# PLANNING FOR UNCERTAINTY: DISASTER RECOVERY AND BUSINESS CONTINUITY PLANNING

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# DISCLOSURES

#### NOTHING TO DISCLOSE

# OUTLINE

Risks in care delivery Security management National Preparedness System Basic disaster recovery framework Basic Business continuity plan framework Specifics to Healthcare Personal versus professional response and recovery needs



# RISKS IN CARE DELIVERY

#### NTRINSIC

External Man-made Natural

#### **RISKS IN CARE DELIVERY - INTRINSIC**

RADIATION EXPOSURE

FMEA AND TG100 IN RADIATION THERAPY

#### **RISKS IN CARE DELIVERY - EXTERNAL**

#### MAN-MADE

CYBER ATTACK DIRTY BOMB PROTECTION OF PEDIATRICS (KIDNAPPINGS) VIOLENCE IN HEALTHCARE ENVIRONMENT ACTIVE SHOOTER EPIDEMIOLOGICAL

#### **RISKS IN CARE DELIVERY - EXTERNAL**

<u>NATURAL</u> GEOLOGICAL HYDROLOGICAL

Meteorological Wildfires





#### SECURITY MANAGEMENT

NATIONAL SECURITY

PHYSICAL SECURITY

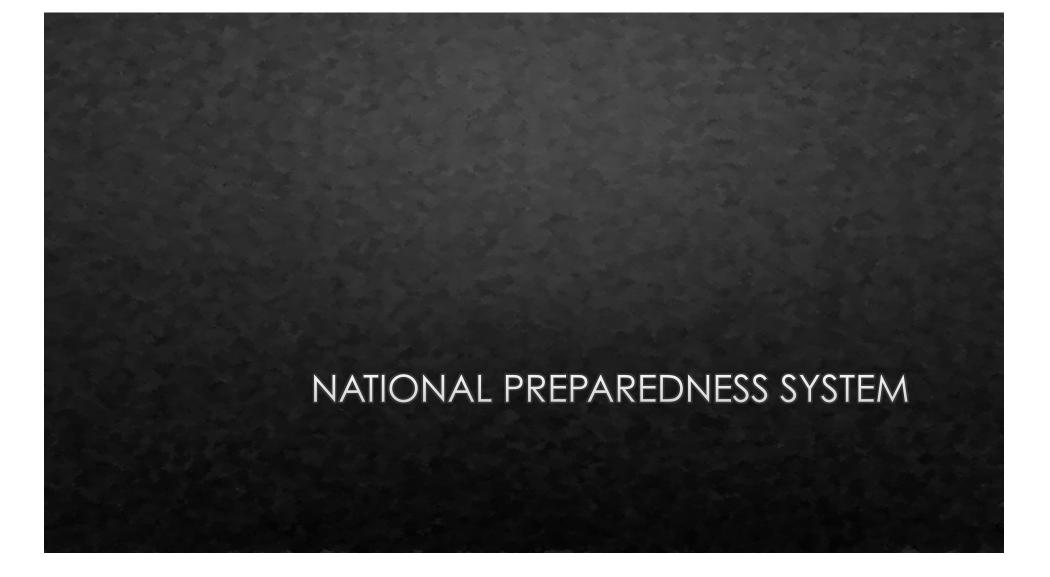
CYBERSECURITY

NIST GUIDE FOR CYBERSECURITY EVENT RECOVERY

HTTP://NVLPUBS.NIST.GOV/NISTPUBS/SPECIALPUBLICATIONS/NIST.SP.800-184.PDF

STRATEGIC SECURITY

(Security Management, ASIS International, https://sm.asisonline.org)



# NATIONAL PREPAREDNESS SYSTEM (FEMA)

INTEGRATES EFFORTS ACROSS FIVE PREPAREDNESS MISSION AREAS

PREVENTION

PROTECTION

MITIGATION

Response

Recovery

Utilized in basic emergency management framework

#### USA - HOMELAND SECURITY AND FEMA



(NRF)

#### National Response Framework

Second Edition May 2021

Homeland Security



# National Disaster Recovery Framework (NDRF)

#### EMERGENCY PLANNING CONCEPTS

Aims, purpose and scope (long-term vs. short-term) Method: making and using maps (cartographic methods) Analytical techniques (Also under multi-hazard) Emergency plan and its activation Emergency management (plan in practice) Specialized planning Reconstruction planning Emergency management training

(Alexander, D. E. (2002). Principles of emergency planning and management. Oxford University Press on Demand.)

#### ANALYTICAL TECHNIQUES

Modeling Risk analysis Loss estimation Resource analysis and inventory General and organizational systems analysis Use of information technology

#### ANALYTICAL TECHNIQUES – RISK ANALYSIS

HAZARD IDENTIFICATION

Profiling of hazard events.

