

Applying NIMS ICS Concepts and Principles to Health Care Systems

NDMS Pre-Conference
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Module Objectives

- Explain the sub-systems of the National Incident Management System.
- Describe the eight components and five management functions of the incident command system as applied to health and medical systems.
- Provide an overview of the critical processes that integrate the five functions during response
- Discuss some of the challenges and benefits to incorporating ICS within health care organizations

Homeland Security

Presidential Directive #5:

Management of Domestic Incidents

February, 2003

- “To enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system
- The objective of the United States Government is to ensure that all levels of government across the Nation have the capability to work efficiently and effectively together.”

National Incident Management System (NIMS)

March 2004

“To provide for interoperability and compatibility among Federal, State, and local capabilities, the NIMS will include a core set of concepts, principles, terminology, and technologies covering the **incident command system; multi-agency coordination systems; unified command; training; identification and management of resources (including systems for classifying types of resources); qualifications and certification; and the collection, tracking, and reporting of incident information and incident resources.**”

National Incident Management System (NIMS)

March 2004

- In generic terms: a way of organizing people and things
 - Common language (**Common terminology**)
 - Allows different groups with responsibility to work together (**Unified command structure**)
 - Allows different groups to respond in a similar fashion (**Consolidated action plans**)
 - Allows different groups to share responsibility and resources (**Comprehensive resource management**)
- Incomplete product at this point

National Incident Management System (NIMS)

March 2004


- Recognizes that most incidents are managed locally
- Desire to promote coordination of multiple disparate resources
- Based on ICS principles
- Has both Incident Response and Emergency Management Components
 - Mitigation
 - Preparedness organizations
 - Training and implementation

National Incident Management System (NIMS)

March 2004

“NIMS provides a consistent, **flexible**,
and adjustable framework within which
government and **private** entities at **all**
levels can work together to manage
domestic incidents.....”

Who does NIMS apply to?

- Federal government
 - State governments
 - Local governments
 - Tribal governments
- 
- Private sector
 - Non-governmental organizations

National Response Plan (NRP)

- Updates the Federal Response Plan, first published in 1992.
- Expands the number of Emergency Support Functions.
- Incorporates the Federal radiological Emergency Response Plan (FRERP) and the Terrorism response plan(s).
- Uses ICS

Components of NIMS

- 1) Command and Management
- 2) Preparedness
- 3) Resource Management
- 4) Communications and Information Management
- 5) Supporting Technologies
- 6) Ongoing Management and Maintenance

