

Disaster Health Information Sources: The Basics

Transcript

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Please stand by for realtime captions >> It is time to get started. I will introduce myself. I am Robin Featherstone., A medical librarian at McGill University and also worked at the health center. My interesting disaster health information started when I was an associate fellow at the national Library of medicine. I participated in an oral history project where I recorded stories from librarians across the United States and Canada. This was about the role that they played answering disaster questions or responding to disasters. Not -- this really started my interest in this area. I recently conducted a qualitative research project investigating the information needs of health professionals during each one and one. I presented -- H1Ni -- I presented a paper to them. My day job is teaching medical students and working with physicians and clinicians. So, teaching disaster health information is a new area for me. This is the foundational course as well in the capital MLA disaster specialization. If you are good to take a class on disaster health information, this is the one to take. It is the survey course. Today we will go for about 1.5 hours. As I said at the beginning, I would like to make this as interactive as possible. For me, participating in a webinar is a great opportunity to catch up on my e-mails. So, please participate in the polls and the questions and feel free to ask questions during the class. Take advantage of some of the features of the software which allows us to talk and interact.

Just to get started, I created this graph -- I hope everyone can see my slides. This is on disasters using the medical subject heading and looking at the last 40 years. I used a tool called [indiscernible]. This is great for doing an analysis of bibliographic citations. What we do see, obviously, is an increase in relative research interests and the number of publications on disaster topics. I want to point your attention -- draw your attention to the three increases -- you can see these in relative research interests. I would like to ask the class -- if you know the answer, please raise your hand. I will call on you.

What do you think caused the three increases in relative interest in disaster topics? >> Jeanette is typing in her answers. [laughter] Remember we did the exercise when we were practicing breathing the hand? Good -- Jeanette has raised your hand. That's okay. Are you on the UIP? -- Voice over IP? You on the phone? Can you hear me through the conference call? Why don't you just use the text -- the chat box to type in your answers? >> 2005 was hurricane Katrina. 2009 -- the cocaine or this is not a. Then, 2001.

-- 2001 as well. >> I am getting a lot of people raising their hands and typing in answers. I have heard all of the correct answers and everybody got the idea that the increase in relative research interest is caused by events. Particularly events that get high media coverage. I have added to the slide -- 2001 was September 11. 2005 was hurricane Katrina. 2000 2009 -- the highest interest that we have seen -- this is reflected of a health topic and the search was done with MEDLINE citation being H1N1.

Just to go into more detail about H1 and one, what you can see between March 15 and April 26 is the increase in the number of cases. Then, immediately following during the same period we had a -- an explosion of available information. Particularly on the web.

One of the challenges of searching for disaster information is that there are many -- but I will just highlight one -- having to navigate the influx of information and select best quality evidence to meet information needs for the disaster workforce.

Disaster information needs don't always occur during the response phase, but also during the mitigation, planning, and recovery phases. In this course in today's webinar we are going to describe -- I will describe the information sources that will meet all the needs of the different phases.

It is my hope that by the end of the course you will have achieved three objectives -- or, I will have achieved this. To be comfortable locating disaster health information -- peer reviewed articles on disaster topics as well as standards and reports. Just to name a couple of different information sources.

You will be confident using a variety of data bases and tools and websites. We will discuss Hazlett, BHT.gov, tools like Weiser and trend. Not to mention pub med that you are probably already know you're with. And, being knowledgeable about initiatives and technology for accessing this. We will talk about social media and speeds and Twitter. Also, initiatives like the national Library of medicine initiative to share journals and publication data with areas affected by disasters.

What we will cover today -- I will talk a little bit about disaster medicine is a topic and the workforce. The target audience for the information sources.

We will have a case discussion and a pool.

We will talk about disaster health information for professionals as distinguished from information for the public. Just to be clear, there are different ways that you can organize the number of sources. I hope you will have an opportunity if you haven't already to look at the MA -- MLA resources and links to every source that I mentioned in today's class. Also some more.

Then, we will talk specifically about the capital MLM resources for disaster health information and at the end we will talk about tools -- social media tools. I mentioned these previously.

