

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

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

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

Core Emergency Management Overview Pre-event

All Hazards
Risk
Assessment

Hazard-
specific
response plans

Risk Mitigation

Staff Education

Community
Relationships

Surveillance &
Detection

Core Emergency Management Overview **Event & Post-Event**

Response

**Incident
Management**

**Communication
Strategies**

**Continuity of
Operations**

Recovery

**After Action
Review**

IP Pre-event Risk Assessment **Infection Prevention**

Identify likely infectious threats

Hospital & population vulnerability

Community and regional risk analysis

IP Pre-event Risk Assessment Surveillance & Early Detection



**SYNDROMIC
SURVEILLANCE
SYSTEMS**



**RAPID
DIAGNOSTICS &
REPORTING
PROTOCOLS**



**PARTNERSHIPS
WITH LOCAL
HEALTH
AGENCIES**

IP Pre-Event Planning Isolation & Containment

Cohorting patients by infection risk

Negative pressure room readiness

Surge capacity planning

IP Pre-event Planning/Mitigation Staff Protection



PPE TRAINING
AND DRILLS



IMMUNIZATION
REQUIREMENTS



EXPOSURE
RESPONSE
STEPS

IP Pre-Event Planning Continuity of Operations



**Maintain
essential
services during
outbreak**



**Contingency
staffing and
cross-training**



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

IP Pre-Event Planning Communication Strategies & Community Relationships



**Internal Alerts
& Notifications**



**Public/Media
Information
Management**



**Cross-Agency
Communication
Lines**

IP Event Response Operations



Detection & reporting



Isolation protocols



Staff PPE & safety measures



Ongoing surveillance and adjustment

IP Event Response Command Center



Serve as
Medical-Technical
Specialist
in
Command Center



Provide
guidance on
appropriate
PPE & isolation
precautions



Cross-agency
communication
lines



Incident Management



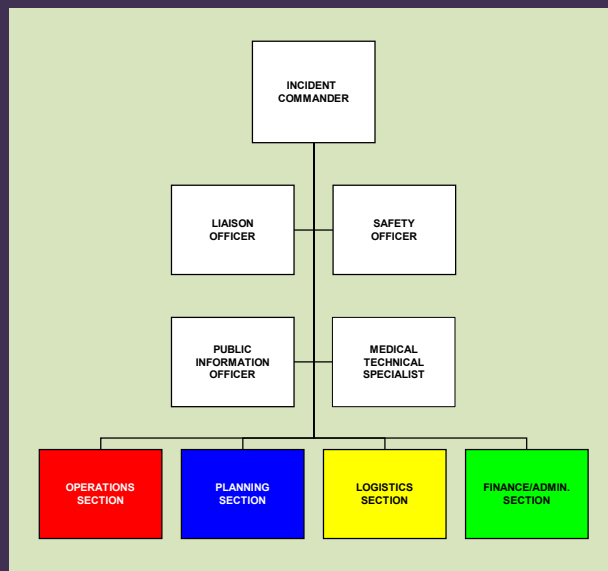
HICS: standardized approach to building a chain of command that provides components (think of them as departments) needed to manage an emergency, unusual event, or even a planned event.

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.

