

## Karen Hagen

Well, in order to move people up and build leaders, we have to have an evaluation process, but it's not for our day-to-day volunteers. That's a picture of sheltering because it's one of the biggest most visible things that we do in a major disaster event. It's important to say that in a hurricane pre-landfall, the chances of having cots in a shelter are pretty slim. Some communities want to have cots available, but really a shelter for hurricane is a lifeboat, and we just want to get people in out of harm's way, out of the elements. If that shelter is going to last longer, if it becomes a standard shelter what we call it, then we'll start to bring in cots and not just regular cots but special needs cots, cots that can accommodate the functional and excess needs of people. Sometimes, we, Red Cross, would have to work with our local health department, our local hospital or our local centers for independent living to bring in specialized equipments.



I don't know if you talked about [Unclear] yesterday, but it's a really big subject of conversation today about how we can accommodate people with disabilities and people with access needs in shelters. It's something that no one of our organizations is going to be able to do by ourselves. It's going to be a team effort. If the resources locally differ and that's why there is increased conversation and coordination at the state and federal level to bring in resources. If we had to keep a shelter open for a long period of time, we would be bringing in more and more resources, both people with expertise and equipment, durable medical equipment, personal assistance services. Overtime, you would see an increased level of equipment and people. But, traditionally, really in Florida with

hurricanes, our hurricane shelters don't stay open very long, and I don't think the special needs shelters stay open very long. It would have to be truly catastrophic for us to keep shelters open for a really long period of time. I mean that's been our experience.

Just like there I mean I am sure that they might have started out in one building congregatingly and then overtime to keep families together. They might move in to a different building or they might do structural things to a building so that you could have curtains, so there'd be some privacy. Overtime, you just bring in more and more services.

It's important that when we plan for sheltering or when we are managing a shelter that we really are aware of the need for human dignity and privacy. I think that sometimes we go through the emotions of we step up the shelter, we bring in the food, we try to take care of the people, and we register them, but equally important is that we look out for their individual needs. We have an intake form. There is a new one coming out, but we did it with the health and human services to track information by family member about what's some of their personal needs are health related, etcetera. Our shelter folks have an idea of what the needs are of the people that are in there. Sometimes, it helps in triage if we need to send them to a hospital or someplace else, especially if we think that shelter is going to be open for a longer period of time.

### **Female Participant**

What is the average term of the shelter opening?

### **Karen Hagen**

If you've seen one shelter, you've seen one shelter really, depends. In a hurricane event in Florida, historically, our shelters have not been open longer than 3 to 4 days at the most.

They don't want to stay in a shelter if they can help it. They might find friends and families. They might find alternatives. The folks that usually have to stay in a shelter for a longer period of time are most vulnerable from a demographic standpoint. That's where in some cases, you have the homeless that will come in and stay in a shelter because they'll be fed. If Red Cross opens up a shelter for a disaster and homeless folks come in, we are going to take care of them and feed them. However, when everybody else can go back home, we still might have the homeless folks in there. We then have to work with local community, social service agencies to get them back into their normal day-to-day support system, which might be a normal local shelter for the homeless, not a disaster shelter. There is a lot of casework that starts coming into play. I'll tell you if we don't have those relationships before a shelter is open with our community partners, it's hard because then you've got to meet them for the first time and try to work this through. We're always trying to push folks to work together in readiness times, preparedness times.

### **Male Participant**

One of the things our shelter depends on talk about hurricanes here and if we get back into the impacted area, we want people to go back home as

quickly as possible. But, I was up in North Dakota this year with some floods and our team stayed in the shelter. We were there 2 weeks. It was open another week after we left. It was open 3 weeks before we got there, so it's about 6 weeks. Even when they closed it, they still had maybe 75 to 80 people that had not been able to get back into their impacted areas. That was the flood that was just impacted about 10,000 homes. It depends on the disaster if you get back in there or whether or not the community has somewhere else where you go then they didn't have any hotel rooms available. That's a major issue.

### **Karen Hagen**

We had a tropical storm a few years ago in Florida, and it affected like all but two counties in the state and there are 67 counties in the state. All but one community down in Southwest Florida, they kept the shelter open for 45 days because it caused flooding in a community that had mainly mobile homes and there was no place for those folks to go. It was kind of like what you were talking about. Then, you have to accommodate them. You have to wait for new housing to become available. It depends on the location and the needs of the people.

### **Female Participant**

One of the other things [Unclear] is the velocity in Florida because a lot of our sheltering is done in schools like we talked about yesterday [Unclear] and that kind of thing that it is a priority to get people back into their homes, get them out of the schools so that schools can then reopen and go back into doing that because that also helps with community stabilization getting people back to their some sense of normal routine. That's really part of the emphasis too on trying to get shelters closed and get people into a better, even if it's temporary situation, it's better than staying in a shelter. They really do work to try to minimize the stay in shelters.

### **Karen Hagen**

Sometimes, we'll have to open up a secondary shelter so that we can get the schools back open, and there is less number of people that still need sheltering. We might go to a community center or a church depending upon the needs in that community. But, then again, it's really helpful if we've already scouted out what is available, buildings or churches or whatever, that could be used. We don't have to do it at the last minute.

### **Female Participant**

Under normal circumstances, you ask them to provide their buildings for shelter, a contract or agreement?

### **Karen Hagen**

It's an agreement. It's not a contract. When we use schools, the best agreement is done between the school, the emergency manager, and the Red Cross if Red Cross is the sheltering agent. They actually will talk it through, and they will have an agreement. We know who has got the key. We know what rooms in a school can be utilized. It's all thought out. We have inspection forms that we would do pre when we are trying to negotiate an agreement. But, we also have an inspection form when we

first open the door up to walk in as a shelter. We'll go in and we'll look at everything. We have a form that we fill out so that we know exactly the condition of the building pre-shelter, and then we'll go back in post-shelter and see because if there is any problem, we will fix it whatever that might be. It could be, you saw the gym floor before, so we've scratched up many gym floors with a cot. We've replaced many gym floors.

