

August 29th, at 1:00 p.m. ET **Using Gender Research to Enhance Disaster Public Health**

Event ID: **2405221** Event Started: 1:05:00 PM EDT

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Thank you for your patience. We are able to start now. What do the webinar today, using -- Using Gender Research to Enhance Disaster Public Health?

A little bit about our agency -- we are this part of the uniform services. We are dedicated to the education and training to visit disaster health workforce. If you enjoy the content today, please consider attending the attending -- upcoming workshop on -- in September in the DC area. You can learn more about this by going to the website --. Presenter today is Dr. Elaine Enarson is Dr. She received her PhD in sociology from the University of Oregon and want to coordinate the Nevada network against domestic violence and the first women's studies program at the University of Nevada, Reno. Moving to Miami when hurricane Katrina struck introduced her to disaster and then to gender and disaster work. In addition to her case studies in the US, Canada, and India, Elaine was the lead developer at the FEMA online social vulnerability course and initiated a Caribbean project to build on women's knowledge and community risk assessment. Elaine publishes widely in the field, having collected three international readers on gender and disaster. For US focused book, *Women Confronting Natural Disaster* was released in 2012.

And active public speaker, trainer, and international consultant, she cofounded the Mobile Gender and this master at work and initiated a sourcebook project and developed the US gender and disaster resilience alliance. After the teaching of women in Manitoba at the department of applied disaster and emergency studies, she returned to independent work in color model where she offers distance education courses to Canadian and US graduate students and emergency management. Her current projects include a fund-raising about disaster quilt and a new: added reader on men, masculinity, and disaster. >> Please take a look at the disclaimer slide. Although the national Center is hosting the webinar, the content is not an official endorsement by NCDMPH This slide highlight help the webinar me a line with the club competencies from the article -- core competencies for disaster medicine and public health from the Journal.

You can learn more about the article by visiting the website -- NCDMPH Now, Dr. Enarson, you may begin.

Good morning, everybody and thank you for taking some of your Labor Day weekend if it has begun already to talk about this. It is an important concept in an area of practice and I welcome your thoughts. I wanted to say up front that I am not a health practitioner myself -- a disaster sociologist, as you heard. I stumbled into this by moving with my geologist husband -- we moved often -- we moved to Miami before hurricane Andrew. I began to begin to think about disaster for the first time and because I had a gender background I worked with others in the community -- for example Betty Morrow and Walt Peacock to begin to piece together gender and disaster work. These are the topics I would like to talk about today. If I speak too quickly, got Liz a note and I will slow down. To give you a sense of gender analysis and disasters, it really isn't our topic, but there have been about 25 or 30 years now of work in this area and we've

learned a lot, really. We know that there are established gender patterns in people's health status and we know fundamentally that gender is across cultures and through human history, really, and connecting principle. It organizes our family life, intimate life, social institutions around is in the late Terry at education and environmental work. It is a fact, that we know in social vulnerability and in social resilience. Arguably, we can come back to this -- at the global level -- understanding gender justice -- in other words, working toward gender equality between women and women and boys and girls and people of different sexuality promotes, in the end, the kind of society that we need in order to reduce -- reduce disaster risk. We can come back to these things.

I want to preface the discussion about health by looking at gender-based analysis. I don't know who you are so I don't know if this is familiar or new, but let me say that GBA -- gender-based analysis is like a prism with different facets. We talk about gender in shorthand, but remember with that we are talking about the body as well as culturally endowed and flexible and dynamic offenses of who we are as women and men or people somewhere in between. Masculinity and femininity -- this is a cultural phenomenon but our bodies bring a lot of gender to life. Sexuality - - gender relationships -- these are historically and culturally specific patterns so that our relationships with our children and grandparents is not the same as it might've been 50 years ago or 350 years ago or in different cultures. >> Gender-based analysis looked at all of these things and argues that you can't never dismiss gender. It always has to be understood and investigated and explored. That is true in the [indiscernible] work. In general, we in the field of gender note that gender is ever something that stands alone. It always cuts across -- intersected and interwoven with all of the other dynamics of our society. Ethnicity, race, social class, abilities, capacities of different kinds. It is historical -- culturally specific. It is also about relationships between women and when and among women and men and contextual. How we act as women or men and boys and girls around the dining room table or in a line getting relief after a disaster or in a classroom are all different.

It exists in intimate relationships and also in social institutions. For example, in the emergency management organizations. Fundamentally we want to ask with gender -- who, what, where, why -- who controls the resources we look at minimum is that women and men differently situated.