Then, I will summarize and lead time at the end for questions.

I will ask the person who has joined us via the conference call -- please mute your speaker.

Thank you.

Let's start with a quick definition of a health disaster. The key point here is that the impact of the event has -- it will exceed the resources of the area to handle it. We were talking a little bit about H. back one -- H1N1 -- it is totally not a disaster, but a public health emergency was declared. I will talk about some related terms. This entire class could be about definitions related to disasters and disaster management and emergency planning and emergency preparedness, etc. I don't want to go to in-depth, but I want to talk about this continuum of escalating incidents. A disaster would be a serious disruption in the bludgeoning of society. Where as an emergency -- it is a situation that is out of control and requires immediate attention.

An event is an occurrence that has the potential to affect living beings and their environment. You can think of an event turning into an emergency and the emergency turning into a disaster and then a disaster turning into a health disaster.

That is how I keep it clear in my mind.

If you are interested in more definitions or you would like to clarify some ring may be for publication, I have pointed out a link on this slide to a great glossary of different disaster related terms. I will mention, too, while I am at it that all of the links through Adobe connect -- you can follow these during the presentation. In fact, we will do an exercise later.

Molly has raised your hand. I will approve that, Molly. What does wadam stand for?

It is the world Association for disaster and emergency management. It is a professional organization that provides wonderful information and resources. >> Let's talk about disaster medicine as a topic. This is the best thing I could find on disaster medicine -- it is by calling and shoulder. -- It is by Koenig and Schultz.

We will talk about some of these things like merging infectious diseases. Mental and behavioral health -- the effects that a disaster would have on mental health -- the members of that community.

Surveillance and surveillance tools. Just to keep track of what is happening during a disaster, particularly during the response phase.

The hospital facility -- to -- disaster management -- we would do a couple of exercises. Search capacity is an important concept. Rapid expansion of the capacity of existing healthcare systems to respond to an event. That event could cause a need for increased personnel, more support options and more physical space like that. Or alternate care facilities being made available. The definition -- the best definition for this is really from the Department of Homeland Security. It is something that hospital managers are interested in calculating their [indiscernible]. There is a lot of literature about that.

Specific disasters -- chemical events, nuclear and radiological events, hazmat, toxic an individual event, and also floods.

Something I want you to keep in the back of your mind to during today's workshop, though, is the term all hazards preparedness. According to the CDC, emergency preparedness requires attention not just for specific types of disasters -- not just floods and fires and earthquakes, but also steps to increase preparedness for any type of hazard. A lot of the literature out there is literature out there is focused on all hazards preparedness.

I think of the disaster workforce as the target audience for a disaster health information resources we will look at today.

You would be surprised -- at first I thought, the disaster workforce -- that is emergency responders and hazmat teams. It is small. Actually, the opposite is true. It is a large audience. It can include licensed or trained volunteers, paid or volunteers, permanent or as needed workers who play a defined role in and emergency support option related to math care and emergency assistance and public and medical services.

I have given you a link here for the FEMA definition of emergency support functions 6 and 8 -- this outlines what the workforce does.

Some of those individuals who might have a need for disaster health information include the following licensed or credentialed health professionals: you have nurses including advanced practice nurses like first practice in there is and anesthetists. Also, certified nurse midwives, clinical nurse specialist -- all the range of nurses. This includes registered nurses. You also have behavioral health professionals like a therapist, couple held -- public health social workers, mental health and social is -- mental health counselors. You have emergency medical technicians -- AMT's -- and paramedics. A group that surprised me -- better in areas. Animals are affected by disasters as well.

Dentists, pharmacists, physicians including PAs and emergency physicians and other first receivers. We think a lot about first responders as being the first was on the scene and then the first receivers as being those individuals who would work in a healthcare organization and be the first ones to receive patients or to receive victims of disasters as they arrive.

I also have radiologists, and technicians. And a wide variety of other specialists like respiratory therapists, clinical lab technologists and technicians, and this is from a resource the emergency system for advanced registration of volunteer health professionals -- it is ESAR VHP. On the moodle there is a list of acronyms. It is not -- it is nice to have a quick sheet.