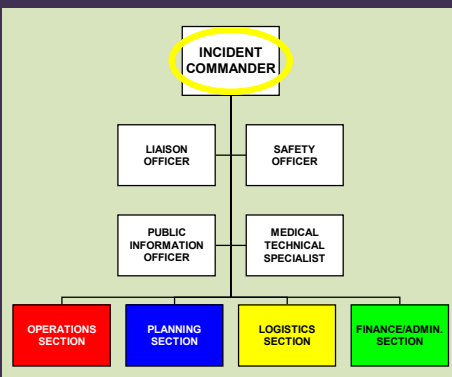


Organizational Chart





Organizational Chart

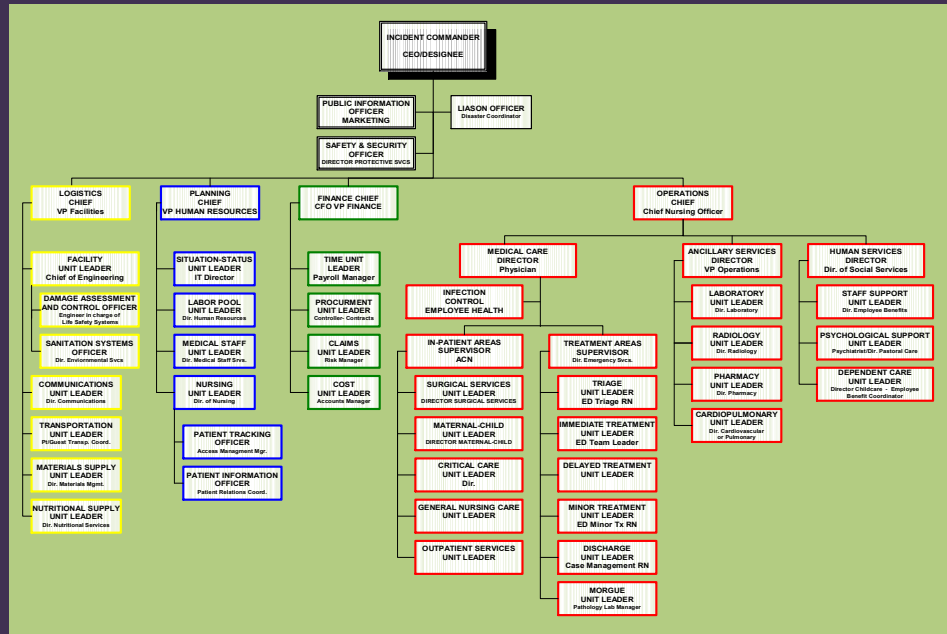


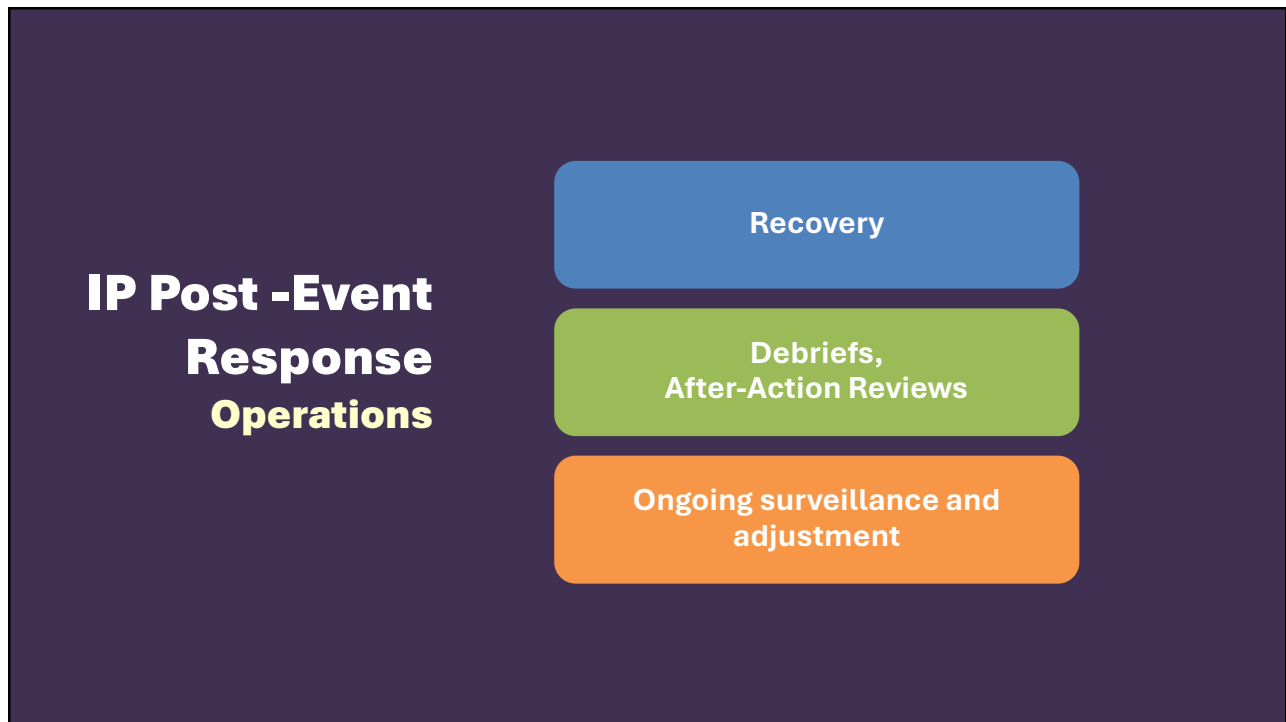
Incident Commander

- 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



Scalability





Current Risks

Man-made



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

Current Risks

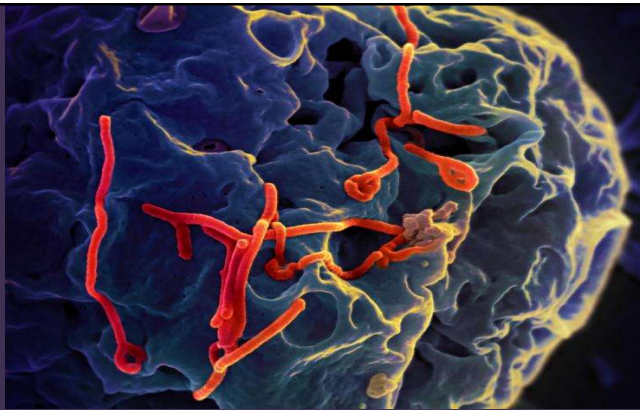
Aging Infrastructure

- Outdated systems
- Utilities
- Facilities
- Transportation



Current Risks