A few slides -- I was privileged -- because of going with my spouse to Canada several times I gained a great respect for the women's network in Canada are doing. They have wonderful and thinks about sender -- gender-based analysis as you can see you. Gender cuts across everything that you see before you. When you had, I am conscious of the time. I would like to get to the health issues quickly. A thumbnail sketch, first, of what the gender and disaster community of practice had been accomplish in. It is a global network -- there is a website -- an organization but I hope you are familiar with. If not, you might be interested in this and joining in. It is no cost. We do advocacy and education -- on the gender and disaster network you will find resources around disaster risk reduction, case studies, teaching materials, bibliographies, 90 nations policy documents. A lot of work. In particular, you also find studies that have been uploaded in the bibliographies. You will get a sense from that, as I sound like, that post of the work in the area to date has been qualitative. That is pretty to of social science generate -- case study base. Julie written from countries like ours although it is changing a lot. It is also the multidisciplinary

because you cannot think about one of the other without the multidisciplinary land. Sadly, I would say that we are still focused on short-term impact of sudden onset events. What have we learned? >> As I said, sex and gender can never be put aside -- we will get to that later. No, sex and gender are a part and parcel of everyday life and what we have learned about disasters is that our everyday lives come into and shape both our vulnerabilities and responses and the ability to recover and the choices about having want to recover. We've learned a little more, though. Gender and disaster matter at every stage of the cycle and we are now beginning to focus more on the capacities that people who have turned genders -- bring as well as vulnerability. >> As it cuts across classes and through life -- this is an important point. Masculinity, for a couple, does change relationships with the family through life. We're looking at different levels of analysis. I don't think I need to talk much about this, but you will see a number of references. I would emphasize that we are talking about gender -- looking at deeply rooted and sometimes defended or contested patterns both of different -- isn't hers and also inequality because gender has been the basis of any quality both globally and in our own country, of course. >> Let me focus more closely on what we've learned about disaster public health. Our conversations about applying this knowledge. Briefly, these are the areas that people of it working out. Mortality, morbidity of course. The kind of gendered health status that we bring into and that -- as a risk perception and this comes along with risk tolerance. The different patterns that vary by gender and by raising else in terms of who accesses the kind of healthcare REIT the kind of health services that we provide and where we provide them. As you know, people don't just go to the doctor. Health needs arise and very diverse contacts shift throughout the process. >> We are also looking at norms of healthcare and the kinds of health behaviors that -- that we all take to maintain our health. How that affects our lives in terms of disaster events. To delay looking at the gender division of labor -- who does what I did particular the mental health needs and less but increasingly reproductive health needs as well.

Looking at safety issues -- public health as always been a concern with safety. We're looking at gender and gender-based violence and disaster context and the different kinds of issues arising in disasters that had to do with gender that differently situated men and women, men, boys, and girls.

We learned a lot. Those of you that are here this morning might -- I hope you will time in -- you might want to talk more in depth about this. A lot of different literature here we have learned that man's risk in terms of health and disaster context in countries like ours and globally is largely a function of the gender division of labor. Where you are at a particular time puts us all differently at risk. Certainly, if you look at the daily routines, women and men are not in the same space at the same time. We also know that for men there are powerful norms around production of the family and around autonomy or independence -- doing it on your own. Not asking for help to come back to that. Contingent family and kin -- men are more likely than women to be divorced from the powerful networks which we have shown to be protective in disasters. They are contingent because when the relationships break down they don't necessarily reestablish themselves. Not as readily as the women's networks do. >> Pre-disaster health conditions -- this is one of the main things we been looking at. Men are more prone to accidental harm and death, heart disease, homelessness, health conditions that come with that, distress, I highlighted

veterans but there are the people in this category. This is important. People with HIV or AIDS and substance abuse as well.

After the fact that we know that some factors that affect men in particular -- we talk about gender baseline. Usually male or female but in the back of our minds -- we also see an increase in conflict including physical conflict between men which is a form of gender-based violence. >> Looking at the injury -- disability. Sometimes permitted sometimes temporary -- responders -- what are they are first responders or whether they are the men in our lives who are tied to put a roof back together again -- these are some of the factors we could talk about. This increases the risk to men and the corollary for women is, again, the gender division of labor that puts women in different places. Also gender inequalities that women more than men bring to the table to disasters.

For example, being more economically dependent, were presented among the poor. Or represented among single parenting. Less able to participate politically in formal politics but also of the community base level what we talk about the community voice being so important. Women's voices are not always sure. So, the same kind of pre-existing health conditions come in. For women -- the big elephant in the room is pregnancy or having just given birth. Temporarily disabling conditions. We also have chronic health issues. Some are here -- for example, diabetes, dementia, and more exposure to gender-based violence. We talk about health and safety and well-being and put these together and there is enormous risk for many, many women in our country as in other countries. After the fact women are the ones that are in the homes -- everything that goes wrong inside the house including mold or unhealthy air -- exposure to unhealthy toxic in the FEMA trailers, for a couple, is it something that is a reality for women more than men because that is where more of our lives are lived. There is the notion of stress that I will come back to. Some of the sexual effects that happened -- I mean bodily related effects for example the different physiology of women and men -- if you're walking through floodwaters you are more likely to become infected more than men might be.