Think about the additional trained professionals -- you have trained community volunteers -- for example to the Red Cross. You have firefighters and hazardous material response. It merges the managers -- emergency managers. From my personal experience working at the hospital that the disaster help that I received was from this group. The research that I conducted in H1N1, healthcare administrators were a key audience for disaster information. This would include hospital and other health center administrators and public information officers. Members of the command system.

Military and civilian humanitarian assistance workers. Like Salvation Army, for example. We have Iranian -- we are a part of the team as well. This is to provide information during a response. The planning and all of the phases.

Support staff -- administrative and support staff are a number of different groups. Social workers, laboratory support staff, administrators, clergy, -- the clergy were very visible at the scene on the ground. You have disaster mortuary team members. The acronym it is DMORT. This includes many professionals.

Others are health educator, toxicologists, the environmental work force, and the list goes on. Something to keep in mind. There are a huge number of individuals that have a need for disaster health information.

That is a lot of talking. I would like to do a case discussion to get a thank you. We are talking about H. 1 N1. Thinking about this particular scenario where it is the end of April 2009 -- just in the first wave of what we called swine flu. And administrator from a hospital asked me to find information to answer the question -- what is the effectiveness of antiviral agents for swine flu? What are three challenges related to finding information in this case?

A. -- unavailability of information.

B. -- the audience probably once all available information.

C. -- there are a variety of different sources on the topic.

D. -- unavailability of indexed, peer reviewed literature during the early phases of an outbreak, particularly of an unknown infectious disease.

E. -- the need to start monitoring information sources in order to provide updates to administrators.

What you think about this, I will open up the pole so that you can give your answers. There is more than one correct answer to this question. >> Hopefully you can see the pole now. People are starting to give their answers.

I will now broadcast the results -- people are still changing their answers. I will close the poll.

Answer A. -- this would be incorrect. What we saw was that there was a lot of information available at the time.

Was a good information? Probably not. Answer will be -- this would probably be incorrect. The audience probably once all available information. I think it would be completely overwhelmed as healthcare administrators giving the number of other responsibilities they would have.

They would want the best while at the evidence.

So, the correct answers would be C., D., and E.

The unavailable peer-reviewed literature -- this is what we found from our research. Trying to find randomized control trials -- was not available. Then, A -- as these -- E. -- as the publications came out, you would want to be there to monitor it as recommendations and guidelines came from the CDC or WHO. It requires the work of an information professional to be able to monitor and provide the information to the health care demonstrators.

Now I will clear out those answers. I hope that exercise makes you aware of some of the challenges that really make disaster health information tricky. Hopefully the resources were recovered today will help it easier to find best policy evidence when you need it.

If there is one slight remember, I hope this is the one -- this is my attempt to summarize disaster health information sources. Imagine that the triangle represents the body of disaster health information. It can be split into two parts -- the first part is the peer reviewed scholarly literature. -- This would be journal articles and books. This is what we use as medical librarian.

Then, there is a much larger body of literature including reports, summaries, surveillance data, training material, etc. Today we will search for both kinds of disaster information using the sources for finding peer-reviewed journal articles and books. We were also -- we will also be using other sources of disaster information.

This seems overwhelming to see the slides, but I hope it makes sense.

I see that Jeanette has raised your hand. Should I enable your microphone? >> I try to put a triangle in every class I teach.

Jeanette raised her hand again.

Go ahead.

That was a mistake -- now I will move ahead. We have one hour left in the class. I don't want to joke too quickly, but I might want to cut out one of the exercises. I want to stay on track.

The following are some of the PubMed indexed journals that publish topics related to disaster medicine -- disaster medicine. I want to add that they are our a lot of emergency medicine journals and they have significant content on disaster health. One of the themes of the course is that the description and definition of these resources is really all over the place. Sometimes this information can be hard to find.

Describing disaster medicine. I have given you some subject headings from the Library of Congress. A great resource. The medical subject heading list that the disaster information management research Center at the national Library of medicine is put together. A list of subject headings that have been applied to disaster topics. So, if you are starting a search and you want a list, I would recommend checking this out.