Emerging Diseases



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

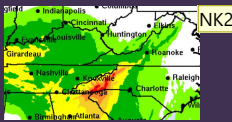
Current Risks

Natural Disasters

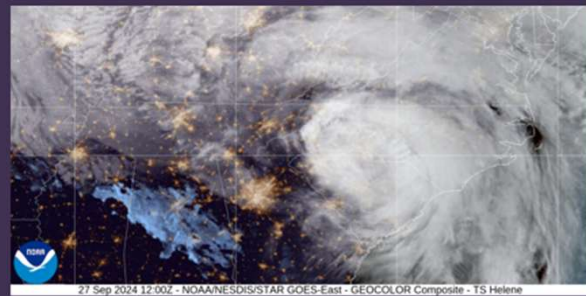
- Hurricanes
- Floods
- Tornadoes
- Wildfires
- Earthquakes



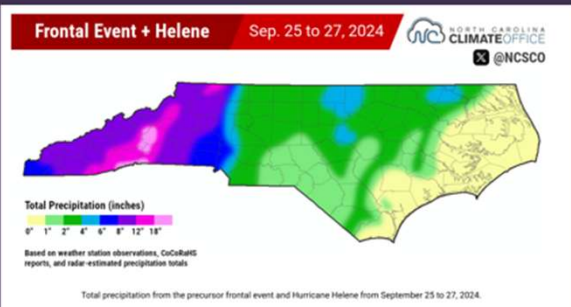
Hurricane Helene



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



27 Sep 2024 12:00Z - NOAA/NESDIS/STAR GOES-East - GEOCOLOR Composite - TS Helene



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.