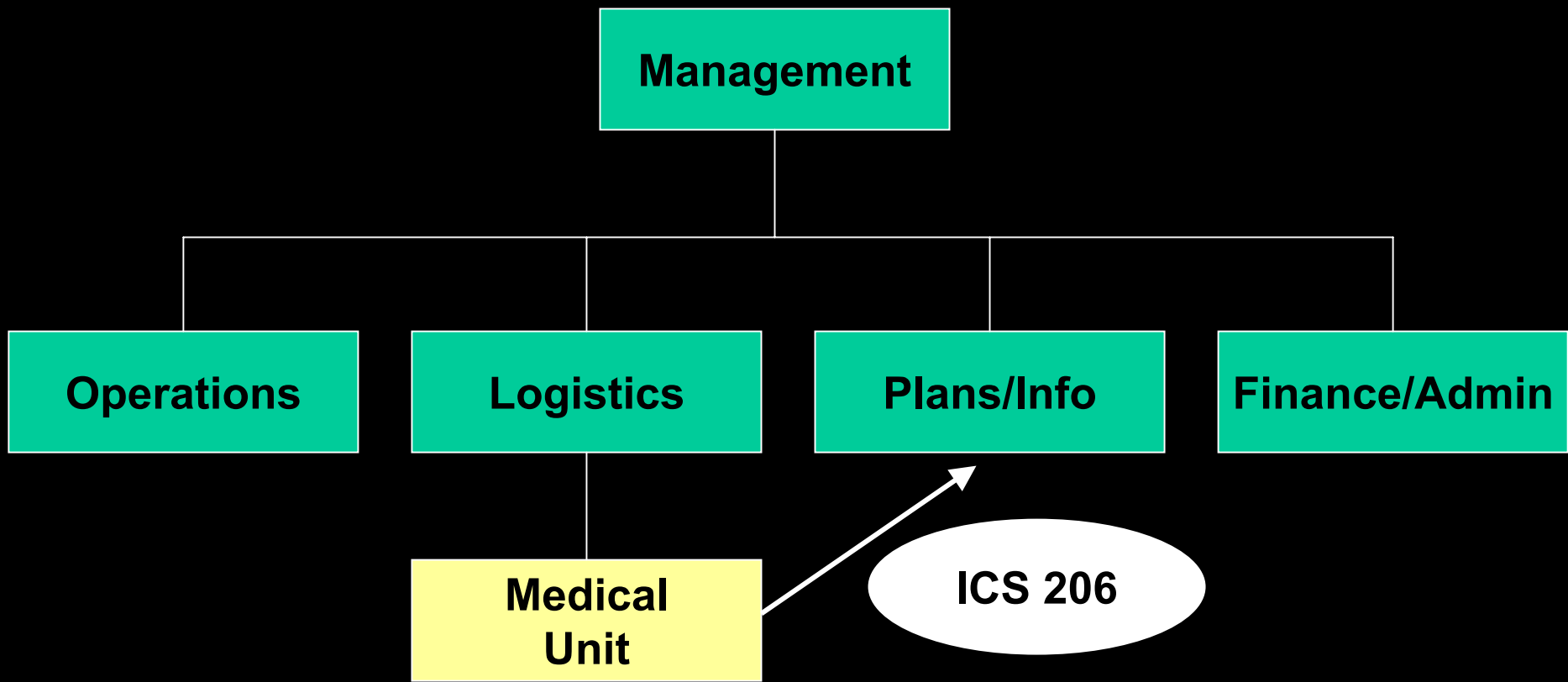
#1: Command or Management

- Incident Command System
- Multi-agency Coordination System
- Public Information System