INVENTORY OF ASSETS

ESTIMATION OF POTENTIAL HUMAN AND ECONOMIC LOSSES BASED ON THE EXPOSURE AND VULNERABILITY OF PEOPLE, BUILDINGS, AND INFRASTRUCTURE

### EMERGENCY PLAN AND ITS ACTIVATION

Planning Process Disseminating the plan Testing and revising the plan

EMERGENCY MANAGEMENT (PLAN IN PRACTICE) MANAGEMENT STYLES TRANSPORTATION ALERT PROCEDURES, ENGINEERING WARNING AND SHELTER **EVACUATION** Emergency food Search and rescue PROGRAMS COMMUNICATIONS CARE OF VULNERABLE AND (INCREASE IN SOCIAL SECURE GROUPS MEDIA)

### SPECIALIZED PLANNING

Emergency medical planning Veterinary planning Schools Terrorism and crowd emergencies

Tourism Libraries and archives Protecting fine art and architecture Mass media Psychiatric help

#### RADIATION EMERGENCY MANAGEMENT



#### **Radiological Emergency Response**





Guidance on Diagnosis and Treatment for Healthcare Providers

- Understand Radiation
- Plan Ahead
- Practice Teamwork



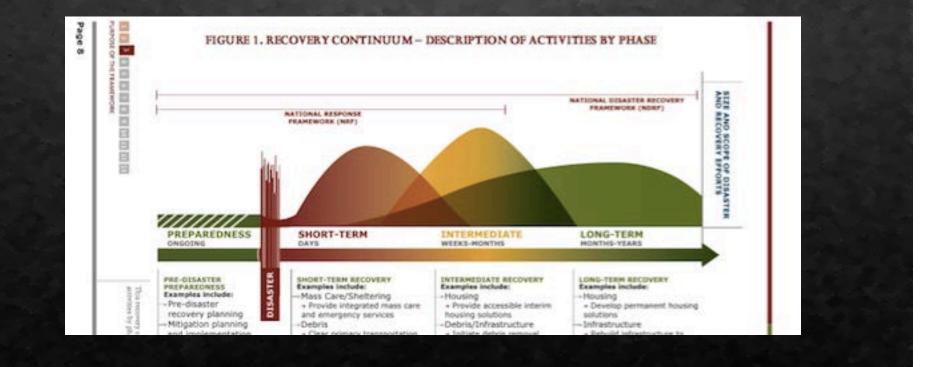
# **RECONSTRUCTION PLANNING**

Temporary measures Restoration of services Reconstruction of damaged structures Development and mitigation

#### EMERGENCY MANAGEMENT TRAINING

Cause-and-effect model Concept-based approach Scenario-based methods Trends - collaboration

### FEMA – NRF, NDRF RECOVERY CONTINUUM



# BASIC DISASTER RECOVERY FRAMEWORK

#### BASIC DISASTER RECOVERY FRAMEWORK

DISASTER RECOVERY IS HOW QUICKLY DATA AND APPLICATIONS CAN BE RECOVERED AND RESTORED.

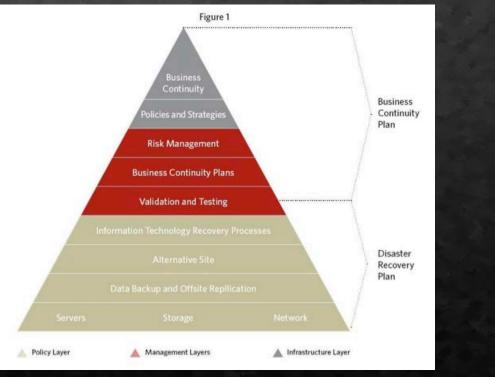
BUSINESS CONTINUITY PLANNING IS WHAT NEEDS TO BE DONE TO ENSURE THAT ITS KEY PRODUCTS AND SERVICES CONTINUE TO BE DELIVERED (AT A PREDEFINED LEVEL), WITH MINIMAL OR NO DOWNTIME OR SERVICE OUTAGE.

#### RECOVERY VERSUS CONTINUITY

Business Continuity Policies and Strategies

Risk Management Business Continuity Plans Validation and Testing

Information Technology Recovery Processes Alternative site Data backup and offsite replication Servers/ Storage / Network



#### BASIC DISASTER RECOVERY FRAMEWORK

Incident response Emergency response Damage assessment Evacuation plans

#### APPROACH FOR PHYSICS SERVICES

THE PHYSICAL CAPABILITY AT THE LOCATION (EQUIPMENT, EMR, ETC.) DATA BACKUP AND OFFSITE REPLICATION – ARE THESE CHARTS, PACS, INFORMATION ACCESSIBLE?