Because of the exposure to sexual assault and domestic violence, our health is endangered in that way as well.

These are large areas of research. Sexual minorities -- we are beginning to examine the health concerns are. The key factors -- not sexuality but the fact that they are stigmatized. Barriers to even saying who you are -- Menninger you are -- who your partner might be. This may prevent the book for him asking the kind of help that they need. We know that lesbians and gays and people in general -- are at greater risk of violence as well of being on the streets.

All of this puts people in harm's way when the various kinds of disasters that we confront unfold. We're learning more about transgendered individuals who may be in the middle of a transformation of some kind and need continuity of care. This has not been taken on board get in terms of health. Similarly, they need protection from violence again because of the extreme marginalization in opposition that is so deeply rooted in a form of gender that doesn't fall into a familiar pattern. We can talk about that.

Here are some of the other issues. In addition to these specific gender related health factors, we also are looking, as I said, about what people bring to a disaster in terms of choices. We're looking at where women and men are statistically overrepresented in various groups rather than the everyday reality I spoke of earlier. You can clearly map women and men differentially represented among these groups you see before you. For example, low income African American women are the primary residence in public housing. You will find many more women than men among the frail, elderly, economically dependent group that depends on the social safety net and may depend on continuity of care in long-term shelters. Certainly, battered women's shelters as well.

We are looking at gender differences in who accesses which kind of care and in the health professional roles. One thing that comes up when you start to think about this is that we have a highly feminized post-disaster healthcare system. At the end of the presentation I have put together a set of narrative statements about disaster and health. Based on an old study that it did in 1997. It was in the red river Valley area of the upper Midwest in North Dakota and across the border in Canada. You will see men speaking to this. There are more women in the health care system -- paid or unpaid and more e-mail volunteers in some of the national institutions. A complex web of citizens and organizations of which this organization is a part, of course, the responded to and take responsibility for preparedness. >> Then, there are more women in the caregiving professions such as counseling and social work who become ad hoc, if you will, healthcare providers. Historically, and traditionally in all cultures including our own, women carry the burden and have more responsibilities for healthcare as well. >> Now I will try to bring this humble little bit. I will provide a few examples. There are many. These are interesting to me because they illustrate how these play out in different contexts. I was living in Canada in Manitoba will be close to the borders. Around mad cow disease -- the epidemic. This became a disaster. I was happy to be a part of my old the province and multi-university collaborative study of the social and health impacts on communities. As well as on individuals. We did a lot of research looking at farmers and farm families and small rural communities. You can imagine the same kind of findings that would be similar here. >> What is interesting to me -- we look at the gender lens -- I women and men -- they had many things in common with the borders closed and the communities that -- took an economic hit but there were differences as well. The one that sticks in my mind was the man telling me that the minute's communities to come together for coffee and conversation and support in the grain elevators. With the decline of the industry, basically, the whole cattle industry stopped short and these towns were dying on the vine. These grain elevators which were not doing all that well in the beginning were close. There were fewer places women together. A lot less money and families -- people cut back on gas and did not take kids to sports activities which isolated the women and their children back in the home. A lot of increased stress and long commutes. Some men work going to Alberta to work in the [indiscernible] and coming home on the weekends after three or four weeks to help on the farm again. >> As you can see, there was more substance abuse reported in more domestic violence and marital conflict in general.

A little more specific -- there aren't always -- you see this in the drought and gender literature -- more farm work combined with the traditional elastic labor and the farm labor of women -- a

tripling of labor for women went things get tight. For men you see more migration. People having to leave. Enormous depression. These women struggling to keep the family farm -- they did not want to lose the farms on their watch. We heard other successful suicides and suicide attempts. >> This conference or some other literature on drought and farming from around the world. >> This is at a community health level that there are important gender themes.