This is just example of feeding. This is out of an emergency response vehicle. We have about 350 of them across the country, but we are not limited by these vehicles. If we run out of mobile feeding vehicles, we can run a truck or we could use the back of a station wagon. The key is we get food out to the people that needed. Just like the state though, we don't want to go out and feed people when we've got the stores open because that undercuts the business community. If the businesses are up and running, we would rather people go to them. But, if they are not, if there is power outage, they can't cook, we're going to provide mobile feeding. I can keep going.



Just another example. Well, that's a clamshell. We put the food in a clamshell. There have been instances where we will put food in clamshells and then people will take it by horseback to like the Native American population who really doesn't want to have an emergency response vehicle in there. I have seen them fill up meals and just bring it out on horseback. Anyway, we can feed. Anything, we can do to get food to people so that they can live in their own home. It's really creative. Feeding can be very, very creative. Interesting couple things about feeding, sometimes we use USDA, United States Department of

Agriculture food because we try to stock it in the schools during hurricane season. It's a couple days worth of food. But, USDA is kind of varies in quantities nationwide. You don't always know what you've got, but at least you've got something to start with.



Quickly getting back to a longer-term shelter besides the functional and access needs, we know we are going to see different dietary needs, etcetera. We've got certain plans, and we work with certain agencies locally to make sure that we can accommodate peoples' dietary restrictions as well. Not usually in the very beginning when we are trying to get them out of harm's way, but as time goes on, we would look to that. We have contracts there. We have contracts with different vendors who provide food. We know in a catastrophic event, food is going to have to come from all over the place, whether it's shelf-stable meals or meals ready to eat. It might be cold meals for the first few days, but as soon as we can get a hot meal, the better.

**Female Participant**

Did you or were you saying that there were some challenges with special diets in the shelters and...

**Female Participant**

Suppose that we cannot reach that point, we can't provide some foods, but nutrition of food is important in emergency situation.

**Female Participant**

How do you evaluate the needs of the people, dietary needs?

**Karen Hagen**

Let's start with culture. One of the things you want to start with is culture and who you are going to be sheltering or feeding. If you know that it's a Vietnamese community, then you should know some of the kinds of foods that they would want to eat, and that's where you would want to work with different vendors and those are the kinds of foods you want to be preparing to feed. We can start with that. Then, if you've got diabetic diets, our health services folks are pretty good at knowing what kind of food needs to be brought in. But early on again, in those first early, early days where we are trying to get people out of harm's way, you might not have as much of the variety in foods but overtime.

**Female Participant**

When do you know the number of diabetes patients in the shelter?

**Karen Hagen**

You know that intake form I was telling you about, it has those kinds of questions. When we are registering people in a shelter, we're going to do an intake on their family and all of the different health needs that their family might have. We're going to know very early on. It's up to the folks who are working with those families to communicate that with our mass care feeding people, so they know the kind of foods to purchase.

**Female Participant**

You find such information. Do you share information with other agencies?

**Karen Hagen**

Yes, we will. I mean in that situation, say, it happened here, Rhonda you used to be with this local health department. If we opened up a shelter and we knew that there were certain folks in there and they needed special health care or whatever, we would be communicating with our local health department if we needed to, to talk about that whatever that might mean. Usually, we'll have enough folks that know enough about how to purchase the right kind of food or request it depending on how catastrophic. Here is an example of health services. I mean in Red Cross disaster services, you've got mental health, staff wellness, and staff wellness is making sure we take care of our volunteers and paid staff. Mass care is a part of it like which is what we are talking about mass feeding, client case work, and all other disaster activities, but we are partners which is what we were talking about with Public Health Department, CDC. Medical Reserve Corps, those folks are really kind of under the umbrella of the local health department. Sometimes, they will take Red Cross training. They will come into a Red Cross shelter. It's part of the health departments, community service as well. I mean, as I said, Red Cross is not a private club. It's owned by the community. It's successful as the community that supports it. We just happened to be the sheltering agent, but it doesn't happen without partnering.



American Red Cross

## Disaster Health Services

- Disaster Mental Health
- Staff Wellness
- Mass Care
- Client Casework
- and all other Disaster Activities



## Partners In Health



**Public Health**  
Prevent. Promote. Protect.

What makes the most sense in any given community is where the Red Cross and the health department and emergency management and all kinds of other agencies are sitting together and planning. Because then when a disaster happens, it never goes according to plan, but it's a whole lot better when they know each other.

### Female Participant

One of the things we talked about yesterday was that integrated collaborative planning effort and this is an example of in this particular topic area where you need all those people. We understand our role. They understand their role, and then we already have those relationships built for response.

### Karen Hagen

We share the responsibility of taking care of the citizen's period.

### Female Participant

Red Cross, Health Department, and Emergency Management Agency. What is the Emergency Management Agency?

### Karen Hagen

FEMA is the top Emergency Management Agency in the country, Federal Emergency Management Agency, and then every state has a State Emergency Management Agency. It might be called different things, but usually the word emergency management is in there. Then every local community has some semblance of an emergency management organization. In Florida, it's pretty robust because the risk is so high. They are government staff. They are government employees.

**Female Participant**

State government employees?

**Karen Hagen**

Yes. But like in Florida, not only does emergency management government have the responsibility for preparing and responding to disasters, but so do other state agencies like the Department of Health. Most of the state agencies have a disaster responsibility, Department of Education, the AKA [ph]. I know you are going to have someone speak from AKA here later today.

