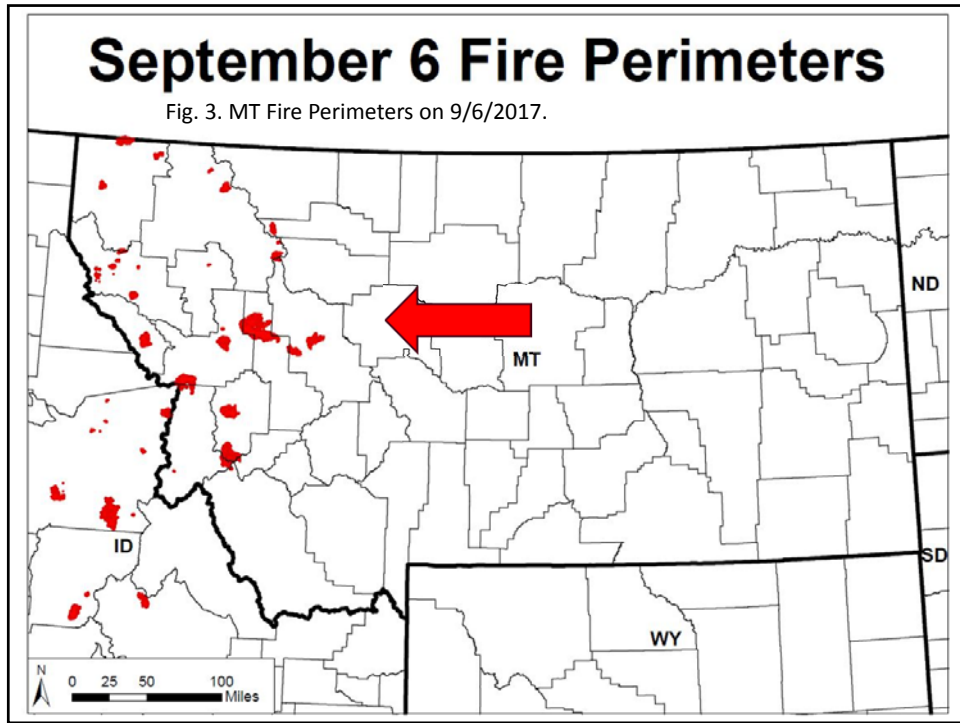
- Explains Smart911 in plain language
- Is for use in service and supports planning.
- Outlines support options for individuals to consider.

First usage of SmartPrepare

- On August 10 2015, two strong storms converged over Missoula resulting in powerful down draft, outflow winds.
- Power was knocked out in multiple neighborhoods.
- The next day 8,000 people were still without power.
- OEM queried the Smart911 database for people self-reporting that they were reliant upon powered medical devices and made contact with those people to ensure their safety.







Summary of Figure 1

Missoula County's fire season started with a lightning storm that resulted in five large fires in and adjacent to the County on July 15th. The fires continued burning hot through September 19th.

- **7/15/2017:** 3,677 Safety Profiles in the Smart911 system protecting 9,487 individuals within the Missoula County boundaries (8.3% of the county population).
- **10/12/17:** 6,911 Safety Profiles in the Smart911 system protecting 17,830 individuals within the Missoula County boundaries (15.6% of the County population).
 - Using the national average of 2.53 persons per household (*U.S. Census 2010*)
- **During the wildfire season, an additional 3,206 households (8,271 individuals) signed up.**



Flood Data

- 2nd highest flood level on record (highest was in 1908)
- 94 residences evacuated
- Flooding is considered hazmat incident
- Some people have now been evacuated for five weeks
- AFN impacts populations include hearing impaired, seniors and low income.
- AFN considerations: inclusive messaging, access to resources, sheltering.