If you are ordering books -- this is a resource for medical librarian. Hopefully there are enough on the call that this? Sense to everyone.

There is no topic for disaster medicine. We looked at some disaster medicine text and it came under the categories for EMTs -- then, the same, as you see, for world cat -- the categories are all over the place. You see emergency medicine and disaster planning. There are many terms. Please consider checking this list to try to find words to match your queries.

One of the nicest initiatives -- I mentioned this earlier -- capital and capital and -- N L Matt -- N L N -- NLM emergency disaster references -- handbooks are and guidebooks aren't helpful. Many physicians and up practicing outside of their specialty areas. So, drug handbook handbooks are used heavily during response phases. There is also a great resource called the one shelf reference library that the NNLM have put together. That resource can also be found on the capital MLA course website.

I want to talk about some information sources for professionals. This would be toward the top of the period. Peer-reviewed material and journal articles and books. I want to present to scenarios -- one is a child psychiatrist once you to find articles to answer the question -- what is the post hurricane pattern of behavioral and emotional problems in children?

Another one -- the facilities manager asks you to find best part is guidelines for evacuating a hospital. These are real-life questions.

I will start by describing the disaster information management resource Center -- DIMRC -- this is an index to literature resources on the web. This is a great one-stop shop for great literature resources. A lot of government material here.

I will talk about the Hazlitt database. This is from the University of Colorado at Boulder. This contains citations to journal articles and op-ed reports. A word of caution -- some of the materials can be hard to get your hands on. They don't provide a document delivery service. There is a resource that you want to find. It is not available on the web -- I would suggest contacting the natural hazard Center library to find out how to get those materials.

Among other projects, the Library publishes a digest of natural disasters research and they also offer research grants that help researchers traveled to disaster areas.

If you are thinking of doing research in this area, this would be a good place. >>

PAHO Has an area on emergency a preparedness and disaster relief. This disseminates a lot of disaster preparedness and risk reduction and management materials. They also have a hospital safe from disasters initiatives is with a ton of information. This would be a good resource for that facilities question that we talked about on pairing a hospital for evacuation. Or for an earthquake or any kind of event. This would be a better resource probably for the facilities question then for the child psychiatry question.

Pub med -- we are all familiar with this. This is a source of your reviewed journal articles. Adding a caveat -- not all articles may be available in full text. You may need subscriptions to your local institutions to access this material.

The NCBI bookshelf does contain the full text of books. In the area of disaster medicine, the bookshelf contains workshop summaries, evidence reports and technology assessments and I'd like. It is a good resource for that question on posttraumatic stress disorder for children following a hurricane.

And protocols as well. It is a combination of peer review books, but also great literature.

We have other sources of other professional information. Just to start with a caveat -- the agency for health research and quality -- they are no longer maintaining the public health emergency prepared this website. A lot of their journals have been archived and everything is been archived and is available. These internals are not being added to enable go to out of date quickly, but as it stands now, there are wonderful resources they are in the great the richer resources. This was taken over by the ASPR. I was traveling recently during hurricane Irene. This was the best website at the airport. I was able to connect to local data and I wanted to know if my friends in Connecticut were all right. I could see this through their website.

Then there is the CDC -- emergency preparedness response pages for professionals. There are a lot of summary pages including information for the general public and for professionals. There is a section on mass casualties -- this is really great. They have information on medical response to large-scale events and pages on search capacity and injuries and fact sheets and treatment protocols. It is a wealth of information.

Another source would be the professional associations -- the American College of emergency physicians.

The AMA. Everyone thinks of the American Red Cross. They are an important resource dimension as well.

And, the WADEM -- this is an interdisciplinary group that includes is doctors, nurses, emergency planners. Really anybody that we defined as a part of the disaster workforce. He also published the journal for disaster medicine and disaster nursing. They have a book you can read online called Health Disaster Guidelines.

If you will do any research in this area, this is an important textbook.

In addition, we talked about the natural hazards Center at the University of Colorado in Boulder which produces HAZLIT, but there are other sources.

They there'll their focus to non-man-made events.