I was also invited to work with Health Canada and the Bureau of gender-based analysis. We were keen to understand -- the government was developing pilot warning systems around extreme heat is a part of their climate adaptation program under Health Canada. We came to understand the gender dimensions of the periods of extreme heat. This is one thing that we are seeing and can predict is important in the future in this country as well. It is important that we understand and that the review is clear -- the gender pattern in the European heat wave which is the same as in India are different than they are in the US. As you see here, the Chicago victim was elderly, disabled, black, urban, lower social class and male -- this is a heatwave study from Chicago. >> The French victim is elderly, disabled, lower social class and female. >> The CDC data continues to show that more men than women in our country are hurt and hit and sometimes die from extreme heat. We need to untangle the factors. I want to point out and say thank you to the state of Missouri -- they are tracking the data both by ethnicity and bisect. You can begin to see some very interesting pattern there. These are important because if we are moving toward social marketing and moving toward trying to understand how to communicate effectively with subgroups and respond to different people in different ways, we need to know who is most likely at risk. We say more men -- but are we looking at a certain age group or ethnicity or background, for example? A quick slide from Health Canada -- you can think about extreme heat -- this to be any hazard. These kinds of health conditions -- look at it through the prism with gender at the center or at the side as you like. >> Moving on -- I've done a lot of work around domestic violence. It is an underexplored area at a life and safety issue in disasters. We are beginning to look more closely at these things. You will hear when you see the literature or speak with service providers that there is continuing patterns of abuse and more extreme if they were there in the past. One who might ordinarily have shown up in the hospital with a black eye may come in with broken bones. That is a quite striking finding that is repeated often. Sometimes you see new abuse altogether. The population of people exposed to abuse is very diverse and changes with the particular disaster. We need a lot more research here looking at disasters versus environmentally triggered disasters. >> We are trying to tease apart what triggers domestic violence. You will hear people talk about stress or being tired or he didn't know what to do or he was feeling broke. Those of us in the field and has good social scientist we understand these are the triggering cause but the root causes are really fundamentally around power and control and if there's anything we've learned is that they challenge both the sense of power and the sense of control. Having lost my own home, I can attest to that as well. >> There are some community health and safety issues because you have a layering over on top of all the other health issues. Women and men's and boys and girls that don't feel safe -- they might be in a B trailer where Sam is no longer kept awake from Johnny or Jane but is living with them in an extremely crowded environment. There are reports of increased sexual assault against children. >> The shelter movement as a whole is becoming more interested in this. Later you will see that a lot of resources -- for example, the national sexual violence resource Center. To date they don't partner effectively with emergency

managers. We have a lot of problem with the data that we could talk about. Most of the data comes from service providers who will show you that a year later the service calls are up on there are more request for protective orders and indicators of violence. We need to work a little bit harder to get different kinds of data on that.

There are also different research needs -- let's move on.

Disaster mental health is one of the most widely researched areas. I'm not happy to see that because I think that it is an established area of research but perhaps not one that leads in the direction we need to go. I mean I think we need to focus on life and safety issues first and then talk about stress. Not that they are not related. They are, of course, but most of the literature that we have around mental health issues is around stress and other ways to look at that.

Having said that, generally women either are more subject to disaster related negative mental health affects -- PTSD is shorthand for that. It's not always that, but other symptomology. Or, they report this more. On the slide I've listed the obvious factors. Overworked -- women talk about new post-disaster work -- so-called the second flight -- standing in line, waiting for the paperwork, getting the kids back to school. Meanwhile trying to cope with husbands and fathers and sons who feel incapacitated. They don't know where to turn. They don't have strong male friendship bonds or networks. They find it difficult in -- huge generalizations, but you hear this if you speak to them about this -- huge difficulty in reaching out for help. Acknowledging that there are mental health things keeping them awake at night.

One reason, obviously, is because among the mail responder group generally presented it with men -- is exposure to trauma. We find that going back to women you have higher expressions of PTSD among women who don't have the same degree of exposure are susceptibility but they take it on.

Secondary trauma.

Look at 9/11, for example. You have to understand how this complicated. Live the recovery of the men and women responded in a time of need. >> This leads to a final example that we all have to look March or -- resilience becomes the new temporary way that we will think about communities and risk. A lot of research is showing that the family networks that women bring into these situations, not necessarily marriage but family and friendship and Ken networks -- and not exclusively in the militant networks and families, but often more evident there. Protective in disasters -- they help get people organizers and motivated and evacuate and combine the work and get the [indiscernible] out of the basement. They can act in a way that is effective -- family leadership is so important disasters.

If you're interested in reading more about that, I recommend this book called the Women of Katrina. There are a number of articles.

Conversely, we know that social capital can also increase the stressed does make demands upon women and men. I am looking at women in particular who are in these rich networks. That means you have a whole lot more needing people needing from you and wanted to sure your car or your apartment or your FEMA trailer or money or you can imagine the long list. Men bring a

different set of resources -- psychological resources. I would diminish these but any -- we understand the differences more likely to be work-based social networks. This brings men to disasters with skills and knowledge and resources but may not help them emotionally in the way that we are allies women are helped. >> These are some examples and a concrete level.

