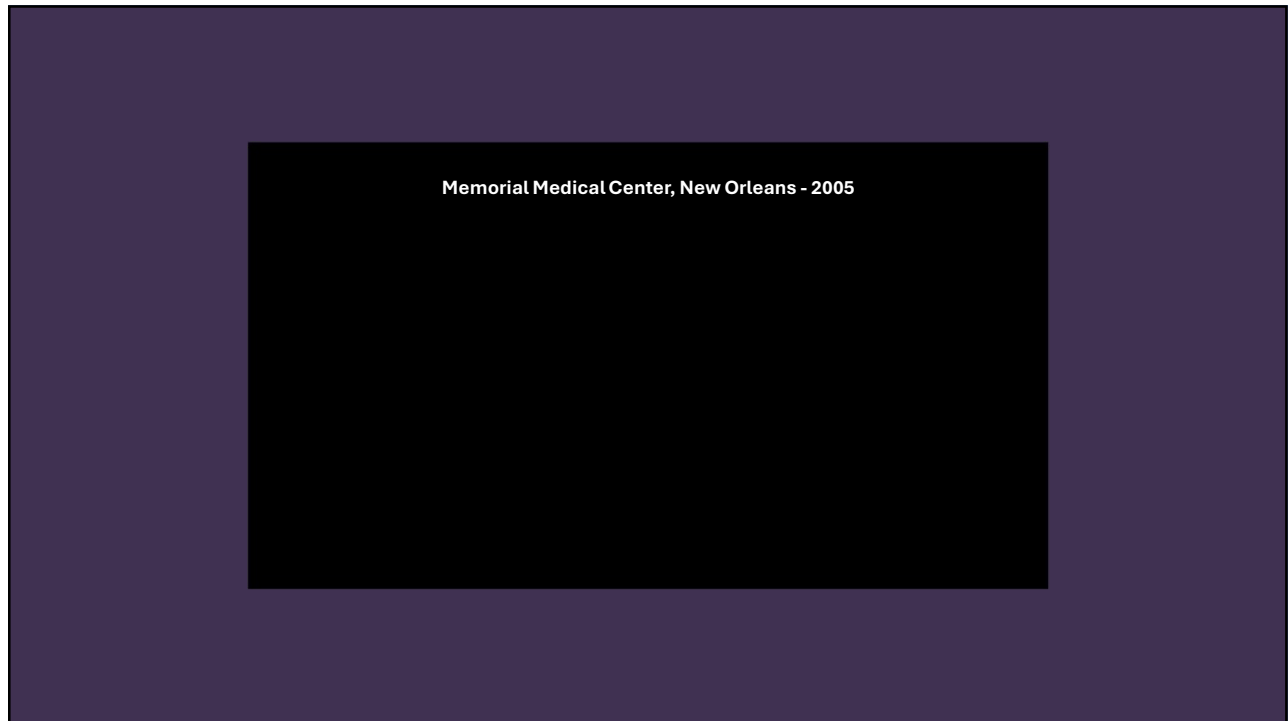




1



2

Why This Matters

Failing to Plan = Planning to Fail



Infectious outbreaks can rapidly overwhelm healthcare systems & threaten the environment of care



Emergency plans should include infection prevention procedures & practices



Past lessons:
COVID-19, Ebola,
Utility Disruptions,
Resource Shortages,
PPE

3

Objectives

01

SEE HOW INFECTION PREVENTION (IP) INTEGRATES INTO HOSPITAL EMERGENCY MANAGEMENT (EM)

02

UNDERSTAND KEY COMPONENTS OF HEALTHCARE EM & INTEGRATE WITH IP

03

APPLY IP BEST PRACTICES IN AN EMERGENCY SCENARIO

4

Infection Prevention & Emergency Management

Infection Prevention Specialist
 Focus on preventing the spread of infections within healthcare settings through:

- Data analysis and outbreak identification
- Implementing infection prevention strategies
- Collaborating with stakeholders and external agencies
- Educating staff and patients

Hospital Emergency Manager
 Prepares for and responds to operational disruptions through:

- Data analysis and hazard identification
- Implementing hazard mitigation plans
- Developing emergency response plans
- Collaborating with stakeholders and external agencies
- Staff training