The Center for by a security look at by a logical weapons and large-scale epidemics. They have a lot of articles on threat assessment and mitigation. One area that may be especially handy is under agents that have been identified as threats.

The Center for infectious diseases research and policy is based at the University of Minnesota. It focuses on the spot to emerging infectious diseases and preparedness, especially pandemic flu.

The Center for study of dramatic stress -- is a part of the uniformed services University. Look for resources in a collection of PDF fact sheet on their website. So, resources having to do with psychological consequences of the situations. This would be a good resource to use for the question about child psychology owing a hurricane.

The Institute of medicine -- part of the national academies -- a private nonprofit. They have offered 14 live at workshops in different parts of the country about different aspects of public health preparedness. -- Preparedness.

This is wrapping of the professional information -- surveillance tools. The most important in the United States is the MMWR -- the weekly report from the CDC. Also, state health statistics. This is a reliable source of data selected and national notifiable diseases reported I stayed. So, you can see -- in the case of H1 and one -- the cases coming out -- that's was a key question that administrators were asking.

ECDC There is the -- the European centers for disease troll. So, they are responsible for surveillance of infectious diseases in the European Union.

Then, WHO -- global alert and response. This is a system for epidemics and other public health emergencies.

I included ISID -- the international Society for infectious diseases pro-med -- it is a great e-mail list that provides updates on rapid global outbreaks and infectious diseases and acute exposures to toxins that affect human health. This is something to note -- it also involves infectious diseases in [indiscernible] I want to ask the question -- I will let you read this. Where are you likely to find information to answer the question -- what is the poster again pattern of behavioral and emotional problems in children? I will open up the poll for that.

You should see it now. I will now close the poll and you should be able to see the results. I would say that pub med would be a great resource. There are a lot of journal articles and the target articles for this exercise were all in PubMed. There are a lot of studies about children's psychological impact following Hurricane Katrina. Reports they are for available through this.

And everyone got the Center for study of the dramatic stress -- traumatic stress.

The APRS would be better for consumers.

Also, the NCP I bookshelf -- related to post dramatic stress sort of.

We will continue. Not a lot of people -- only two of you answered that it was NCP I bookshelf. This is a good resource for materials on PTSD -- post traumatic stress disorders and PAHO was a better resource for questions on facilities.

Let's go to the next question -- based on this exercise, which resources would you use -- hold on.

Let's answer this question -- where are you likely to find best practice guidelines for evacuating a hospital? I will now open the poll. >> I will close the pool now. You can see the results. Nine of you answered AHRQ -- this is a good answer. -- Pub med -- this may not be the best source. You might find a research study possibly that they didn't evacuation exercise in this is what they found. But, this is not the procedures and guidelines we are looking for.

Nobody answered HazLit. This is actually a good resource because of the nature of the material they collect. A lot of guidelines and reports and procedural documents.

T -- D. -- nobody said this is a good resource.

Is correct.

And E. -- CDC armor does the preparedness and response. I probably would not recommend this. 10 of you said it was worth a look. Some things to take away from these exercises is that it is not always apparent where the best ways to look at. It is through familiarity with the resources and today we can only give you kind of a quick overview. But, I hope you will take the opportunity to look at some of these resources and I have given you practice questions so that you will have this opportunity to look at questions to test other resources and get a sense of where is a good place to find the information that numbers of the disaster help workforce would want. >> To switch gears from talking about resources for professionals, will talk about disaster help information for the public. Rather than describing each one of these in turn, I will ask you to follow the links on your screen. Please keep open the Adobe connect window so that

you can come back to the class. I am going to give you about eight minutes to do this exercise. Test out maybe not all of them, but test out the resources to find information on health hazards after a flood for a consumer audience.

Jeanette raised her hand. Do you want to use the chat box? The question was about the previous question -- I will go back. It was HazLit and AHRQ which were the best.

Let's go ahead with this exercise. I will give you eight minutes. I will let you follow the links and find information on health hazards after a flood for a consumer audience. >> [Silence - students doing research] >> You have four more minutes for the exercise. >> You have to were minutes.