I see that we have about half an hour left. I will move on to the problem in the field -- how do we begin to move from knowledge to practice? We have decades of thinking about the gender dimension of disasters through the disaster cycle and different cultures and different levels of analysis. There is work from the public health community in particular that is often sex specific data that can be brought to the conversations. There is quite a bit of work in the health field as opposed to economics and public administration or anthropology. Yet, when we look at disaster after disaster and look at preparedness plans or community meetings after the fact and look at websites and informal work going on, for example in my flooded community on the front range in Colorado, you don't see the attention to gender that I think is warranted on the basis of what we learn. It's always a puzzle to me -- why is that? What can we do to challenge that? This is an important conversation. A few promising things -- I should let you know that I am the Glass empty person in the room. The distance we have not come. There are some things we are getting right.

I will start with the discouraging patches. The first one is important. We have enormous resources internationally and the US government through US a [indiscernible] and other agencies that work internationally have a pretty good sense of how important trafficking is -- crises situations. Or the need to attend to maternal health and crises. We just don't bring it all. We don't apply it in our own country. That's a shame. It is a bit we need to address. >> This is a remarkable to me -- because I am showing my age -- we have talked about gender and women's studies -- we have moved to gender studies and we introduce sexuality studies and transgender studies. It is past the time to start -- stop reading gender as women. Similarly, stop reading women as right, middle-class, -- right, Mary.

We have a lot of business to go. When you look at the website -- I have done some informal and formal analysis of the information on the website. We talk so much about access to social media and the importance of communicating with people and using the new technology, but we have to think not only who is coming to the websites and what they are looking for -- typify what they are looking for? What can they contribute? What did they find? You will not find much around gender in these issues. You will find guidelines for working with children in disasters. You'll find guidelines about working with seniors and guidelines about working with pets. But you look for a long time before you find anything other than guidelines around pregnancy. In fact, these are quite new. So, there's a lot of room for change.

Again, as I said, despite the good research record in public health where sex and age is aggregated and data is the norm -- there is a lack of data on the larger issues. I'm talking about epidemiological studies that always have that -- other public health studies do not. >> There is often a lack of basic information about who is in the sample. Male-dominated? Population? To the sample lean toward a particular ethnic group or age group wax can we talk about both age and gender in the same breath? That's how the real world this. Why can't our research reflect

that? Rarely you will find meaningful gender-based analysis. >> Before I move on, an example - I pulled out these because they were so striking -- you might have better examples. [indiscernible] do is a [indiscernible] any newly minted PhD -- she has written many articles with colleagues here. This is around gender-based inequality and emergency aid -- I won't read it out loud but at the end she talks about trying to raise with FEMA the question around sex specific care in the Katrina context. One of the staffers said with a determined loved, yes, FEMA should consider gender-based policies and he put me in touch with the National Disability Court, Nader to which she replied -- I'm not disabled, I'm a female. >> On the other side, this is the claim that so many of raised -- there's more of a focus on pets. Not that pet ownership is not important. Of course it is, but we need to have primary emphasis on people first.

This includes looking at the specific -- gender specific needs of women and men, boys and girls. >> Here are some examples of the sorts of things we are getting right. General categories. A few examples. In the research this is very promising we are beginning to look more at resilience and less at vulnerability. I'm one of the people that once a balance. I am not moving away from the vulnerability framework because we are not there yet. We have to begin to look at both of these. It's a wonderful study of pregnant and postpartum women and the kind of strength and emotional and physical resilience that they bring. We need Moore's research like that.

There are mental health professionals in our own government that have initiated a wonderful project after Hurricane Katrina and we are looking at it, including disaster gender-based violence trauma. This is a nice collaborative piece of work and you will find if you follow the links documentation about that and some practical action guidelines as well. It is very promising. There are many international guidelines from [indiscernible] and interaction and word health on gender aware health and planning guides. These are wonderful. Perhaps they are used. You can help me out by telling me that they are being used in your experience. >> Here again, Roxanne and her colleagues Desmond one example of a set of guidelines for gender aware disaster care. You will see it ranges from the familiar like making sure you have feminine hygiene products to things that might be more burdock and it -- for example, providing a warning after pill and condoms and oral contraceptive choices and great intake kits. Here I will stop and share with you that it took me a long time to realize that in disasters everything about the everyday life continues. Sex continues. Death continues. People fall in and out of love and break up and come together. Everything about is that makes us human we bring into these things we call disasters. It is common to recognize that this and not turn away. Anticipated. The goal is to minimize the suffering and to recover and respond in ways that make us more resilient to produce our future risk.

We might want to come back to that slide. You will find specific examples. >> The more positive approach is -- reproductive health assessment kit -- so communities can work together. It is a nice tool to look at reproductive health needs, mainly around women. I would hope that this would be developed to look at the reproductive health needs of men with disasters. This point came home on my recent trip to Japan -- there needs to be a sustained research action campaign to understand what these long-term effects are going to be on the man who stepped up to help keep the larger community say. >> The CDC is doing a lot of progressive work. It is relatively

new, but it is important work around reduction of women who are pregnant or might be pregnant or have just given birth.