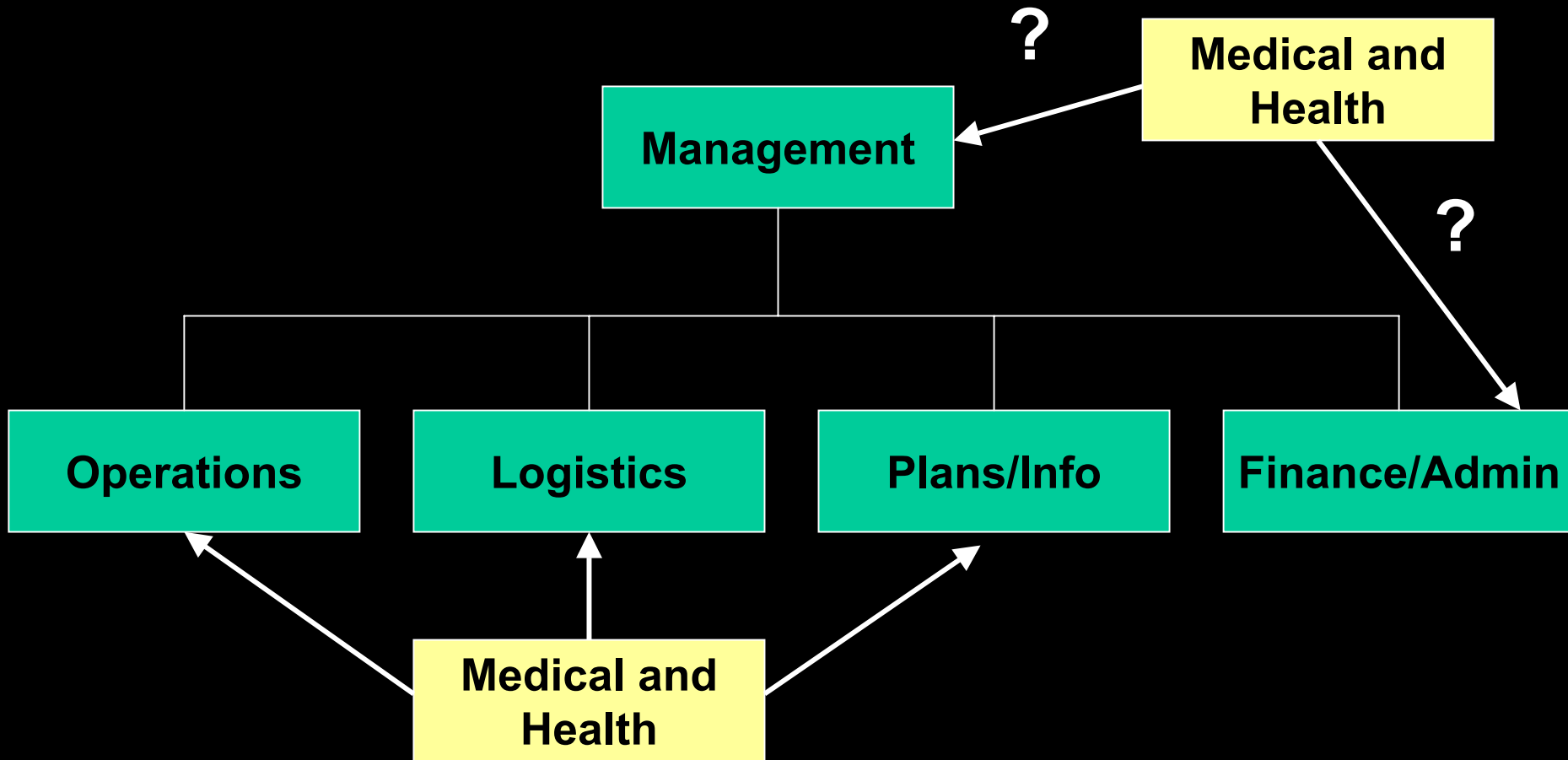
#1: Command or Management

- Willing to be managed if:
 - Enhanced collective security
 - Enhanced information management
 - Decreased confusion among responders (and victims)

#1: Command or Management



#1: Command or Management



#1: Command or Management

Crisis/pre-hazard impact	Law enforcement
Hostage/stand-offs	Law enforcement
Fire/explosions	Fire/EMS
Hazardous materials release	Fire/EMS
Infectious disease	Public health
Utility disruption	Public works

#1: Command or Management

IM

IC

IM or EOC?

#1: Command or Management

#2: Preparedness

- Planning
- Training
- Exercises
- Qualifications and Certification
- Equipment Acquisition and Certification
- Publications Management

#2: Preparedness

Exercises

Drills

#3: Resource Management

- Processes to describe, inventory, mobilize, dispatch, track and recover resources over the life of the incident.
- Internal resource identification and inventory
 - Resource typing
 - Category, Kind, Type
- Mutual-aid agreements
- Staging areas

#3: Resource Management

DCHA MOU

#4: Communications and Information Management

- “Processes, procedures, and systems” –
Page 5, NIMS
- Incident Management Communications
 - Functions
- Information Management
 - Network
 - Information versus “chatter”

#4: Communications and Information Management

Anthrax 2005

#5: Supporting Technologies

- Geographic Information Systems (GIS)
- Global Positioning Systems (GPS)
- Decision Support Systems (DSS)

#6: Ongoing Management and Maintenance

- NIMS Integration Center
 - Multi-jurisdictional, multi-disciplinary
 - Strategic direction and oversight of NIMS
 - Ongoing revision and updates
 - National program of education and training
 - Publications
 - Assessment criteria
 - Performance standards

What is this all based on?