AN ALTERNATIVE SITE NECESSARY FOR IMAGING, TREATMENT DELIVERY?

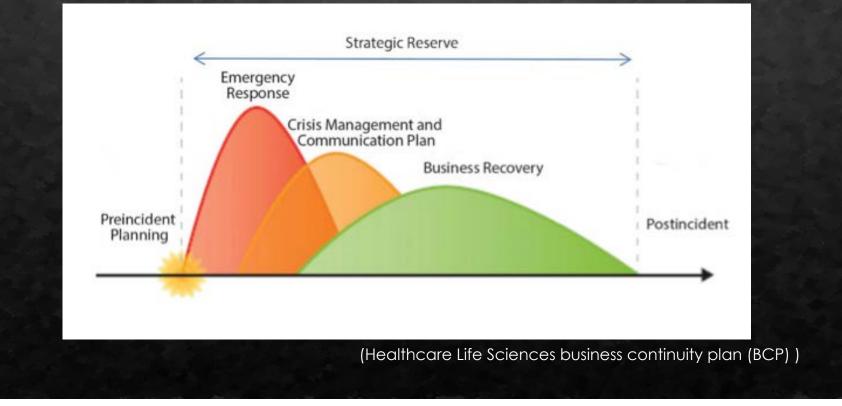
BACKUP EQUIPMENT OR PROCESSES AVAILABLE? IT, MP STAFF AVAILABLE TO RECOVER QUICKLY? HAS IT BEEN VALIDATED AND TESTED?

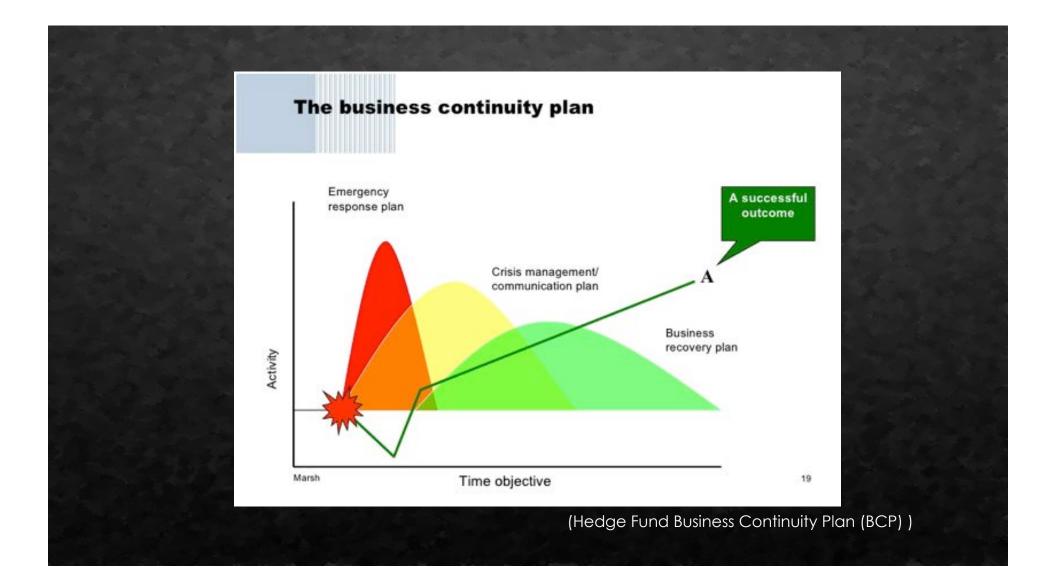


# BASIC BUSINESS CONTINUITY PLAN FRAMEWORK

Pre-incident planning Emergency response Crisis management and communication plan Business recovery

# **BUSINESS CONTINUITY PLAN**





#### **US GOVERNMENT RECOMMENDATIONS**

BUSINESS IMPACT ANALYSIS RECOVERY STRATEGIES PLAN DEVELOPMENT DEVELOP PLAN FRAMEWORK ORGANIZE RECOVERY TEAMS

#### **US GOVERNMENT RECOMMENDATIONS**

DEVELOP RELOCATION PLANS

Write business continuity and IT disaster recovery procedures

DOCUMENT MANUAL WORKAROUNDS

ASSEMBLE PLAN, VALIDATE, GAIN MANAGEMENT APPROVAL

TESTING AND EXERCISES



## SPECIFICS TO HEALTHCARE

INCIDENT MANAGEMENT PROTOCOLS – FOLLOWING ARE USED AS BASELINES

California Emergency Medical Services Authority's Hospital Emergency Incident Command System

U.S. NATIONAL INCIDENT MANAGEMENT SYSTEM

FEMA

JOINT COMMISSION

HEALTHCARE EMERGENCY INCIDENT MANAGEMENT OPERATIONS GUIDE – JAN GLARUM

## ANOTHER POSSIBLE RESOURCE

#### Free resources on Emergency Management

Getting started with the crisis standards of care, part 1

Getting started with the crisis standards of care, part 2 (December 2015)