**Female Participant**

When we talk about the ESF yesterday and the lead agencies for those different ESF, they all talk to emergency management. Emergency management at the county level was over all of the ESF to coordinate the response at the local level, coordinate the response at the state level, and to coordinate the response at the federal level so that it is all integrated.

**Karen Hagen**

They don't have the authority, but they have the coordination responsibility. Now, if we have state of emergency, then the governor does have certain authorities. He can assign an emergency manager as the state coordinating officer, if you will. But, each one of the agencies, whether it's a government agency or a nongovernment agency, we still have our own responsibilities that we have to carry out. I cannot remember a time when we've been together in planning or response or someone sits there and says, "Well, that's not my job." You know what I mean, because it's all of our job to do this. I mean I just don't hear that.

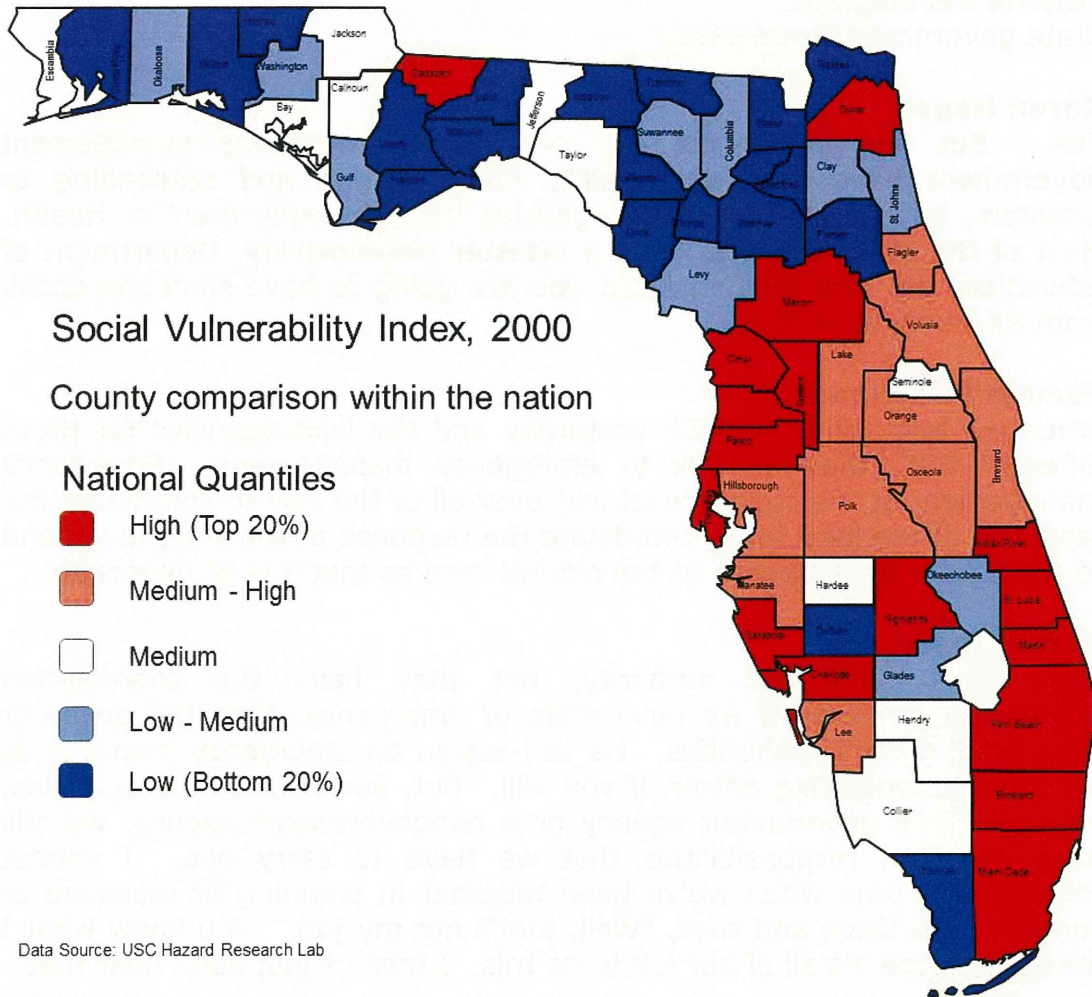
**Female Participant**

Not in Florida.

**Karen Hagen**

No. No one is trying to get out of this work. I think we take it too seriously. We can go to the next one. I think I am almost done. This is an example of looking at the social vulnerability index. If we look at where the most vulnerable people, whether we are talking about income, demographics, we know that the Southeast part of Florida and we know in that Midwestern section of Florida, we're going to see the most vulnerable individuals because this is important to plan for. Where folks are not that vulnerable, they are going to take care of themselves. We don't have to plan on the higher percentage of people seeking public shelter, for example, in a hurricane.





Then, if you go to the next slide, so look at this. This shows where most of the populations live. You are taking the most vulnerable communities in the State of Florida and that's where most people live on the coastline. We know that the risk for hurricane risk is the highest in the Southeast part of the state. Of course, we are going to be focusing a lot of resources on that part. We are going to be looking at it more closely, making sure they are planning together better, making sure they are building more capacity than, say, they might need in the northern part of the state, right on the border of Georgia. There are a lot of implications for looking at this kind of information.