-- Two more minutes. >> Is a last 30 seconds, if I could ask you to close your browsers or minimize them and come back to the Adobe connect page. I will talk briefly about these five resources and ask some questions about your exercises. >> Hopefully everyone is back. The CDC website, as you will have seen, contains information on specific offense for consumer audience. They are slanted is toward health effects and containing infectious agents, specifically.

The DIMRC is a good place to begin your search. They are an aggregator, but not a content resource.

The FEMA website contains information on specific disaster event for a consumer audience, but the scope of their information is more broad. You may have seen this. It may include non-health-related topics like insurance and other financial considerations were a disaster victim.

Medline is specifically designed for the consumer audience and contains overview information and links to other sites.

The PHE.gov -- public health emergency website -- this is another portal page to government information on emergencies. A lot of it is drawn from the CDC.

It is also intended to be one of the first places that you would go to look at kind of a one stop shop? Period.

-- Experience.

Based on this, I would like to ask individuals to raise your hand or type in your response using the chat which resource you would use in the future to find similar information on health hazards following a natural disaster based on this exercise? >>

Catherine said DIMRC others said CDC and Medline, and not so many people are saying PHE.gov. Maybe you didn't get a chance to look at this one.

Medline plus -- you wouldn't think of this as a good place to go for disaster information, but it is great for the consumer audience.

Lindsay has joined us. She thought the class started at noon Mountain time. Sorry, we will offer this again tomorrow. Stick around after the class and we will set you up.

People are giving feedback that they thought the PHE harder to navigate. We should give this feedback to them. It is a website in development.

This class will be available on demand -- we are recording this and people can read do the recording later.

Just taking about the disaster workforce as being married, who do you think would he members of the disaster workforce that would need this level of information? Not every other of the disaster workforce is a professional position. >> Public health officer, community health responders, absolutely. Especially the community volunteers. Yes, people working in public health. That's great. We have about 25 minutes left. I want to move on. One of the key messages is that some of the members of the disaster help workforce would want consumer level information. So, it is important to be familiar with site like MEDLINEplus and PHE.gov and the DIMRC website and the FEMA and CDC.

We will talk about some of the resources from MLM. -- NLM. We are going to talk about some of the disaster information tools for particular audiences. The first one is WISER -- the wireless information system for emergency responders. It contains information about hazardous materials.

CBRN Stands for chemical, biological, radiological, and nuclear. It is designed for first responders. Hazmat teams, over to the department personnel, etc. First receivers that we discussed earlier.

It contains information for triage impatiens during math test of the events. Triage tools to help you categorize different patients.

It has the standalone and enhanced wireless capabilities which makes this great because you can use it on your handheld without being connected to the Internet.

There is a lot of training materials available here. If you are interested in training at your institution, there is a lot of helpful guide available on this website.

To highlight some of these platforms, the downloadable version of WISER on a handheld or a PPC -- and there is also the Web version.

Or Becker is asking -- how do you get the information to the community health members? How do they know to text to for help square? That is a good question. We can hold until the end. I need to think about this. Rebecca, is that okay?

Another mobile application is REMM -- this stands for radiation emergency medical management. It is for healthcare workers diagnosing and treating patients during red a logical nuclear event. The key thing to remember is that the if individuals may not have any formal radiation that is an experience. This is available as a standalone application. This can be downloaded on many platforms and mobile devices.

What you would find would be radiation principles -- for example, exposure versus contamination. Patient management algorithms like the triage algorithm's we would see at WISER and initial activities -- what to do when you come to the environment where there has been a radiation event. Decontamination procedures -- how to decontaminate patients. Also counter measures. There is a lot of great information for this specific application.

I have given you the URL version of this. They are our downloadable versions for windows. Some of the content is also included in WISER.

The third tool is called CHENN. This is for first responders and first receivers. Specifically it is targeted for individuals planning for and responding to and recovering from event involving chemicals. This can be downloaded to your computer. Identification tools and medical management guidelines for chemical groups and different syndromes.

I will give you about five back minutes. -- Five minutes. Use one of the following web resources to answer the questions -- what are guidelines for setting up a chemical decontamination area outside a hospital emergency department? What disaster triage category should be assigned to a patient who cannot walk, exhibited spontaneous breathing and a respiratory great greater than 30?