IF THE CREEK DON'T RISE

Building Resilience with Vulnerable Population



<u>Home</u> > <u>Product Categories</u> > Free Resources

PERSONAL VERSUS PROFESSIONAL RECOVERY AND RESPONSE NEEDS

## PERSONAL VERSUS PROFESSIONAL RESPONSE AND RECOVERY NEEDS

#### <u>Professional</u>

<u>Personal</u> Assessment Response Recovery THE DE-FACTO INCIDENT COMMANDER IN OUR WORK ENVIRONMENTS

- TECHNICAL
- OPERATIONAL

## PERSONAL VERSUS PROFESSIONAL RESPONSE AND RECOVERY NEEDS

<u>Physical Risk</u> Fatality risk Disease risk Other hazards <u>Psychosocial risk</u> First responders OK City bombing vs. Katrina Chernobyl disaster

# EXPERIENCES

DIANA CODY AND BRENT PARKER

- CYBER ATTACK (HTTPS://SM.ASISONLINE.ORG/PAGES/PATIENT-ZERO.ASPX)
- DIRTY BOMB (<u>HTTPS://SM.ASISONLINE.ORG/PAGES/RADIOACTIVE-REMEDIES.ASPX</u>)
- ACTIVE SHOOTER <u>HTTPS://SM.ASISONLINE.ORG/PAGES/HIDE-HIDE-ASPX</u>
- <u>HTTPS://SM.ASISONLINE.ORG/PAGES/SECURING-SERVICE--HOW-SECURITY-IS-HELPING-THE-CHILDREN-OF-</u> <u>CAMDEN-COUNTY.ASPX</u>
- Epidemiological e.g., Ebola Texas Health Presbyterian Hospital Dallas <u>https://sm.asisonline.org/security-by-industry/</u> <u>healthcare</u>
- Meteorological e.g., 2014 Birmingham, Alabama snowstorm affected hospital supply chain <u>https://sm.asisonline.org/Pages/Supply-Chain-Strategies.aspx</u>
- SECURITY MANAGEMENT (SECURITY MANAGEMENT, ASIS INTERNATIONAL, <u>HTTPS://SM.ASISONLINE.ORG</u>)
- NIST Guide for Cybersecurity Event recovery <a href="http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-184.pdf">http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-184.pdf</a>

- NATIONAL PREPAREDNESS SYSTEM INTEGRATES EFFORTS ACROSS FIVE PREPAREDNESS MISSION AREAS ( HTTPS://www.fema.gov/media-library-data/1466014998123-4bec8550930f774269e0c5968b120ba2/ National\_Disaster\_Recovery\_Framework2nd.pde)
- FEMA https://www.fema.gov/media-library-data/20130726-1914-25045-1246/ final\_national\_response\_framework\_20130501.pdf
- FEMA https://www.fema.gov/pdf/recoveryframework/ndrf.pdf
- <u>Emergency planning</u> concepts (Alexander, D. E. (2002). Principles of emergency planning and management. Oxford University Press ON DEMAND. <u>HTTPS://BOOKS.GOOGLE.COM/BOOKS?HL=EN&LR=&ID=ILQMSDGECHQC&OI=FND&PG=PR12&DQ=PRINCIPLES+OF+EMERGENCY+PLANNING+AND</u>. <u>±</u> <u>MANAGEMENT&OTS=\_WNLRX50P-&SIG=XFISKHLosRURH-MUXDSsk280rOQ#v=ONEPAGE&Q=PRINCIPLES%200F%20EMERGENCY%20PLANNING%20PLANNING%20AND%20MANAGEMENT&F=FALSE</u>
- Analytical techniques (Also under multi-hazard <u>https://www.fema.gov/hazard-identification-and-risk-assessment#</u>)
- Risk analysis <u>https://www.fema.gov/hazard-identification-and-risk-assessment#</u>
- HTTPS://WWW.HSDL.ORG/?VIEW&DID=765803
- LOSS ESTIMATION E.G., HAZUS MODELS DAMAGES AND ECONOMIC LOSSES <u>HTTPS://WWW.HSDL.ORG/?ABSTRACT&DID=458314</u>
- JOINT COMMISSION, INC HAS FREE RESOURCES ON EMERGENCY MANAGEMENT <u>HTTPS://WWW.JCRINC.COM/STORE/FREE-RESOURCES-1/</u>

Recovery versus continuity https://www.eci.com/blog/images/4-29%20BCP-DR%20Pyramid.JPG

#### •Basic Business continuity plan framework

http://www.bioprocessintl.com/upstream-processing/biochemicals-raw-materials/supply-chain-challenges-biopharmaceutical-industry-casestudy-following-2011-tsunam-japan/