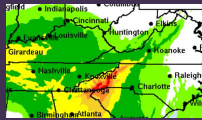
<https://climate.ncsu.edu/blog/2024/09/rapid-reaction-historic-flooc>

Will paste a few on this slide for reference.

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

NK1

Hurricane Helene



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

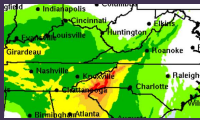


Slide 26

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

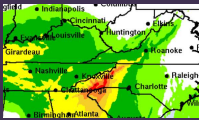
Hurricane Helene



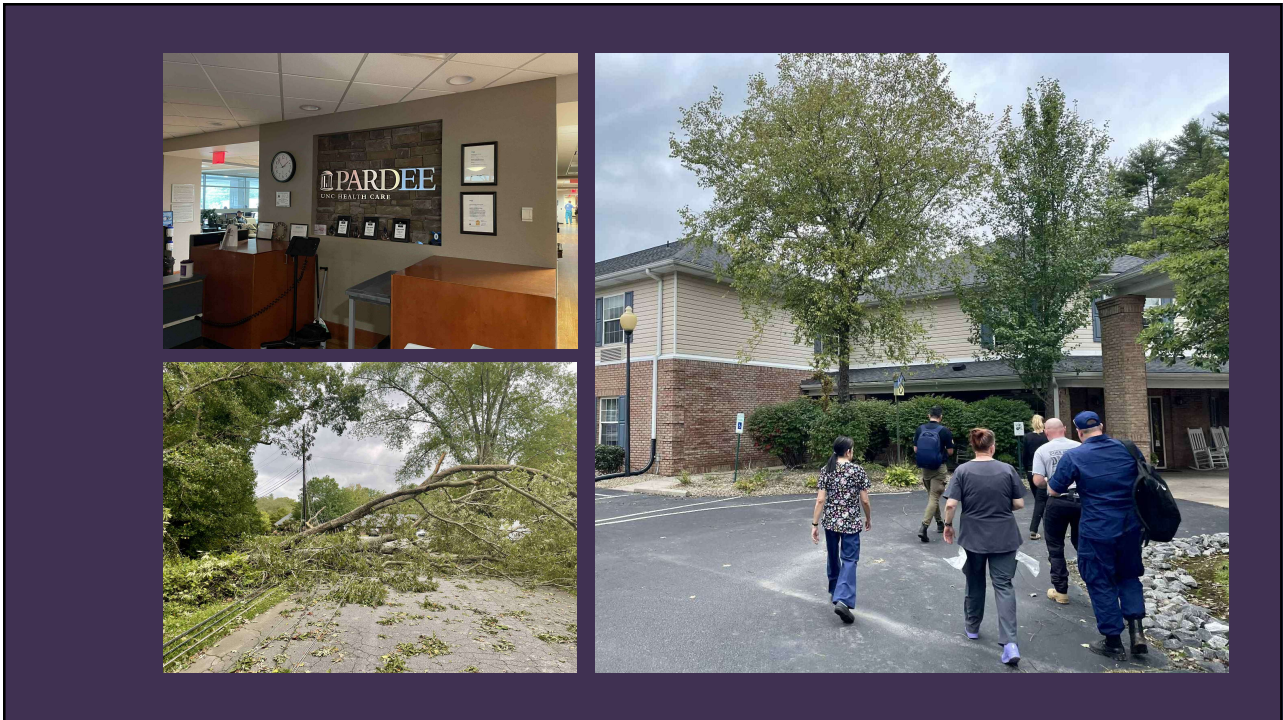
2,015 landslides occurred due to Hurricane Helene
1,064 impacted rivers, roads, and structures



Hurricane Helene



Road closures





Tabletop Exercise

- Informal, discussion-based

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

- *There Are No Wrong Answers*

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



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?

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?

Call To Action



**Know your HCF
emergency
manager.**



**Review and
exercise your IP
plans**



**Build community
relationships**



EMERGENCY MANAGEMENT

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