Both play a crucial role in ensuring the safety and well-being of patients, staff, and facility prior to, during, and after an event

5

Core Emergency Management Overview
Pre-event

All Hazards Risk Assessment	Hazard-specific response plans	Risk Mitigation
Staff Education	Community Relationships	Surveillance & Detection

6

Core Emergency Management Overview Event & Post-Event



7

IP Pre-event Risk Assessment Infection Prevention



8

IP Pre-event Risk Assessment Surveillance & Early Detection



**SYNDROMIC
SURVEILLANCE
SYSTEMS**



**RAPID
DIAGNOSTICS &
REPORTING
PROTOCOLS**



**PARTNERSHIPS
WITH LOCAL
HEALTH
AGENCIES**

9

IP Pre-Event Planning Isolation & Containment

Cohorting patients by infection risk

Negative pressure room readiness

Surge capacity planning

10

IP Pre-event Planning/Mitigation Staff Protection



**PPE TRAINING
AND DRILLS**



**IMMUNIZATION
REQUIREMENTS**



**EXPOSURE
RESPONSE
STEPS**

11

IP Pre-Event Planning Continuity of Operations



**Maintain
essential
services during
outbreak**



**Contingency
staffing and
cross-training**



**Supply chain
resilience
(PPE, meds,
oxygen)**

12

IP Pre-Event Planning

Communication Strategies & Community Relationships



Internal Alerts
& Notifications



Public/Media
Information
Management



Cross-Agency
Communication
Lines

13

IP Event Response

Operations



Detection &
reporting



Isolation
protocols



Staff PPE & safety
measures



Ongoing
surveillance and
adjustment

14

IP Event Response Command Center



Serve as
Medical-Technical
Specialist
in
Command Center



Provide
guidance on
appropriate
PPE & isolation
precautions



Cross-agency
communication
lines

15



Incident Management



HICS: standardized approach to building a chain of command that provides components (think of them as departments) needed to manage an emergency, unusual event, or even a planned event.

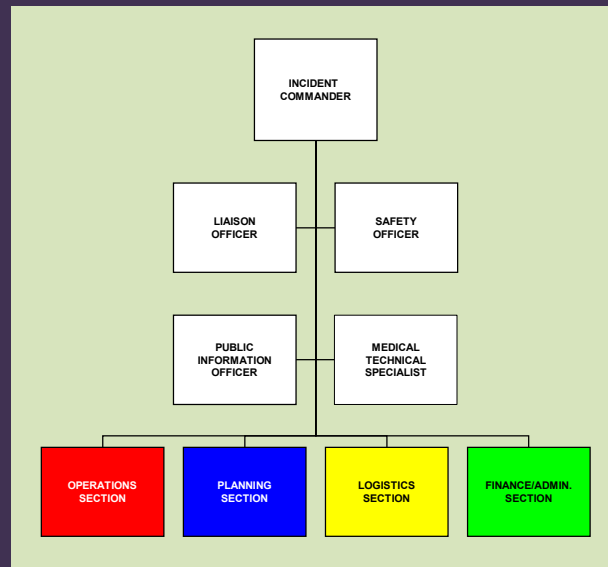
Consists of predefined roles/responsibilities that are modular and scalable based on the size and scope of the event. A process – not a plan.

ICS is used industry-wide and by all local, state, and federal emergency responders. Allows us to work in conjunction with community Incident Command and improves coordination and communication.