- Specific to healthcare ( https://sm.asisonline.org/Pages/Book-Review----Healthcare-Emergency-Incident-Management.aspx)
- INCIDENT MANAGEMENT PROTOCOLS FOLLOWING ARE USED AS BASELINES
- CALIFORNIA EMERGENCY MEDICAL SERVICES AUTHORITY'S HOSPITAL EMERGENCY INCIDENT COMMAND SYSTEM
- U.S. NATIONAL INCIDENT MANAGEMENT SYSTEM (HTTPS://WWW.FEMA.GOV/NATIONAL-INCIDENT-MANAGEMENT-SYSTEM)
- <u>HTTPS://WWW.FEMA.GOV</u>
- JOINT COMMISSION
- Healthcare Emergency Incident Management Operations Guide Jan Glarum ( https://sm.asisonline.org/Pages/Book-Review----Healthcare-Emergency-Incident-Management.aspx)

- LITERATURE SEARCH FOR THIS AREA
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  - Kodama, Y., Oikawa, T., Hayashi, K., Takano, M., Nagano, M., Onoda, K., ... & Shimada, S. (2014). Impact of natural disaster combined with nuclear power plant accidents on local medical services: a case study of Minamisoma Municipal General Hospital after the Great East Japan Earthquake. Disaster medicine and public health preparedness, 8(6), 471-476.
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  - BOOKMAN, K., & ZANE, R. (2013). EXPEDITED ELECTRONIC ENTRY: A NEW WAY TO MANAGE MASS-CASUALTY RADIOLOGY ORDER WORKFLOW. PREHOSPITAL AND DISASTER MEDICINE, 28(4), 391-392.

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- Ozaki, A., & Tsubokura, M. (2018). Radiation oncology and related oncology fields in the face of the 2011 "triple disaster" in Fukushima, Japan.
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- BLUMENTHAL, D. J., BADER, J. L., CHRISTENSEN, D., KOERNER, J., CUELLAR, J., HINDS, S., ... & SINGLETARY, L. (2014). A SUSTAINABLE TRAINING STRATEGY FOR IMPROVING HEALTH CARE FOLLOWING A CATASTROPHIC RADIOLOGICAL OR NUCLEAR INCIDENT. PREHOSPITAL AND DISASTER MEDICINE, 29(1), 80-86.
- Harmon, R. E., & Boulmay, B. C. (2011). Restoration of medical oncology services at LSU Interim Public Hospital in New Orleans after Hurricane Katrina: a two-year experience of LSUHSC. J La State Med Soc, 163, 144-7.
- http://www.bloodjournal.org/content/111/12/5440.short?sso-checked=true

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- FIRST RESPONDERS REVIEW OF REACTIONS ALEXANDER, D. A., & KLEIN, S. (2009). FIRST RESPONDERS AFTER DISASTERS: A REVIEW OF STRESS REACTIONS, AT-RISK, VULNERABILITY, AND RESILIENCE FACTORS. PREHOSPITAL AND DISASTER MEDICINE, 24(2), 87-94.
- COMPARISON OF OKLAHOMA CITY BOMBING AND HURRICANE KATRINA NORTH, C. S. (2010). A TALE OF TWO STUDIES OF TWO DISASTERS: COMPARING PSYCHOSOCIAL RESPONSES TO DISASTER AMONG OKLAHOMA CITY BOMBING SURVIVORS AND HURRICANE KATRINA EVACUEES. REHABILITATION PSYCHOLOGY, 55(3), 241.
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#### First Quarter Educational Session February 8, 2018 - Junior League of Houston Ballroom Guest Speaker: Judge Edward M. Emmett After Harvey – Implications for the Healthcare Community

If you read the title, it says *After Harvey - Implications for the Healthcare Community*. Well, a lot of those implications were there before Harvey. Let me just set the stage a little bit. Who am I? Why do you see me every time something's going wrong? Well, most people don't understand county judge. I'm not a judge. I'm not a lawyer. But in Texas county judge is sort of a county executive. But that's a little misleading because unlike the mayor, it's a strong mayor form of government.

County is run by the county judge and four county commissioners and collectively, we were called the Commissioner's Court, but we're not a court. I'm a judge but not really a judge, presiding over a court that's not really a court. What most people don't know, but I found out when I was King County judge, back in 2001, the legislature following the events of 9/11 decided somebody needed to be in charge in case of emergencies and disasters in every county and that person is the county judge. The mayors have some control over their cities, but we got 34 cities in Harris County, so you can't have the mayor of Houston, for example, as much as we like the mayors of Houston, they can't be dictating policy and saying what happens.