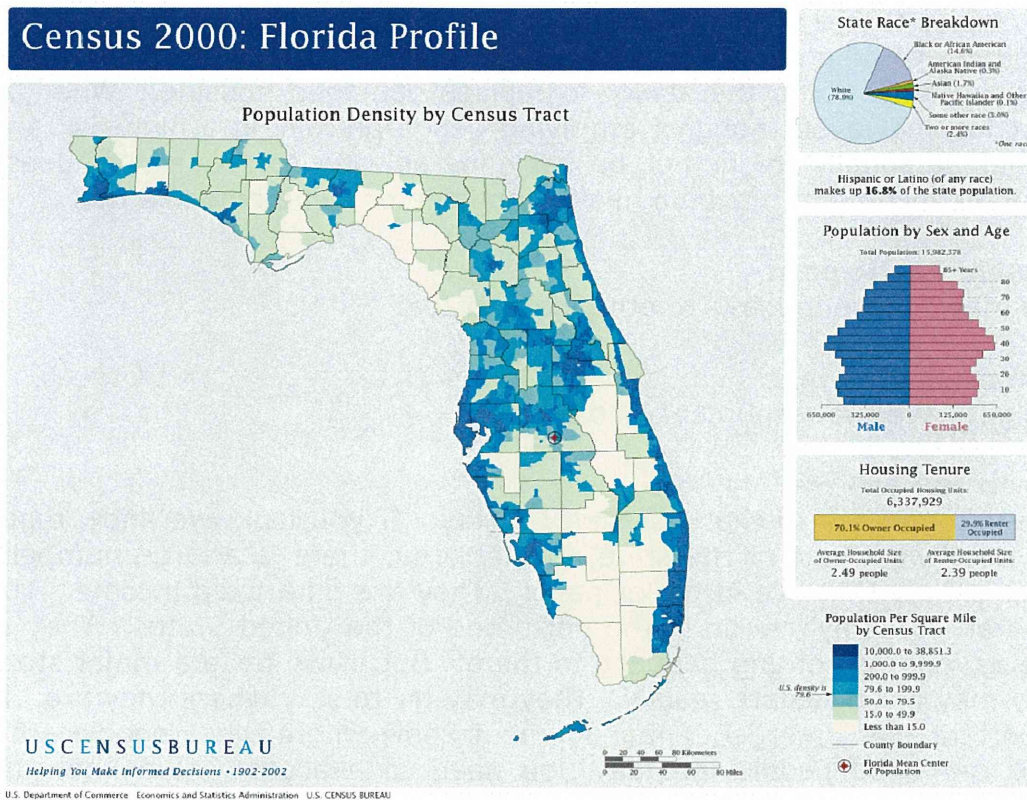
**Female Participant**

How did you define vulnerable population income or...?

**Karen Hagen**

It's income. It's demographics. I think Susan is going to talk about this next. It's a whole science behind identifying what the vulnerable communities are. It could be language barrier. I mean there is a whole list of that. But, it has a huge effect on our ability to respond and care for people. Because the more vulnerable that they are, the longer they'll need to stay in shelter maybe. The more help they are going to need from a casework standpoint. The more financial assistance they may

need. The less resilient they are as a community. There is a lot of planning factors that go into that.



### Female Participant

The other class about vulnerable population is kind of is in three ways. There are demographic factors that make people vulnerable. There are economic factors that make people vulnerable. Then, there are health factors that make people vulnerable, whether it's a chronic health condition, whether it's a disability, whether it's mental status, that's really three categories of how you can look at vulnerability.

### Female Participant

It's very interesting that those people happen to live in the coastline, which is like susceptible area.

### Female Participant

Yeah. That's a geographic vulnerability that puts people in general at risk. When you start trying to [Unclear] down to vulnerable populations, what are those factors that within that general population make people more at risk? You've got the general population that can be at risk because of geographic factors that live on the coast. They live in surge zones. But, then you slice the people and start looking at just the people and say what are factors that made people more vulnerable than other people and that's when you start piddling it down and looking at groups of people within the population and saying, "Okay, this group is more vulnerable than the general population because they are over 85 years old." If that's where you start holding it down and then start to look at the population

and look at the individual characteristics within population that increased vulnerability.

**Female Participant**

If I choose to live on the coast and I have a lot of money, I probably have resources to take care of myself if something happens. I have the ability to leave maybe and the ability to replace damaged housing. When you start looking, even though I am living geographically in a high-risk area, myself personally might not be as vulnerable as someone who doesn't have the income or maybe a health condition or something like that.

**Female Participant**

You may choose to leave to other safer place.

**Female Participant**

I might have the resources to do that.

**Karen Hagen**

Can you go back to that last slide? Okay. If you look, we know that in the southwest part of the state, in that area, there is a large number of older elderly that live in trailer parks. They are on a fixed income. Their children probably live up in the north end of the United States. They are fine as long as nothing happens to them. But, if we have a major storm, they may not evacuate readily. They may try to stay where they are. It's important that emergency management know where these people are so they can send people into say you need to evacuate. We know that perhaps a higher percentage of them would seek public shelter because they don't have any other place to go. It's really important we know that about those communities down there. Now, in the southeast part, we know a lot of the folks living on those coastlines, they are in high-rises. If the power goes out, they can't get down from the high-rise. We know that community agencies might need to go up and get them, communicate with them. We know they are at huge risk if those buildings aren't evacuated.

**Female Participant**

Or they don't have generator power.

**Karen Hagen**

Right, if they don't have generator power. It's really important that we know community by community where the vulnerabilities are so that we can, not only plan to take care of them, all of us together, but also in preparedness time encourage them to have their own plan so that they can begin to take care of themselves. It's just really critical. I mean us sitting here, we are not going to know all of those details, but we surely can encourage the folks, our counterparts at the local level to get that information and do something with it. I mean it's critical.

We're going to make sure that we don't open up a shelter in those evacuation zones. I mean you put a Red Cross on a building, people think it's safe, and so we have a responsibility to make sure that in fact it is. We're going to be farther inland.

This just concludes my little part of this. It's planning, preparedness, readiness, response. I didn't put a recovery component in there that's all other discussion.