Good guidelines there. >> Indifferent public health feels -- because you are professionals today - - these are important to trend. Public health workers -- researchers are identifying disasters as an important issue. The first piece. There is a new special issue on -- actually 2004 -- a special issue from the Journal of Midwifery. I know several people -- one at UC Boulder and in Japan -- many more are beginning to look at the connection between informal healthcare to midwives and sometimes certified hospital-based and more often not -- family-based and community-based. Disasters including emergency preparedness.

This conference at McGill is fabulous. Looking at pregnancy and maternal stress and the larger context of climate change and disaster. You will find the conference proceeding was interesting. If you are interested in that, a good example of how this community is stepping up to disaster. I was happy to be working with women's health in Australia the last couple of years. Wonderful new original work of the effects on women's health of the bushfires there in Victoria, particularly violence but also other health effects. This led to a call for a follow up to look at the effects on men and their experiences. More broadly. This in turn has led to an innovative gender and disaster task forces bringing women and men together led by an initiated by and supported by man in the emergency fire services to try and Willie get this right and help is at the center of the work.

[indiscernible] partnership is one of the many groups that arose out of a sense that there was a Needed to be filled. This is a NGO based in Florida that works internationally and in the U.S. Senate was present after Sandy, for example. Other examples of the work that they do. It is important because they are stepping up in particular to the health issue and trying to raise that at the level of practice and policy in a concrete way. You might want to visit their website and see what you think if you're interested in working in them or lurking just learning more about their work. The state of Florida -- I haven't seen anything like this -- turn and families working together with the Florida network against domestic violence. Doing some preliminary proactive thinking around this. We can prevent -- make a safety plan for domestic violence. I love that they have two different versions of this. It was case a woman is profiled in the other case a man. >> Let me move to the research That we need to address, having shown you a few of the promising practices. One of these would be to assess the promising practices. Harrison, that would make about the research. We study mortality, but rarely do we rate this back to anything other than sex. Not even sex often. We need to understand how mortality and gender relations and the division of labor place in. Their open or markedly good work in that area. We need a lot more than that.

We look at preparedness but we don't have to look at how effective our ender-based preparedness activities are. We look at stress but not enough that coping strategies and the kind of gender specific outreach we might need. We look at climate, but we look at promising practices but we are not really looking at what might support the informal healthcare roles that all of us, in particular women, are going to be thrust into with climate change. This seems to be one of the most predictable consequences for us all. Direct health impact. Women are the ones that historically and willing fully -- we can step up and be in harm's way. How can we do the

kind of work we need to figure out what helps and what support? Do we need personal protective equipment? We might learn from Ebola. We can certainly learn from SARS. In Canada there has been some good work thinking about how this might play out and who would respond in a search context is a search context when the hospitals need to bring everybody on board. Not just hypothetically, but from their work around SARS to see who showed up. As you might expect, women in nursing roles in other roles like that work are put to fill the responsibilities. They were very conflicted. This comes back to gender. They often faced resistance from their partners.

We need to look at age and gender at the same time. We need to think about violence a little more. More creatively. I won't belabor the point except to go to the last one on men's health and safety. It is one of the most pressing concerns. I am happy to be working with a new calling -- in Australia -- around the new book around masculinity and disaster and we would be looking at these issues. We just don't know enough at all about men's physical healthcare needs and emotional needs and emotional capacity and what they give and take and what they might want to be able to give and take. The kinds of informal networks that might be able to support them through these events. What kind of public health safety and warning we need?

I will fast forward here. Action steps -- this is my last point. I think in general what I am calling for is again to use the knowledge base that we have. These are some ways to use it. I think that GBA should be a core competency for all health plan is. I think that we evaluate disaster health research that GBA should be one of the evaluation criteria. We need modules for training in teaching. We need to have women and men of all backgrounds and experiences on our emergency health planning teams and really to take outreach and partnership and Stickle during seriously by understanding how our communities really are structured and who really gets healthcare from Loma. We need to look at that season vulnerabilities. We need to focus on the question of reaching out to reach the people most at risk in terms of judgment for a couple, around extreme heat. Following our work, we know in this case that it is African-American, old, and Probert man who, like women, were fearful of gender-based violence -- male on male -- they did not open their windows to get a crack of air. They were estranged and nobody knew they had died. Nobody collected their bodies. If we understand that about our country, we need to have forms of risk communication that reach them and that is one small example.

There are other things I think we need. >> There are a number of areas for action -- Windows of opportunity. Let me end by walking through these.

Hazard and risk assessment should have as a norm a practice standard sex specific data on the exposure and susceptibility of different groups of women and men to particular different houses. This is research that we've done and we need to do a lot more of.