16



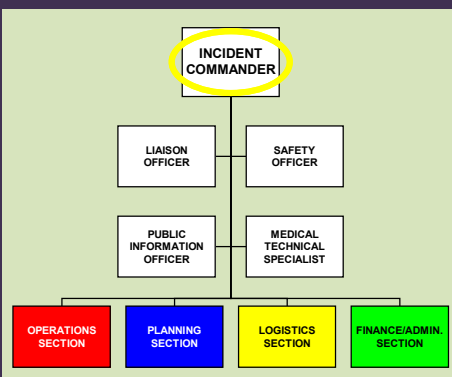
Organizational Chart



17



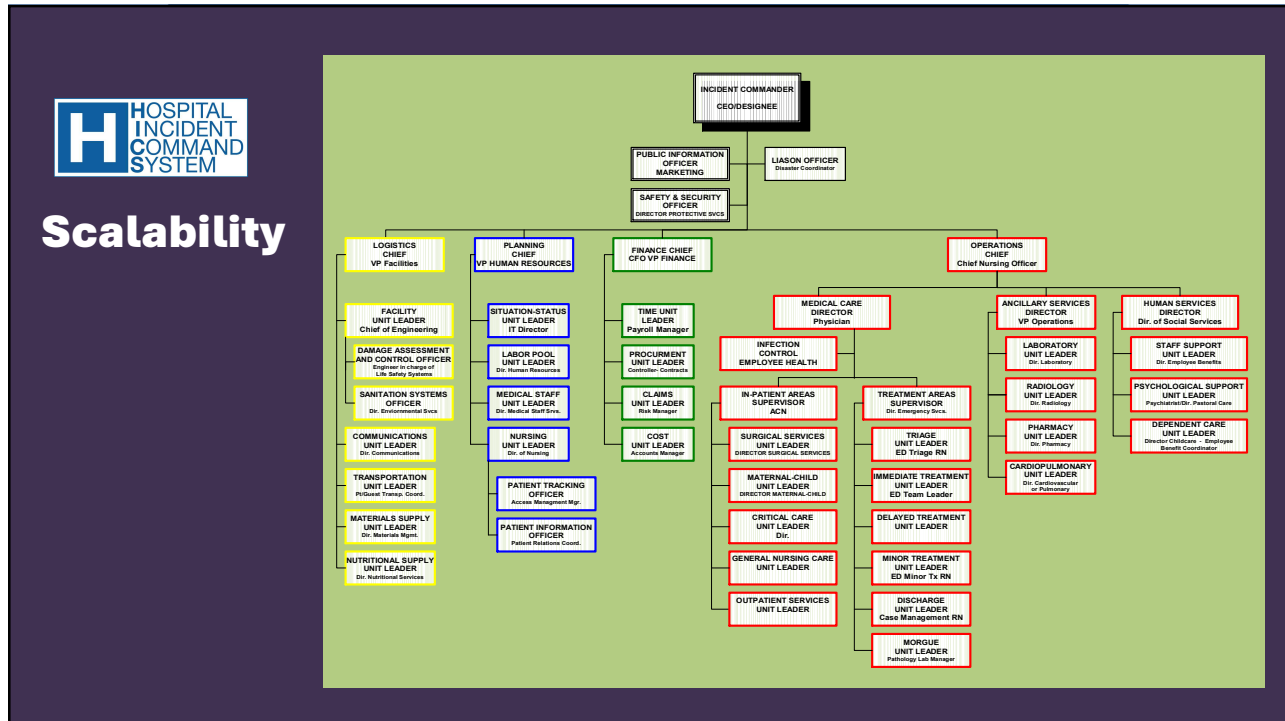
Organizational Chart



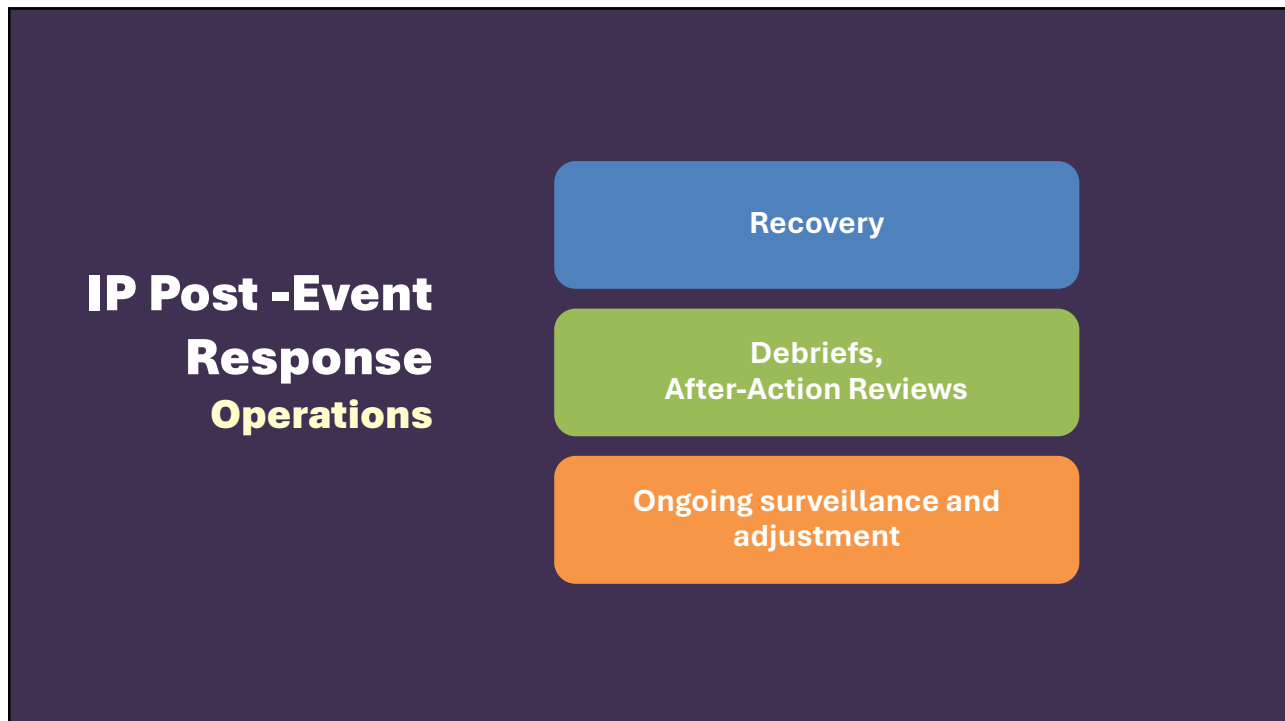
Incident Commander

- Organizes and directs Hospital Command Center (HCC)
- Gives strategic direction for hospital incident management and support activities, including emergency response and recovery
- Assigns tasks and ensures completion
- Typically a senior executive, EOC, or nursing supervisor
- Only position always filled
- May be able to accomplish all five management functions