**The Disaster Services Program is a System of:**

- **Disaster Planning**
- **Disaster Preparedness**
- **Disaster Readiness**
- **Disaster Response**

**Female Participant**

What is the difference between preparedness and readiness?

**Karen Hagen**

Preparedness, now this is how I understand that definition as I have looked that up. Preparedness is usually community preparedness. It's getting your family or your business prepared for whatever disasters might be before you. It's more of a personal community preparedness for disasters; whereas, readiness, the way we, Red Cross, defines it, it's developing people, developing agreements and resources so that we can respond to a community or any kind of a disaster. Readiness is more of a planning factor for a response agency and a capacity building mode; whereas, preparedness is more community and personal and business preparedness, having your own personal plan, having a COOP or Continuity of Operations Plan.

**Female Participant**

In your world, readiness is about Red Cross being ready to respond?

**Karen Hagen**

Yes, and it's both people, you know, developing the people capacity and capability. It's capacity and capability development is really what readiness is. I don't know if it's different in other. I think people take those...

**Female Participant**

What we talk about it at the state level is preparing our response system. But, it's the same concept. Is our response system ready to go? Do the people have right training? Do we have the right stuff? Those stuffs.

**Karen Hagen**

Right. You know where the gaps are and you know where you need to put dollar so that you can build future capacity.

**Female Participant**

Same concept.

**Female Participant**

At the time of registration to the shelters, you distribute family record sheet to evacuees to collect information. Who develops the sheet?

**Karen Hagen**

Well, what I am speaking about, we've got two. One is we just have a registration form just to get people in the door, but then we'll go back. The American Red Cross and Health and Human Services at the federal level designed a form that actually as an intake form to try to analyze the information on the family and what their needs might be or either they are or they might be. I mean it might be a family and really they have an elderly grandmother, and she really needs a wheelchair, and they don't have one. We would need to work with the community to try to get a wheelchair in there for her as an example. There is a big indicator on there, if they need some kind of mental health support. We may have Red Cross assets, people assets too to accommodate or we might not, and if we don't, we would reach out to the community or we would reach out within Red Cross and bring them in from other parts of the state or country. But, it's confidential. I mean we wouldn't just like fax that information out. It's confidential information, and it's handled that way.

Now, I don't know if you want to get into this. If a local sheriff wanted to come in and see who is in that shelter, we wouldn't show them the intake form. We would share with them the registration form. They could look at that because we need to share that. But, we wouldn't send it out. We're not going to send out a list of people in the shelter. It's hard sometimes because as a humanitarian organization, we are going to let anybody who needs shelter in whether they have a Green Card or not, you know, the whole immigrant status. If they need shelter, we're going to take them in. We don't want them to fear that someone is going to come in and take them out. That's hard. That's a hard thing to deal with, but we've got a standby that because we are an international organization.

**Female Participant**

Is that a unit form [Unclear] only one form?

**Karen Hagen**

Yes. Susan has it, but it's also being revised. She can give you what we've got today. But I think in the next couple months, we should see the new one come out. That's been kind of - it's better. I'll be sure.

**Female Participant**

Yeah, it's a real good form. Even the current version is a good form. It will give you a starting place.

**Female Participant**

That's a perception in the country that you will be supported by the different organizations, so individuals don't need to have their own stockpile.

Well, we try to encourage. We work real hard. Red Cross works hard. Emergency management, many, many organizations try to encourage

individual preparedness because we know that we don't have enough resources to provide it back in time that people might need it as quickly as they may need it or we just don't have enough resources, that everybody has a responsibility for preparedness. But it is hard to get that message through to individuals because as Karen said that people get cutoff depending on what the event is. They get isolated. They've got to be able to sustain themselves until help can get there and evacuate them out of an area. That's one of the reasons that they really encourage individual preparedness because in the aftermath, it's very chaotic as you know and people may not have access to resources or the government have the ability to bring resources in as quickly as people may need them.

Private businesses also are a big partner in disaster response in getting their stores like big retail stores, like Wal-Mart, big grocery store chains that they will make sure that they have a lot of mechanisms in place, like they'll put generators in the stores because they know that getting those stores back open helps the economic recovery of a community. They've worked very closely with local government, state government, and federal government to say what can we do as a partner to help in this recovery process. They've made a lot of within their organizational structure changes so that their businesses are better positioned to be a partner in a disaster recovery whether it's a local store like a Home Depot that has building supplies and stuff for people. They put generators in place so that those stores can open very quickly after disaster, so individuals can come in and get plywood and whatever they need to try to stabilize their homes, those kinds of things. The private sector has a very big role with the governmental and nongovernmental organizations in the community. Has the private businesses in Japan been engaged or is that something that's been kind of learned from this experience with the earthquake?

### **Female Participant**

My impression is this country trusts a lot the Red Cross probably, for example, if the private volunteer organization open the shelter, maybe, not many people trust that ...

### **Karen Hagen**

Red Cross is not the only sheltering agent, if you will. Sometimes, it might be like a local community center. They just want to open up a shelter. If it's a shelter that lasts long, our experience is that they'll call us and say, "We need your help now. We need more food. We need more whatever." We'll do that. We'll go in and help them. Sometimes, it's a school board are the shelter workers in a shelter and we'll train them or it might be them. I mean we would like to have Red Cross as the primary sheltering agent just so that a lot of the things we talked about here can be covered because it's more complicated than people realize. When you open up your doors to folks who may have lost everything, it's a huge responsibility, you know, take care of them, and feed them, and to deal with their mental health needs. I mean it's a big responsibility and unless you're in the business, not everybody thinks it all through, thinks about all of the different nuances of it.