AFNs in Safety Profiles

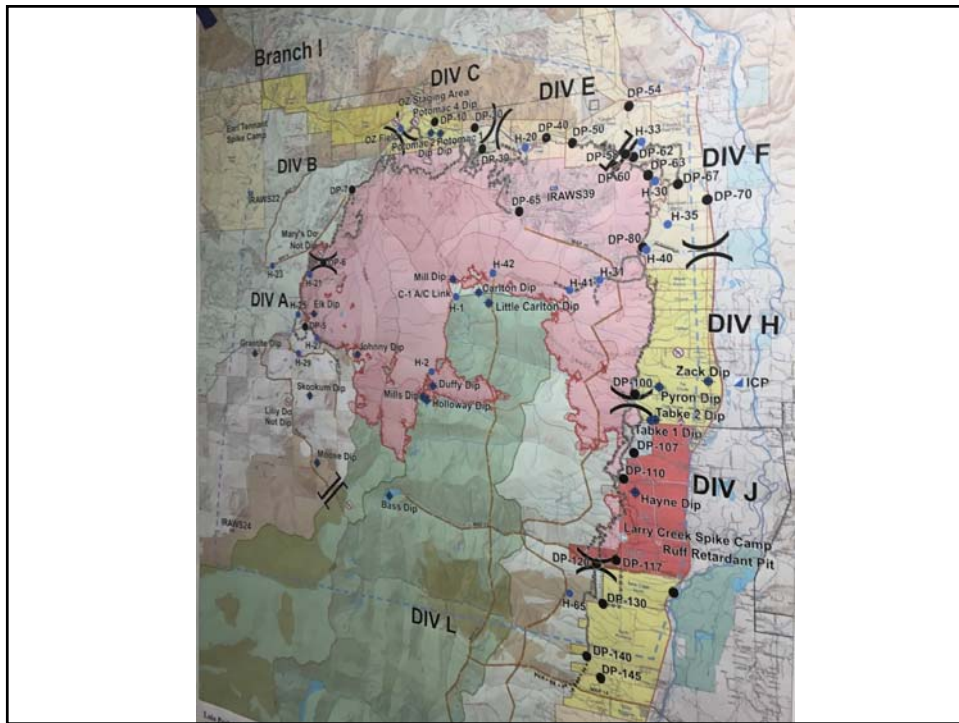
- 1,110 addresses (15.94%) out of 6,960 possible addresses had Safety Profiles with “yes” to one of the questions, indicating some level of access and functional needs:
 - No transportation
 - Implanted medical device
 - Breathing problems
 - Medical Therapies
 - Mobility limitations
 - Powered medical devices

Images from emergency response
(Summer, 2017)





Images from emergency response





Query:

- Trained Responder
- Implanted Medical Devices
- Breathing Problems
 - Asthma
 - Chronic Obstructive Pulmonary Disease (COPD)
 - Congenital or Chronic Upper Airway Disease
 - Cystic Fibrosis
 - Emphysema
 - Other breathing problem
- Med Therapies/Equip
 - Home Health Care / Visiting Nurse / Non-Medical Caregiver
 - Home Health Care / Visiting Nurse / Non-Medical Caregiver (around-the-clock)
 - In-home life sustaining medication or treatment
 - Requires Airway Suctioning
 - Uses Oxygen Tank
- Mobility Limitations
- Powered Medical Devices

RAVE
MOBILE SAFETY

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Fig. 4. Missoula County Office of Emergency Management can draw boundaries into SmartPrepare (e.g., evacuation zones).

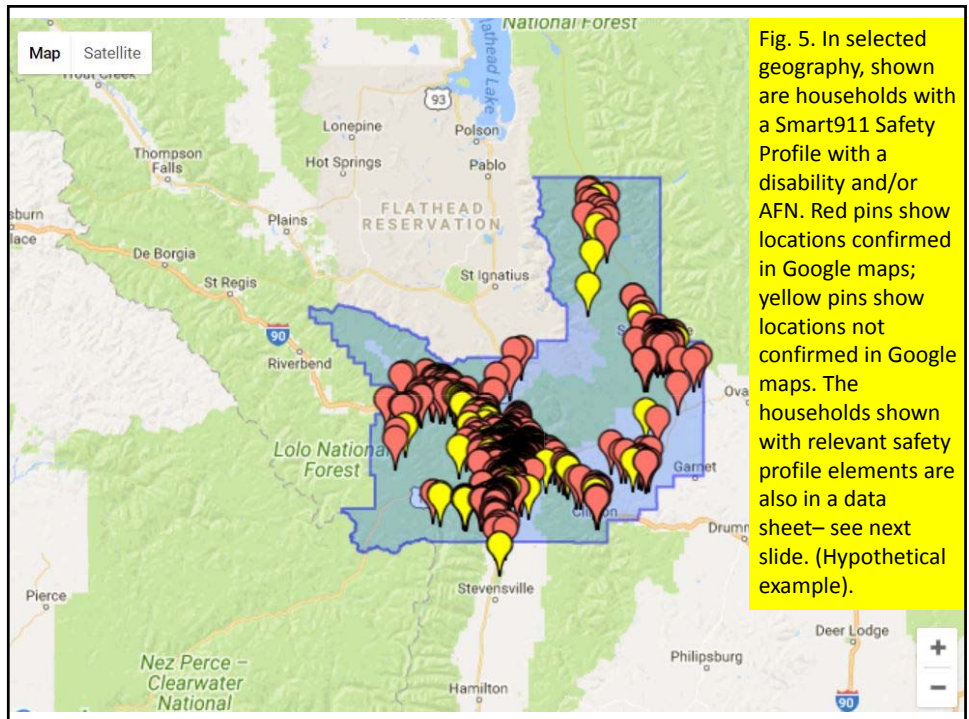
Need Help?