So we have this very structured system of how to deal with emergencies, and so my title was Director of Homeland Security and Emergency Management. But even that is a little bit misleading because Loving County has 82 people in it and Harris County has 4.7 million. So we don't function exactly the same way. So once I came in as County Judge and I was told that I was Director of Homeland Security and Emergency Management, it dawned on me that the emergency management side, that's good because Harris County really does, we have the best emergency management office in the country... We have the best emergency operation center in the country.

But when it comes to homeland security, do I really think that the FBI or the National Security Agency, if there's a terrorist threat, somebody in Washington can say, "You know, we got to call Judge Emmett." It's not going to happen because I don't have the staff to deal with that. So, I'm now served with four sheriffs and the first thing I do when a new sheriff comes in is I go to him and say, "I've got this title, but guess what, you got the troops, the law enforcement." I do have a former CIA personal staff who has all the clearances and they can find out things that I'm not allowed to find out and I tell them if it's something I need to tell the public, come tell me. So you have to get that clear. So that's who I am and that's why you see me in times of disasters.

They never let me come out and tell you it's a wonderful day. I mean, how many times – this afternoon is going to be glorious, you're not going to see me out in a press conference saying "Yes, what beautiful weather out here today." Now, Harvey, let's be clear about something. We did not get hit by a hurricane. Harvey was a hurricane when it made landfall down in South Texas. But we got the rains, we got the remnants of Hurricane Harvey, and that's an important consideration because hurricanes -- and I didn't really realize this until Harvey came along.



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Hurricanes are easy..., compared to something like Harvey, because with hurricane we have a 120 hour window before landfall. We know who's going to do what. All we have to do is look at the storm surge and decide how many, how far inland we're going to evacuate to make sure Galveston-Brazoria County get out of the way first.

And it's our little formula with rains that are going to fall in an unprecedented amount. It's been estimated - this was an eight to ten thousand-year event, we hope that's true. We hope it doesn't come around next year. So when the rain started falling here, it turned into a five-day rain event, and I just want to go through briefly the timeline because Harvey, when it was in the gulf was a tropical storm, wasn't even going to be a hurricane; and then within about 24 - 30 hours, it ratcheted all the way up to a category 4 hurricane and made landfall. And they were talking that there was going to be 50 inches of rain maybe... in a couple of counties to the northwest of us and this was on Tuesday, Wednesday. So we had some conversation, you remember, about evacuation; we have a certain state official suggest we should evacuate after the fact.

Now think about it, if Wednesday before the rain started on Saturday, if I had gone on television and said, "Everybody run for your lives. We're going to evacuate all four and a half million people from Harris County. Your facilities would've gone..." Has he lost his mind? Exxon Mobil would have said, "You mean, you want us to shut down our entire North American campus that it might rain this weekend, really?" So I mean, that was not an option. But we knew it was going to be a serious event, and as it ginned up and as the storm came in on probably about Thursday we knew, 'okay, this is going to be a big problem'. The bigger problem is when you don't know where the rain is going to fall. You don't know which area is going to flood.

So you don't know how to handle whatever evacuations you're going to have and whatever shelter operations you're going to have. So about Friday... We were all up in our emergency operation center. First decision we had to make was whether or not to cancel the Coldplay concert at NRG Stadium. See, some of you are going, "Yeah, I was supposed to go there." Because the rains were not going to come in until later that night or early in the morning and do you cancel -- well, fortunately the band cancelled and that made our lives a lot easier. But also on Friday, what people don't remember is -- and this speaks volumes about the people that worked for me and I get to work with. There were two tornados striking on parallel tracks at the Northwest Harris County.

In our emergency operations center, there was a deputy, who came down to see me. We were watching these things and I said, "Oh, look at those tornados." He goes, "Yeah. That was my house." And he went back to work, and he worked the next six days. It is that kind of dedication that we have. So the rain started on Saturday, any of you live in Meyerland? I purposely went down and asked whether Meyerland flooded? We were told no then... Flooded the next day, but the first day, Meyerland got a pass. But there were other areas that you well know constantly flooded. So what's the aftermath of all that? Well, whether we like it or not, flood control, flood mitigation is now job number one for Harris County. There is no way around it. Everything else, gets to take a backseat because not only is it the right thing to do for people who live here, but the perception.



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We cannot allow a perception (and Mayor Turner and I talked about this at length), we cannot allow a perception of Houston and Harris County as being this flood prone area that nobody wants to live in. Because the truth of the matter is, 6% of the homes in Harris County are flooded, 6%. That's a lot of homes, but it's not like the whole area went under water, and in fact a lot of the areas that had been previously flooded did not flood this time in Harvey. So we've got to pay attention to flood mitigation and knowing the audience here, we can do it. The Texas Medical Center is the perfect example. During Tropical Storm Allison, I didn't live here. But the med center as you all know, went under water. During Harvey, it didn't.