**END**

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**INITIAL INTAKE AND ASSESSMENT TOOL - AMERICAN RED CROSS - U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**

Date/Time: \_\_\_\_\_ Shelter Name/City/State: \_\_\_\_\_ DRO Name/#: \_\_\_\_\_

Family Last Name: \_\_\_\_\_

Primary language spoken in home: \_\_\_\_\_ Does the family need language assistance/interpreter?: \_\_\_\_\_

Names/ages/genders of all family members present: \_\_\_\_\_

If alone and under 18, location of next of kin/parent/guardian: \_\_\_\_\_ If unknown, notify shelter manager & interviewer initial here: \_\_\_\_\_

Home Address: \_\_\_\_\_

Client Contact Number: \_\_\_\_\_ Interviewer Name (print name): \_\_\_\_\_

INITIAL INTAKE	Circle	Actions to be taken	Include ONLY name of affected family member
1. Do you need assistance hearing me?	YES / NO	If Yes, consult with Disaster Health Services (HS).	
2. Will you need assistance with understanding or answering these questions?	YES / NO	If Yes, notify shelter manager and refer to HS.	
3. Do you have a medical or health concern or need <b>right now</b> ?	YES / NO	If Yes, stop interview and refer to HS immediately. <b>If life threatening, call 911.</b>	
4. <b>Observation for the Interviewer: Does the client appear to be overwhelmed, disoriented, agitated, or a threat to self or others?</b>	YES/ NO	<b>If life threatening, call 911.</b> If yes, or unsure, refer immediately to HS or Disaster Mental Health (DMH).	
5. Do you need medicine, equipment or electricity to operate medical equipment or other items for daily living?	YES / NO	If Yes, refer to HS.	
6. Do you normally need a caregiver, personal assistant, or service animal?	YES / NO	If Yes, ask next question. If No, skip next question.	
7. Is your caregiver, personal assistant, or service animal inaccessible?	YES / NO	If Yes, circle which one and refer to HS.	
8. Do you have any severe environmental, food, or medication allergies?	YES / NO	If Yes, refer to HS.	
9. <b>Question to Interviewer: Would this person benefit from a more detailed health or mental health assessment?</b>	YES / NO	If Yes, refer to HS or DMH.	<b>*If client is uncertain or unsure of answer to any question, refer to HS or DMH for more in-depth evaluation.</b>

**STOP STOP HERE! STOP** REFER to: HS Yes  No  DMH Yes  No  Interviewer Initial \_\_\_\_\_

**DISASTER HEALTH SERVICES/DISASTER MENTAL HEALTH ASSESSMENT FOLLOW-UP**

ASSISTANCE AND SUPPORT INFORMATION	Circle	Actions to be taken	Comments
Have you been hospitalized or under the care of a physician in the past month?	YES / NO	If Yes, list reason.	
Do you have a condition that requires any special medical equipment/supplies? (Epi-pen, diabetes supplies, respirator, oxygen, dialysis, ostomy supplies, etc.)	YES / NO	If Yes, list potential sources if available.	
Are you presently receiving any benefits (Medicare/Medicaid) or do you have other health insurance coverage?	YES / NO	If Yes, list type and benefit number(s) if available.	
MEDICATIONS	Circle	Actions to be taken	Comments
Do you take any medication(s) regularly?	YES / NO	If No, skip to the questions regarding hearing.	
When did you last take your medication?		Date/Time.	
When are you due for your next dose?		Date/Time.	
Do you have the medications with you?	YES / NO	If No, identify medications and process for replacement.	

INITIAL INTAKE AND ASSESSMENT TOOL - AMERICAN RED CROSS - U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES			
<b>HEARING</b>			
	Circle	Actions to be taken	Comments
Do you use a hearing aid and do you have it with you?	YES / NO	If Yes to either, ask the next two questions. If No, skip next two questions.	
Is the hearing aid working?	YES / NO	If No, identify potential resources for replacement.	
Do you need a battery?	YES / NO	If Yes, identify potential resources for replacement.	
Do you need a sign language interpreter?	YES / NO	If Yes, identify potential resources in conjunction with shelter manager.	
How do you best communicate with others?		Sign language? Lip read? Use a TTY? Other (explain).	
<b>VISION/SIGHT</b>			
	Circle	Actions to be taken	Comments
Do you wear prescription glasses and do you have them with you?	YES / NO	If Yes to either, ask next question. If No, skip the next question.	
Do you have difficulty seeing, even with glasses?	YES / NO	If No, skip the remaining Vision/Sight questions and go to Activities of Daily Living section.	
Do you use a white cane?	YES / NO	If Yes, ask next question. If No, skip the next question.	
Do you have your white cane with you?	YES / NO	If No, identify potential resources for replacement.	
Do you need assistance getting around, even with your white cane?	YES / NO	If Yes, collaborate with HS and shelter manager.	
<b>ACTIVITIES OF DAILY LIVING</b>			
	Circle	Ask all questions in category.	Comments
Do you need help getting dressed, bathing, eating, toileting?	YES / NO	If Yes, specify and explain.	
Do you have a family member, friend or caregiver with you to help with these activities?	YES / NO	If No, consult shelter manager to determine if general population shelter is appropriate.	
Do you need help moving around or getting in and out of bed?	YES / NO	If Yes, explain.	
Do you rely on a mobility device such as a cane, walker, wheelchair or transfer board?	YES / NO	If No, skip the next question. If Yes, list.	
Do you have the mobility device/equipment with you?	YES / NO	If No, identify potential resources for replacement.	
<b>NUTRITION</b>			
	Circle	Actions to be taken	Comments
Do you wear dentures and do you have them with you?	YES / NO	If needed, identify potential resources for replacement.	
Are you on any special diet?	YES / NO	If Yes, list special diet and notify feeding staff.	
Do you have any allergies to food?	YES / NO	If Yes, list allergies and notify feeding staff.	
<b>IMPORTANT! HS/DMH INTERVIEWER EVALUATION</b>			
Question to Interviewer: Has the person been able to express his/her needs and make choices?	YES / NO	If No or uncertain, consult with HS, DMH and shelter manager.	
Question to Interviewer: Can this shelter provide the assistance and support needed?	YES / NO	If No, collaborate with HS and shelter manager on alternative sheltering options.	
NAME OF PERSON COLLECTING INFORMATION:	HS/ DMH Signature:		Date:

This following information is only relevant for interviews conducted at HHS medical facilities: Federal agencies conducting or sponsoring collections of information by use of these tools, so long as these tools are used in the provision of treatment or clinical examination, are exempt from the Paperwork Reduction Act under 5 C.F.R. 1320.3(h)(5).