How do you diagnose for wound contamination from a radioactive shrapnel?

Please take five minutes to complete this exercise and then we will talk about the results. >> [Silence - students doing research] >> If you want to do this exercise on your iPhone, I think that is great. >> As far as I know, the CHEMM application is not available. >> Think it is Cindy love is here to answer this question. >> Check your chat talks if you're wondering about the question -- Cindy Love has giving us some information. >> One more minute for this exercise. >> In the last few seconds, I will ask you to close your browser windows and come back to Adobe connect.

I will ask some summary questions. Which resource answered the first Russian -- question -- I will open up the pole.

-- poll. >> Now I will close it. The majority of you got this correct -- at least the first resource that I would like to -- this would be CHENN -- decontamination procedures. There are also other resources you could use like pub med toward the resource guide for public health preparedness, but CHEMM is a great one.

Question number 2 -- I will open the pole again -- the poll again. >> I will close this now. Most of you got this correct -- it would be WISER. It is the adult triage that would answer this question.

The final question -- this is the question about radioactive shrapnel. >> I will close this now -- REMM is absolutely correct. Go to patient management. Under contamination. There is a section on wound contamination on from the radioactive shrapnel.

Thanks, everyone for doing this exercise. I hope we gave you some hands-on experience with those tools.

Now, I will enter the last section -- we have over 10 minutes. I understand that people have to go, but I will keep teaching and it will probably be about five minutes over. Just to let you know. There was a great article recently -- I have given you a quote -- about the role of social media during disasters and during preparedness activities. I hope this is something that I can't stress is important to start becoming involved with and to start using these tools. We'll talk about these tools.

Things like Apple cases for your mobile devices, e-mail lists, RSS -- really simple syndication -- Twitter and widgets. I will open another poll to ask the question -- do you currently use any of these tools mentioned to monitor disaster information? >> I will close the pole.

I see that the majority is using these tools. That is wonderful and I hope that from this class you learn about tools that you can start to use and work with. >> A resource I wanted to highlight is called relief central. This is from unbound medicine and it is free. I don't know if it will stay free, but I hope it will. This is a resource for relief workers and first responders, specifically those arriving in a foreign country and meeting to climate types quickly to an unfamiliar environment. It has some wonderful resources like the CIA factbook and the CDC yellow book -- health information for international travelers. Summaries from MEDLINE journals on disaster medicine and use from the CDC, Red Cross, FEMA and relief Web. We talked to you about the applications for WISER and REMM and the CHEMM outpatient will be available soon.

These are the links that I mentioned. You can go to the PowerPoint or go to the course website -- specifically for the librarian audience -- the DIMRC list and also the ISID pro-med --

I have given you a screenshot from the Google page and my folder on disaster information. RSS stands for simple syndication it allows you to subscribe to feeds from websites and you can look for the icon which will see the bottom right-hand corner of this line. Use your feed reader or an aggregator like Google reader to read be subscriptions like I have done here. You only need to check the aggregator page in order to get updates from a number of different sources.

These are some great RSS feeds from the CDC -- or talent he and morbidity weekly report.

The EC DC -- epidemiological updates and influenza surveillance data. The FEMA feet and Ethel MLM -- for the specialized information services section. This includes TIMRC. And, the WHO -- I recommend this, too.

Twitter -- the micro plotting service allows people to post short messages and in real time. Some people can think of Twitter as being a trivial source of news, but it tends to have up to date information because it doesn't take long to compose a short message. Also, it is indexed by Google and it is a great place to look for breaking news as it comes out.

You might see news from Mercy managers and emergency responders before the event has been covered by journalists. Something to keep in mind when using Twitter is that the information is not back checked the way news article would be.

-- That checked.

Many government agencies are using Twitter and these are being cataloged by the Library of Congress.

One thing to keep in mind it -- look for the blue Twitter icon -- the bluebird or the blue T. -- they are not used as consistently. Twitter it is being used for the following disaster organizations this entire list -- including the hash tag -- will be available through the course site --.