Yet, a lot more rain fell during Harvey and that's because of those big box culverts that went under Kirby and all the improvements that had been made to Brays Bayou. We need to finish that. We know that we can mitigate flooding if we do the right thing, but it's going to take money. Now we have to look at accessibility, and again the med center is a classic example. During Harvey, yes it didn't flood, but you couldn't get there, it was an island. Supplies couldn't get in and out. People couldn't get in and out. We've got to now find ways to decide what the critical infrastructure needs are, what the critical areas are that we need to protect and make sure that there's at least one roadway in and out so that we never get in that situation again.

Then we get to the people story. When the floods were at their worst, there were a lot of interesting dynamics going on and I might be a little critical of the Red Cross. We always have 300 or so possible shelters whenever we have an emergency. But deciding which ones you're going to operate, which ones you're going to stand up, you can't decide until the emergency itself because you don't know which ones you're going to need or which ones are going to be available. So when the storm was sort of at its worst and people were being pulled out of Harvey's way and rescued by boats, we had 36 sites selected, of course, George Brown was already being setup by the city and the Red Cross for 10,000 people. We had 36 sites selected and we needed those sites opened.

There was a gentleman from the Red Cross on the floor of the emergency operation center. He was a wonderful man and volunteer; and he said, "Well, we'd like to but we don't have any drivers." I said, "Well, why don't you have drivers?" "Well, we're a volunteer organization. And our drivers can't get out." Okay. So we scrambled around and we got drivers. The County Clerk even drove the truck. So we went back and said, "We've got a driver.'... By the way, Metro was a hero in this whole thing. Metro was out of service. Tom Lambert, the CEO of Metro was in our EOC and anything we needed, he provided because his people were available, his equipment was available. On a total side note, national media, bless them, Metro had moved a lot of their buses up on this one highway, to get them out of Harvey's way and the National Media portrayed that as all those were stranded.

They were purposely put there, so that they wouldn't be like the school buses back in New Orleans, you know out there floating in the water. So, anyway, Tom Lambert provided some drivers. So we go back to the gentleman at the Red Cross and say, "Okay, we got drivers." He said, "Well, we don't have any trucks." So, 'wait a minute what do you mean you don't have any trucks?' He said, "Well, we were afraid they were going to flood, so we moved them." Well, that made me want to ask the question of 'if you don't have any drivers, how did you move



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them?' But we didn't have time to get into that. So Mattress Mack and UPS and some other stores provided the trucks. We eventually got these 36 shelters up. But we got to do a better job than that. That's a lesson learned, and while it sounds critical to the Red Cross, it's really not. We need them not to be trying to do things that they can't do. We need to have other plans to do that.

And of course, and our G shelter got setup. It was supposed to be a FEMA operation, but FEMA trucks couldn't get in either. This is where Harvey was so different than a hurricane because hurricanes don't flood areas north of us and west of us. And so all those relief supplies that were going to come in couldn't get here so that's when we called the local Baker Ripley formerly neighborhood centers. They set up what has now become the model for the world in terms of shelter operations. That was all good, but what we also found was, in evacuation, there was a problem, and I say evacuation, people were being pulled out by boat, hopefully none of you were, but if you were I'm sorry, but you're here and you're alive and that's a good thing. My daughter's family was taken out of Braes Heights by boat, we all sort of endured that.

But there were so many people being rescued, that rescuers both public and private were taking them to the nearest dry land dropping them and going back to get more. Nobody wrote down where they put all those people. So the next day when we're trying to move people to shelters, we didn't know where they were... We had to do a reverse supply chain, logistics formula to figure out, okay, here's these people, here are the shelters, how do we get the right people to the right shelters? So in the future, we're going to give every group, I guess an RFID chip and they're going to hang on to that chip and we'll be able to track them. So hopefully they won't do anything bad, but we'll at least know where they are.

That's not all I'm going to say about Harvey. Because Harvey changed my life but now it's a distraction and it's something that we're all going to pay a lot of attention to. Harris County, the county government operates only on property tax. Nobody likes the property tax, me included. Most miserable tax ever devised, but that's all the county has. We have certain state leaders and legislators who constantly say, "You need to lower the property tax, you need to lower the property tax." Everybody goes, "Yeah, that's a good idea, my property taxes are too high." Well, that's great. Medicaid was mentioned. I went to the legislature, was it three sessions ago? And I said, "Explain Medicaid." My gosh, he thought I was the boogeyman. But the truth of the matter is, that first time we suggested, if the State of Texas would put \$50.3 million into the program, we would've gotten \$4 billion back. And that \$4 billion would've been the best property tax relief anybody could have. But why wouldn't they do it? Because they didn't want to seem like they were going to give President Obama a win, and it didn't have anything to do with the Affordable Care Act. We've got the same number of poor people who need healthcare, and as the fiduciary agent, if you will, of the county, you know, if I can get the federal government to pay for it and get that burden off the local tax payer, why would the legislators not do that? Because they're too wrapped up in various philosophical arguments. But the truth of the matter is, indigent healthcare is going to bankrupt Harris County if we don't do something about it.