The authority for collecting this information is 42 USC 300hh-11(b) (4). Your disclosure of this information is voluntary. The principal purpose of this collection is to appropriately treat, or provide assistance to, you. The primary routine uses of the information provided include disclosure to agency contractors who are performing a service related to this collection, to medical facilities, non-agency healthcare workers, and to other federal agencies to facilitate treatment and assistance, and to the Justice Department in the event of litigation. Providing the information requested will assist us in properly triaging you or providing assistance to you.



資料8 健康危機管理・自然災害対応に着目した地域行政におけるサーベイランスシステムを用いた情報収集の効率的な手法及び、収集データの有効利用について：

米国フロリダ州保健局における実践の考察

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**研究要旨【目的】**健康危機管理及び自然災害時の対応を目的とした地域行政における効率的なサーベイランスシステムの確立及び収集データの有効利用について検討を行う。**【方法】**自然災害時等の対策に実績のあるフロリダ州保健局で実施されているサーベイランスシステムの現状等について調査する。その内容について評価を行い、本邦地域行政における適用の可能性について考察する。**【結果】**フロリダ州においては ESSENCE と呼ばれる電子ネットワークシステムによりサーベイランスデータの収集及び分配を行っている。その内容は多岐にわたり、データ収集は平常時より行われる。自然災害対応時に ESSENCE から得られた情報の考察結果が有効に活用されている。**【考察】**平常時のみならず健康危機管理や自然災害対応時に活用され得るサーベイランスシステムの地域行政における確立は公衆衛生上の施策に有用であると言えよう。

#### A. 研究の背景及び目的

公衆衛生における情報収集の手法として、サーベイランスシステムが広く用いられている。このシステムには、以下のような特徴がある(1)。サーベイランスシステムにおいてデータは系統的に収集される。収集された情報について解析、解釈、評価が行われるが、これらは継続的に行われることが必須である。サーベイランスデータの収集においては、通常「実用性」「均一性」「緊急性」が重視される。これは、時にデータの「正確性」や「完全性」と相反する。サーベイランスを行うことに

より、時間、場所、集団における事象の変化の傾向を捉え、予期され得る確な調査や管理等の対策を取ることが可能となる。このことより、行政による住民を対象としたサーベイランスシステムの実施は公衆衛生に係る施策として有用であると言えよう。しかしながら、健康危機管理や自然災害対応を目的とした、サーベイランスシステムの、本邦地域行政における活用の可能性については、未だ十分に明らかにされていない。本研究においてはサーベイランスシステムが地域行政において広く活用されている米国で、特に災害等の健康危機

対策に実績のあるフロリダ州保健局においてサーベイランスシステムの実施及びデータ活用状況について調べ、健康危機事象及び自然災害等発生時におけるその活用について明らかにし、その評価を行う。更に本邦におけるサーベイランスシステムの活用の可能性について考察を行う。

## B. 方法

2011年11月14～15日に米国フロリダ州保健局の健康危機管理に携わる部署を視察し、サーベイランスシステムの担当者らに面会し、プレゼンテーション等により当該州における情報収集の状況等について説明を受けた。特に健康危機や災害に係る事象に焦点をあて、それらの情報がどのように収集されているかを確認した。また、収集データの施策への活用の状況について確認した。この視察で収集された情報や知見をもとに、当該地域行政におけるサーベイランスシステムの有用性や問題点等について検討を行った。得られた知見を用い、本邦地域行政における健康危機及び自然災害に係る事象への対策について、サーベイランスシステムの有用性について考察を行った。なお、本報告書に使用されている図表等は全てフロリダ州保健局より提供されたものに一部日本語訳及び報告者の解釈を付記したものである。

### (倫理面への配慮)

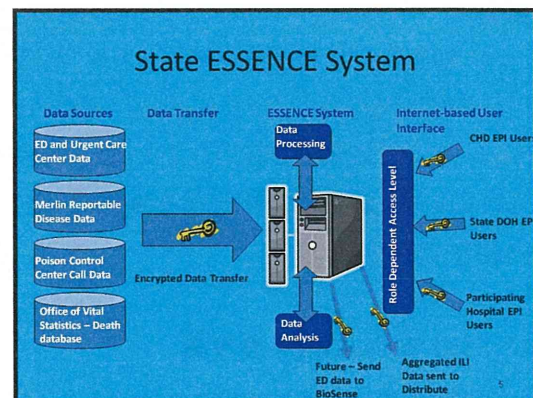
米国フロリダ州保健局の視察及び職員への聞き取りおよび発表会への参加により情報収集を行い、一般住民への聞き取り調査は行わない。また個人を特定できるデータの提供は受けない。

## C. 結果

### ①フロリダ州の電子サーベイランスシステム

フロリダ州においては ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics) と呼ばれる電子ネットワークシステムによりサーベイランスデータの収集及び分配を行っている。このシステムでは同一のポータルを用いて以下に述べる4つの異なるサーベイランスデータの管理を行っている(図1)。