Some of -- some of the hash tag I mentioned before -- these are the tags that will indicate what the message is about. These are common was related disaster and health information.

Disaster information like the tropical weather Outlook Atlantic and the link to a complete list of disaster information has tags on Twitter.

Another resource -- we get. This allows -- which it -- Widgets -- this is very effective on a library wiki. We saw the blue dot the being -- flu.gov during the H1N1 outbreak.

Has many Widgets if you would like to enable these on your websites.

We are just coming up to the summary now. I want to review some of the information we covered in the class.

The first -- the question -- what is the name of the NLM program that gives free access to literature to areas affected by disasters where --?

I will now open the poll . I don't think anyone will give a different answer now.

It is correct -- the emergency access initiative. >> The second question -- how many individual topics I'll under the category of "disaster medicine"? >> This time I will not -- you are seeing the results already. >> Let me close this poll. There are about 30 individual topics and to the subject of "disaster medicine". There is a lot of material contained there.

Finally, which resources will help you find disaster information 40 members of the disaster workforce? Have given you a list here -- once we have used in the class. >> This time, I am keeping the results a secret. Everybody is done so I will close this and broadcast the results.

The answer is D. -- all of the above. The reason is that the disaster workforce is so broad and varied that you can see members from professional communities as well as consumers. So, think of that audience as being broad and varied when you look for information. >>

Finally, one last question -- which tool will help first responders identify toxic agents? >> I will close this poll and broadcast the results. Most of you got this correct -- C. -- WISER -- a tool for Oeste responders and it carries information such as identification tools.

-- First responders.

Just some key points -- that will be it. Thank you. I know we are at the end of the time. We have two more minutes to go. The key points -- the influx of information and research interest will, lay occur shortly after major disaster. Be prepared to answer questions and consider using tools like RSS and e-mail lists to monitor information.

Another key point is the disaster workforce is large and contains licensed professionals and volunteers. Consider using sources of four both a professional and public consumer audience with providing disaster health information.

There are more gray literature sources of disaster health information than peer-reviewed indexed sources. Use a combination of Italy a graphic databases, websites, and aggregators like the ones mentioned -- DIMRC, professional associations, and academic centers -- cast a wide net.

The NLM tools contain specialized information for first responders and receivers. Consider the nature of the disaster when recommending a tool. For hazmat or CPRNE. And for chemical events think CHEMM.

Social software is revolutionizing the method of delivering health information. Use apps, e-mail, Twitter, and widgets to stay informed.

I will now open it up to questions. Thank you for being a good audience and participating in the exercises and the polls. I enjoyed teaching this class.

If you have a question, raise your hand or talk over the phone or chat into the box. I will stay and answer your questions.

Rebecca raised her hand. I haven't enabled the microphone -- use your chat box and I will talk through your answers.

Becker is asking how to -- how do community health members know to text you for help?

This is a tough question. For the next class that we develop, we will talk a little bit about some promotion methods. This class was really focused on disaster health information sources and answering those kinds of questions that may come to information professionals and librarians. Thinking about the next step -- I am sure there are a number of successful strategies that have been used to push information to this audience, but I am sure it is on a case-by-case basis. It is something that I would want to have as well. I think that anybody on the call, please feel free to jump in and answer that question. >> City is telling us a key point -- the disaster workforce needs to be aware of your existence ahead of time. >> There is so much information on these websites particularly the ones like CBC and FEMA this can be advantageous ahead of time.

Rebecca is asking if there are any sites specific to Canada. The public health agency of Canada is a good place to look. I prepared this class for a US audience. There could be another class prepared for Canadian on its is for sure. And any country, really. A key point that is did he said -- during an actual event or during an exact are or disaster health emergency -- often it is the local resources that are the best place to go for breaking news. Not necessarily the web federal resources. Of course, preparing a class for people over Canada and the US, we need to focus on the higher level don't forget about your local news agencies and your local organizations, etc.

Michael has a good advice -- just in into deep into the pool and just do it. That is good advice.

Thank you so much, everyone, for participating. >> [Event concluded]