18



19



20

Current Risks

Man-made



- Health policy changes
- Cyber attacks
- Staffing shortages
- Resource shortages
- Human errors
- Terrorism
- Workplace Violence

21

Current Risks

Aging Infrastructure

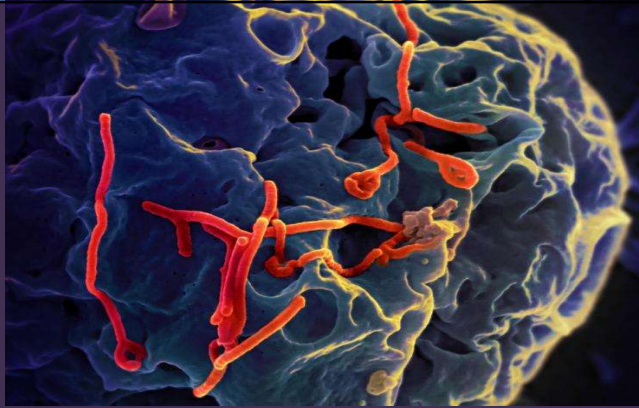


- Outdated systems
- Utilities
- Facilities
- Transportation

22

Current Risks

Emerging Diseases



- Vaccine-Preventable Diseases
- Healthcare-Associated Infections
- Ongoing COVID, Resp, & Flu viruses
- High-consequence pathogens
- Antimicrobial-resistant pathogens
- Vibriosis