図1 フロリダ州における電子サーベイランスシステム



- 薬物や化学物質等の中毒関連のサーベイランス [Florida Poison Information Center Network (FPICN)]
- 病院での救急対応に係るサーベイランス [Emergency Room chief complaints (ED)]
- 報告義務のある疾病に係るサーベイランス [Florida reportable disease system (Merlin)]

- 死亡報告に係るサーベイランス  
[the Florida death records]

ESSENCE により管理されているサーベイランスデータの収集の方法はそれぞれのデータベースにより異なり、後述する。データの活用は図1に示す通り、異なる部署の担当職員によりシステムに直接アクセスされる。データを活用するにはセキュリティが重要となり、アクセス可能なセキュリティレベルは各部署や職員により異なる。データの活用を促すために担当職員を対象とした研修が常時行われている。

## ②中毒症状等のサーベイランスについて

### 概要

中毒症状等のサーベイランスは Florida Poison Information Center Network (ESSENCE-FPICN)において、管理されている。収集の対象となる事象は以下の通りである。

#### 1. Food Poisoning: 食中毒

Suspected Food Poisoning  
Bacterial Food Poisoning  
Botulism\*

#### 2. Fumes and Gases: ガス等の気体

Carbon Monoxide\*  
Ammonia  
Chlorine

#### 3. Heavy Metals: 重金属

Arsenic\*  
Barium  
Cadmium  
Lead\*

Mercury\*  
Selenium  
Thallium

Other Heavy metal

#### 4. Marine Toxins : 海由来の有害物質

Ciguatera\*  
Tetrodotoxin  
Paralytic Shellfish Poisoning \*  
Scrombroid

#### 5. Nerve Agents\* (Agricultural) : 神経ガス (農業用)

Carbamates  
Organophosphates  
Pyrethroids

#### 6. Pesticides\* : 殺虫剤

Fumigants  
Fungicides (Non-Medicinal)  
Herbicides  
Insecticides  
Repellents  
Rodenticides

#### 7. Weapon of Mass Destruction: 大量破壊兵器

Anthrax\* : (炭素菌)  
Nerve Gas  
Other Biological Weapon  
Other Chemical Weapon  
Other Suspicious Substance  
(Non-Powder)  
Suspicious Powder in  
Envelope/Package

(\*フロリダ州において報告義務のある事象)

ESSENCE-FPICN のデータ収集は 24 時間の無料ダイヤルを設置して広く一般より

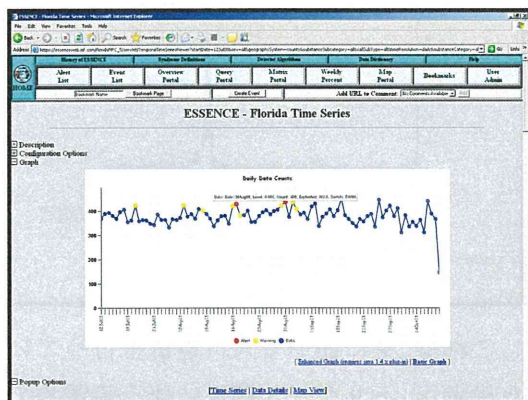
報告されるものに加え、医療従事者による報告が為されている。さらに中毒や毒物の専門家によりまとめて収集された曝露事象等をデータベースに直接入力することも可能である。

### ESSENCE-FPICN により収集されたサーベイランスデータの活用例

収集されたデータがフロリダ州保健局疫学部において解析されたことにより得られた情報の活用例を提示する。なお、この事例については既に米国疾病予防管理センター（CDC）において報告されている（2）。

図2に、平常時における実際の FPICN で収集されたデータをもとに事象の頻度を要約したグラフを示す。

図2 平常時における FPICN により収集されたサーベイランスデータの一例

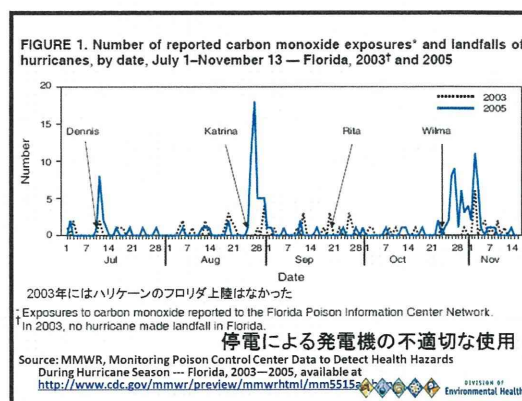


平常時においても事象の頻度に多少の上下が観察される。ESSENCE-FPICN のシステムでは、事象の頻度に急激な高まりが見られると自動で警告が発せられ、データベース管理者や関係担当者に注意喚起が促される。

フロリダ州においてはハリケーンの甚

大な被害がみられる。2005年にはDennis, Katrina, Rita, Wilmaの4つのハリケーンが州に上陸した。図3は2005年にESSENCE-FPICNにより収集された一酸化炭素中毒の事象の頻度を示すデータを、州にハリケーンの上陸がなかった2003年の同様のデータと比較したものである。

図3 フロリダ州 2003年 2005年の一酸化炭素中毒の事象頻度とハリケーン上陸



図に示される通り、Dennis, Katrina, Wilma 上陸後に、一酸化炭素中毒の事象報告の明らかな高まりがみられる。これは、ハリケーン上陸に伴う停電により発電機の使用が増加し、それとともに発電機の不適切な使用による中毒例が増加したものと推察されている。Rita 上陸時には事象の高まりがみられないが、このハリケーン上陸時には広域停電が無かった。また2003年には、2005年のような事象の顕著な高まりはみられなかった。このことより、ハリケーンのような自然災害時には一酸化炭素中毒の事象増加が伴うと考えられる。行政は住民への発電機の適切な使用を平常時より啓蒙し、また自然災害等の発生時には一層の注意喚起を行うことが一酸