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But the indigent healthcare piece we have got to deal with, and when you understand that Harris County has more people than 26 states and poor people don't all live in one little neighborhood anymore, there's this myth, you know, that although people lived down in the circle of inner city area, it's not true. I can show you along 1960 and Cypress and Katy and we now have such suburban pockets of poverty that we've got to have more clinics out there. We've got to be able to provide services out there, and the best way to provide those services, and Harvey brought this to fore even more, we need preventive care, we don't need people coming to the ERs and LBJ to get their primary healthcare.

We got to find a way for them to be more involved; and this group is a great group – I'm going to get to an assignment here at the end by the way, so get ready! It can't just be the public interview. We've got to find a way to get healthcare more accessible to more people in a preventive sort of way. So talking about preventive healthcare, let me tell you a concern I have. When the Katrina evacuees came over and I was county judge at the time. Louisiana had a registry so that – when it was all setup about at the astrodome. You were able to check people's vaccination records. You were able to get everybody's shots up to date. The Texas legislature is going the other way. Texas is the only state that we have an opt-in registry rather than an opt-out registry. We now have an anti-vaccine group that is campaigning around the state and they're winning and its occurring right here.

I know this is not a political crowd, but I've got to say it. You know, Sarah Davis, I don't care whether you like her politics or not, is being approached by somebody who is anti-vaccine. And the governor is putting millions of dollars into that opponent's campaign. So we have a governor of the State of Texas who is anti-vaccine, how does this work? It makes no sense. Your industry has got to start stepping up. You got to start saying, "Wait a minute, we may agree with you on this, this, and this, but we're going to take issue over here". Because we've gotten ourselves -- and I thought about it driving over here today.

When I was growing up, the healthcare industry was trusted. It was something that, if a doctor said, 'do this', you went, 'yeah, it's a good idea'. Now we've got government officials saying, "No, no, no. I know better about healthcare than you do." And that's got to change. We've got to make a change. So what's the other issue that we got to talk about? Mental health. Harris County jail is the largest mental health facility in the State of Texas. Fundamentally wrong. People shouldn't be in jail because they have mental health issue. The legislature is working on that, they've made improvements. As a matter of fact, they just approved and Representative Davis got it through appropriations - we're going to double the size of Harris County psychiatric centers. For a population of 4.7 million, we're going to double it from 220 to 440. It's not enough, and again, it does come down to money.

I'm afraid of putting on my emergency management hat, I'm afraid of a pandemic breaking out. I know how to deal with a storm. I know how to deal with ice. But how do you deal with pandemic? And I'm -- for now anyway, you know I'm the governor's appointee on the Texas Infectious Disease task force representing large urban counties. But how can you have an infectious disease task force at the same time that you're saying vaccinations aren't the right



thing? It doesn't make any sense, and the problem with all of that is your industry, the medical community, doctors in particular.

So from the county point of view, Harvey brought into very clear focus that we are large, we have diverse, we have a lot of people in a lot of needs and we're going to have to meet those needs. But where is the money going to come from? We have got to step up and say, "We're going to spend millions of dollars on flood mitigation, no question." But we can't allow Harvey to say, "Okay, that's all we're going to do." We can't allow Harvey to take every penny that we have -- and by the way, I've got a side note. In the last legislative session, we have something called an economic stabilization fund in the State of Texas. And certain members of the Texas House and the Speaker wanted to use some of the \$10 billion that's in that fund to help with some teacher issues and some other issues then they were told, "No, no, no." Now the governor and lieutenant governor and others, that is a rainy day fund. We cannot use that for these type of expenses. We have to save that for a natural disaster. And then Harvey comes along. If that ain't a rainy day, I don't know what is. Guess what? No tapping of the rainy day fund yet. They say they're going to and I hope they do, but even if they do, what you cannot allow to happen is for Harvey to be a distraction from the other things that we have to do. Harvey hopefully was a one-time event. It opened our eyes to needs in flood mitigation.

However, it can't cause us to just completely ignore mental health, indigent healthcare, proper healthcare, all these things that are going to make our society and our community better. We can't let Harvey do that to us. If that happens, then Harvey will have won. We got to focus on other things. So I just want to leave you with your challenge and it comes from a great philosopher. The late great Jerry Garcia of the Grateful Dead, who once said, "Somebody has got to do something, and it's incredibly pathetic that it has to be us." So you're the "us" and you got to do something. Thank you very much.