23

Current Risks

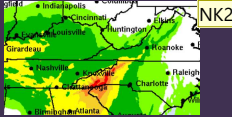
Natural Disasters



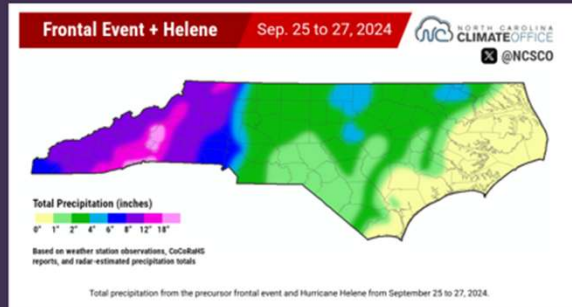
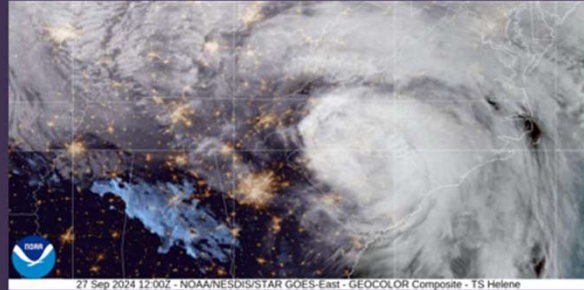
- Hurricanes
- Floods
- Tornadoes
- Wildfires
- Earthquakes

24

Hurricane Helene



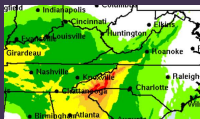
- Made landfall in Florida on **NK1** September 26, 2024
- Arrived in North Carolina on September 27, 2024



25

NK1

Hurricane Helene



1,000-year flooding conditions caused catastrophic damage to infrastructure



26

Slide 25

NK1 Thinking you could add "on" to both since you don't have a sub-bullet or any grammar. Just an idea.

Kothegal, Nikhil P, 2025-05-30T20:43:36.233

NK2 Not sure what you think about this: your images visually looks good, but is not NC focused. There are some more zoomed in maps you could use too.

<https://climate.ncsu.edu/blog/2024/09/rapid-reaction-historic-flood>
Will paste a few on this slide for reference.

Kothegal, Nikhil P, 2025-05-30T20:46:21.615

Slide 26

NK1 Image is a little blurry. There are some additional ones here:

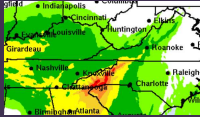
<https://climate.ncsu.edu/blog/2024/09/rapid-reaction-historic-flood>

Kothegal, Nikhil P, 2025-05-30T20:48:23.741

NK1 0 I just pasted two of them as examples. No worries if you prefer the other one.

Kothegal, Nikhil P, 2025-05-30T20:49:34.445

Hurricane Helene

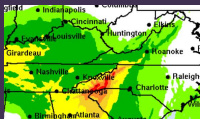


2,015 landslides occurred due to Hurricane Helene
1,064 impacted rivers, roads, and structures



27

Hurricane Helene



Road closures

28



29



30

Tabletop Exercise

- Informal, discussion-based

- Provides learning environment
- Challenges assumptions
- Improves plans, knowledge
- Tests capabilities

- *There Are No Wrong Answers*

31

Tabletop Exercise

Scenario

Current day/time
Local EMS dispatched to nearby international airport for inbound flight with multiple passengers with severe N/V/D.

Your ED is notified to expect 15-20 patients of various ages. All have traveled together to West Africa on a church mission trip.

You have been summoned to the hospital Command Center to serve as “Medical-Technical Specialist” reporting to the Operations Chief

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Tabletop Exercise
IP Objectives

- Detection & reporting
- Isolation Protocols
- Staff PPE & safety measures
- Ongoing surveillance and adjustment

33

Tabletop Exercise
Inject 1

- IC: “What are your recommendations? What do we need to do from an IP perspective?”
- How do we protect our ED, staff, and facility if multiple admissions are required?
- Cohort, patient movement, waste mgt
- Medical mgt (diagnostics, clinical & non-clinical care mgt, surveillance of care givers)
- What external agencies do we need to notify?

34

Tabletop Exercise

Inject 2

It's now Day 2. You received 20 patients in the ED. Ten were admitted with Cholera. All are co-horted to one medical floor.

“How do we continue to protect our staff?”

Multiple media requests for information. What can be shared? Is there an infectious risk to the community?

What ongoing surveillance measures are needed?

It's Day 4. All cholera patients have been discharged. What is needed for recovery?

35

Call To Action



Know your HCF
emergency
manager.



Review and
exercise your IP
plans



Build community
relationships

36



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UNC Health Rex
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