We need to apply, then, the knowledge that gender-based analysis based on that sex data to shape the risk assessments that guide everything else. That's the core foundational document of most of the disaster and emergency management.

We need to be top of the transcend patterns that will affect us differently in the future and we have enormous divide in this country around class and they're getting worse, not better. More and more people owning in different and more exclusive ethnic and racial communities whether

the community is defined by ethnicity or poverty or language. We need to understand how these patterns -- immigration and cross-border work and transnational families -- caregivers from the Caribbean into Washington DC -- what does this imply for the future public health and disasters? There is so much that we could be on top of by understanding the trends and patterns around gender. Around how women and men that there'll lies in relating that to health.

We need to look at capacity more than vulnerability. We need good work around engaging in reaching out to women's nonprofits. I worked for years with domestic violence programs and many are keen to be engaged but they don't know how. They feel excluded from the system. This is just one group. I would think that there would be shelters for the homeless, for example, run by men. Community clinics that they are serving mainly homeless man or mainly who would fill the same way. There is a lot of work we can do. A lot to be gained from a broader network. >> This is a similar point, but I think in particular I am focusing on women's leadership and women's NGO -- they need to be able to do risk assessments working with this community-based groups around, for example, emergency health planning and childcare centers or work with disability communities and their enormous disabilities difference. Gender is often not analyzing, particularly. We know from past research that women living with disabilities are more at the to be low income, less likely to be employed and more likely to be subject to violence. These are public health issues and disasters. We can work with our LGBTQ communities to understand their health knowledge and about services incapacities and, of course, the communities with indigenous relations here in our own country. >> I've spoken to this before -- the preparedness campaigns -- we spent so much time working your as we should and must. But I think we are missing the boat. Again, we have a better understanding from a health is effective and a community health perspective of what these subgroups are and if we slice and dice a little more carefully and theoretically, understand what it is that creates a greater health risk among these subgroups. Then we can reach people better. We can use the kind of strategies that advertisers use and the industry -- insurance industry used to reach young man for example or older women or high risk women. Here again we need to not do this on our own. I'm teaching emergency management student. I am using this editorially. I am a sociologist. These campaigns need to basically begin and not just throw toward -- begin with the knowledge that many organizations have including men's organizations of which there are many in this country. They are either paper-based or around youth and recreation or work. Both are natural partners. >> I have spoken to this already -- we need forms of risk adjudication and specific warnings designed with specific information about gender and health in these particular contexts and informed by input from, for example, gender and communications experts. This is not rocket science. We have to know would reach out to. We have to have basic standards of competence, for a couple. If you are putting together a brochure or a webinar or a poster, or what have you, what kind of images are you using? Whose pictures? I will stop for a moment and talk about the numerous reports out there with pictures of women here and there and no text and no data and no policy implications. No practical implications. Liberally illustrated with pictures of women. This has to stop.

Our training needs -- I am adding more work for the wary, but we need to have emergency planning teams trained -- everybody, not just a few women or men. Everybody -- to be able to reach out to high risk women and went and was engrossed in the disaster context. In order to do

that we need to have some gender modules. I have my list here. You might of course want to talk about that or contribute other ideas. When you have training that is accessible at the community levels for women and when and this means thinking clearly about who's going to come to the meeting or working be held or happened meeting be held to expand the diversity and diversity of men and women wept so much to offer we talk about health and safety and disasters.

We can work with people that are already out there doing it from a [indiscernible] communities for example. Other examples of community-based traditional trusted health experts in the -- every town in this country. They should be a part of developing the training and doing the training of the -- training the trainer program.

Of course, the responses have to be designed with knowledge Desmond build on the gender and disaster and health knowledge base about who actually shows up in hospital need to have everybody on board. We need to understand how to better protect and save the lives of our own emergency health providers. Probably understanding who is going to be most likely a risk -- to support women and men in our spot and through their different family roles in terms of offering to anticipate the kind of caught child care or adult care support we need to give -- versus, for example. Before we expect them to show up to work. How can we minimize the health effects on first responders? To think about this, gender perspective and not just generalize about first responders. There are other ideas there. Let me move on. Shelters are temporary accommodations. This is one of the major areas where we do reach out as healthcare providers. You are doing the work, not me. We need to get it right. Learn from what is happening globally and read our own literature about disasters here in our country. It must be designed with women's safety paramount. I should've said women and girls and boys because gender-based violence is a factor in boy's life as well as girls. We need to have women only spaces not only for privacy issues around breast-feeding but also as a way for women to get together and talk about how to make a safe space and to support one another. We have to prioritize women who are heads of households and this extends to supporting teenage boys and fathers and grandfathers that are thrust into sudden intense caregiving roles. We saw this after the 2004 tsunami. Will he see it here in US disasters every time? The shelters need to be located near traditional services on which women in particular are more dependent -- public transportation. We know that women are the first and the last out of shelters. I this is distressing research around the higher levels of domestic violence and sexual assault which many are subject to in our own soldiers. -- In our own shelters. >> This needs to be designed with input from transgendered advocacy groups from the LGBTQ community as much as from different ethnic groups and age groups.