- [What's New in Rave Alert](#)
- [Rave Alert Knowledgebase](#)

Targeted recruitment to targeted supports

- | | |
|--|---|
| Artificial Joints | Requires Airway Suctioning |
| Cochlear Implant(s) | Uses Oxygen Tank |
| Heart Valve Prosthesis / Artificial Heart Valve | Amputee Confined to Bed |
| Implanted Defibrillator | Electric Wheelchair/Scooter |
| Left Ventricular Assist Device (LVAD) | Manual Wheelchair |
| Asthma | Paraplegia |
| COPD | Quadriplegia |
| Congenital or Chronic Upper Airway Disease | Requires Walker |
| Cystic Fibrosis | Requires Wheelchair |
| Emphysema | Weight over 300 lbs |
| Other breathing problem | Other Mobility Impairment |
| Home Health Care / Visiting Nurse / Caregiver | Dialysis |
| Home Health Care / Visiting Nurse / Non-Medical Caregiver (24x7) | Med Requiring Refrigeration |
| In-home life-sustaining meds/treatment | Oxygen Concentrator Ventilator / Respirator |
| | Other |
| | No Transportation |

**SmartPrepare:
Select for
Smart911 Safety
Profiles with
self-reported
disabilities
and/or access
and functional
needs.**



	A	B	C	D	E	F	G	H
	Artificial Joints	Cochlear Implant(s)	Heart Valve Prosthesis / Artificial Heart Valve	Implanted Defibrillator	Left Ventricular Assist Device (LVAD)	Asthma	COPO	Congenital or Chronic Upper Airway Disease
1	Y	N	N	N	N	N	N	N
2	N	N	N	N	N	Y	N	N
3	N	N	N	N	N	N	N	N
4	N	N	N	N	N	N	N	N
5	N	N	N	N	N	N	N	N
6	N	N	N	N	N	N	N	N
7	N	N	N	N	N	N	N	N
8	N	N	N	N	N	N	N	N
9	Y	N	N	N	N	N		N
10	Y	N	N	N	N	N	N	N
11	N	N	Y	N	N	N	N	N
12	Y	N	N	N	N	N	N	N
13	Y	N	N	N	N	N	N	N
14	N	N	N	N	N	N	N	N
15	Y	N	N	N	N	N	N	N
16	N	N	N	N	N	Y	N	N
17	N	N	N	N	N	Y	N	N
18	N	N	Y	N	N	N	N	N
19	N	N	N	N	N	N	N	N
20	N	N	N	N	N	N	N	N
21	Y	N	N	N	N	N	Y	N
22	Y	N	N	N	N	N	N	N
23	Y	N	N	N	N	N	N	N
24	Y	N	N	N	N	N	N	N
25	N	N	N	N	N	N	N	N

USFS who was SIT unit leader on the Rice Ridge fire reported that sheriffs showed him the houses where residents would need more support to evacuate.

Fig. 6. Select portions of a data sheet supporting the map on the prior slide (figure 5). (Hypothetical datasheet.) Information like this was given to sheriffs to communicate with households during Missoula County wildfire season.

Next Steps for SmartPrepare

- SmartPrepare
 - If the water was bad, we would bring clean water (bottles). If the air is bad, we need to bring air filters. Air filters are durable equipment. They need equipment. Instead of filters, get air filter cartridge replacements.
 - COADs- augmented ability to respond to emergency and could strengthen planning.
 - During response, United Way and 211 administered cash donations to pay for air filters (Climate Smart distributed); and may have started to promote Smart911 as their involvement grew. This strengthened relationship between COADs and Missoula OEM and led to common messaging (no conflicting messaging) about Smart911.
 - Increase awareness of option to shelter v. other options– e.g., people need to know where they can go and what their home owners' insurance will pay.
 - Explore potential of trained responders in the area– e.g., extra (retired) law enforcement, physicians, et al. could help provide support to AFNs.
 - Current: Deploy to a specific community center or school to coordinate a response.
 - Future: Recruit to promote planning, preparedness, and mitigation.

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Smart911 is a free service available in Missoula County

Please sign up to receive **Emergency Alerts** at www.smart911.com today. While there you can also create your family's **Safety Profile**. Your profile contains key information that allows emergency responders to tailor their response to meet your family's unique needs.

Find us on  

These details can save valuable seconds during an emergency. Seconds save lives. Smart911 is a *free, private and secure* service recommended by all of Missoula County's fire, law enforcement and EMS emergency responders.

No one plans to call 9-1-1,
but now you can plan ahead.

Sign Up Today at
Smart911.com™