The recovery programs, of course, have to reflect upon the constraints -- unconstrained by delay the return of women Desmond women than men to return to implement. What are the issues that keep women at home? What are the issues that force me to go back to work? What are the indications for help? We need to prioritize the recovery of home health care does make a community-based healthcare. That is ultimately where the action is. People do not go to hospitals. And they can't just depend on the hospital system. We think about the recovery of our institutions and networks of help and our region disaster. We have to be aware that they are both tender and community-based and being systems. More we can understand what shapes these, not

just the buildings, of course. Not just the supplies or the well-written plan. The actual social relationships including gender relationships -- been the better off we will be.

Wrapping up, there aren't many windows of opportunity for action as we say after disasters but let's be proactive and proactive and again to the health community of practice here in the disasters because that is what you do. This is a way of wrapping up. We do need to have systems that are gender balanced and diverse. With respect to ethnic -- age and ability and sexuality and other differences among and between women and men and among different groups and women and men because that is what gender analysis offers. We need to have systems that include all of the actors. This includes professionals and wellness work essential to professors and midwifery and anti-violence workers. We should be able to reflect both women and men dominated petitioners as fully as possible. Some groups are out of the ballpark. Not included as a stakeholder Zaurus planner Jack. We need to take seriously planning ahead to care for the caregivers and for responders wherever they may be. >> I am wrapping up here. I am rushing through a large amount of information. Let me move to the last slide to -- some websites you might want to take a look at. Acknowledging, truly, the week -- the work of the photographers that have taken the pictures and the women and men stood still. Everybody was contributed to the community of knowledge. I will go through these, but you will see that these are the kind of first person statements that you can see if you are interested in hearing the voice is a little bit more. Again, that comes from the upper Midwest. >> The second appendix -- to archive this -- different steps that I've broken down by sector. Rather than the by by the way I presented on this morning. What kind of health care might we expect with leadership from health centers? Public health? Leadership from the authorities in government and nonprofit from the private sector and educators and from women in community groups?

Finally, I apologize for speaking so quickly. I will turn it back to Liz and I hope to hear your thoughts. Thanks. >> Thank you, Dr. Enarson. And for those that could attend to today. I know it's Labor Day weekend. I'm sure you have fun plans. I appreciate you being here. You can enter your questions into the chat box if you have any. I have a question about a previous slide on the program in Florida. I wonder if you could expand on that -- the type of interventions that they had in mind, if you know. >> The [indiscernible] partnership or the domestic violence?

Domestic violence. >> I an answer to what I said -- I could send you a copy of the brochure. It was an initiative of the governor's office is supported. It was initiated by the coalition of domestic island groups in Florida. We went to the governor and got support from family services there. To distribute a brochure that raises the issue and point people toward services available in the community already. It's not an after-the-fact to -- it is an awareness raising piece. I would add to that that went we were in the upper Midwest -- I had a distressing story from a shelter that was not amended to put the number of the shelter on the post-disaster resource list. The reason was that it was " too negative". That's ridiculous. You have to put a crisis line out there. It could be a life-saving service. I think that is why I am so struck by Florida stepping up and saying this is not something that we will hide and pretend doesn't happen. Here's a brochure. The only thing other thing I would add as bit the Florida coalition is among a number of state coalition set up in very proactive in this area. You will find materials on the website -- training materials and slide.

Emergency health from them. >> Great. I thought that was very interesting and unique. I have not heard of anything like that before.

Yes.

On that note, Liz, the national sexual violence resource Center -- they have a presentation. I organized a session on the whole community approach and I wanted to bring in some tender based work around violence. They've done a fabulous work including outreach -- they have an online E educational learning tool around as domestic violence and disaster. They have cards and brochures that you brought to the conference. This is one example of a group stepping up. >> Great.

There's a question about if these drills will be available online. Yes, they will be available on the website. I put the link there for those on the phone. It is NCDMPH. US QHS.and you/news events/webinars HDM.

I am happy to talk individually with anyone that would like to have a discussion -- my e-mail is on the final slide.

Great. It doesn't look like we have any questions. Feel free to contact me or Dr. Enarson if you would like to follow-up. Thank you for joining us today. The wet the next webinar is September 30 on health IT in disasters. This will be on -- at 1 PM. You can find more information on the webinar link that I included. >> Thanks, everybody, have a fabulous holiday. Stay in touch. This is an important conversation. I appreciate your time.

Thank you, everybody.

Goodbye.

[Event concluded]