Appendix B: The Incident Command System

8 Components of ICS

- Common Terminology
- Integrated Communications
- Modular Organization
- Unified Command Structure
- Manageable Span of Control
- Consolidated Action Plans
- Comprehensive Resource Management
- Pre-Designated Incident Facilities

ICS Components

#1 - Common Terminology

It is essential for any management system, and especially one which will be used in joint operations by many diverse users, that common terminology be established for the following elements:

- Organizational Functions
- Resources
- Facilities

Common terminology?

- Disaster plan?
- Emergency Plan?
- Facility emergency plan?
- Emergency management plan?
- **Emergency operations plan**

ICS Components

#2 - Integrated Communications

Communications are managed through the use of a common communications plan and an incident-based communications center established solely for the use tactical and support resources assigned to the incident.

“Equipment, systems, protocols.” Pg 11 NIMS

Integrated Communications?

Information Management?

- Need to move beyond bed reporting
 - Full resource status
 - Situation reports (including patient tracking)
 - Organizational structure
 - Assigned resources
 - Tactics and strategies being utilized

ICS Components

#3 - Modular Organization

The organizational structure develops in a modular fashion based upon the kind and size of an incident. If one individual can simultaneously manage all major functional areas, no further organization is required. As the need exists, four separate Sections can be developed, each with several Units which may be established.

Modular organization?

ICS Components

#4 - Unified Command Structure

The concept of unified command means that all agencies who have a jurisdictional responsibility at a multi-jurisdictional incident contribute to the process of:

- Determining the overall incident objectives
- Selection of strategies
- Ensuring joint tactical planning occurs
- Ensuring joint operations are conducted
- Making maximum use of all resources

Unified Command Structure?

Metro crash
2004

Pentagon
2001

Anthrax, DC
2001

ICS Components

#5 - Manageable Span of Control

Safety factors as well as sound management planning will both influence and dictate span-of-control considerations. In general, the span-of-control of an individual with emergency management responsibility should range from **three to seven** with a span-of-control of FIVE being established as a general rule of thumb.

BUT.....

ICS Components

#6 - Consolidated Action Plan

Every incident should have some sort of action plan. For small incidents of short duration, the plan need not be written. The following are examples of when written action plans should be used:

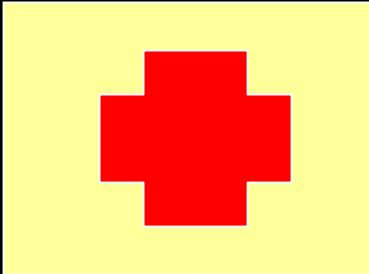
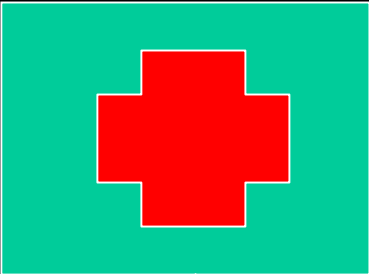
- When resources from multiple agencies are used
- When several jurisdictions are involved
- When the incident will require changes in shifts of personnel and/or equipment.

Consolidated Action Plans?

?

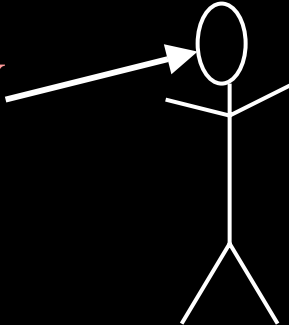
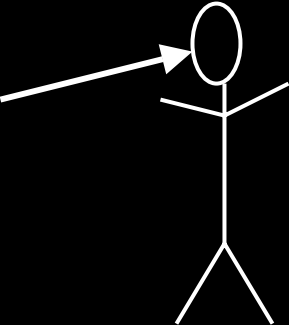
Hospital A

Hospital B



CIPRO

DOXY



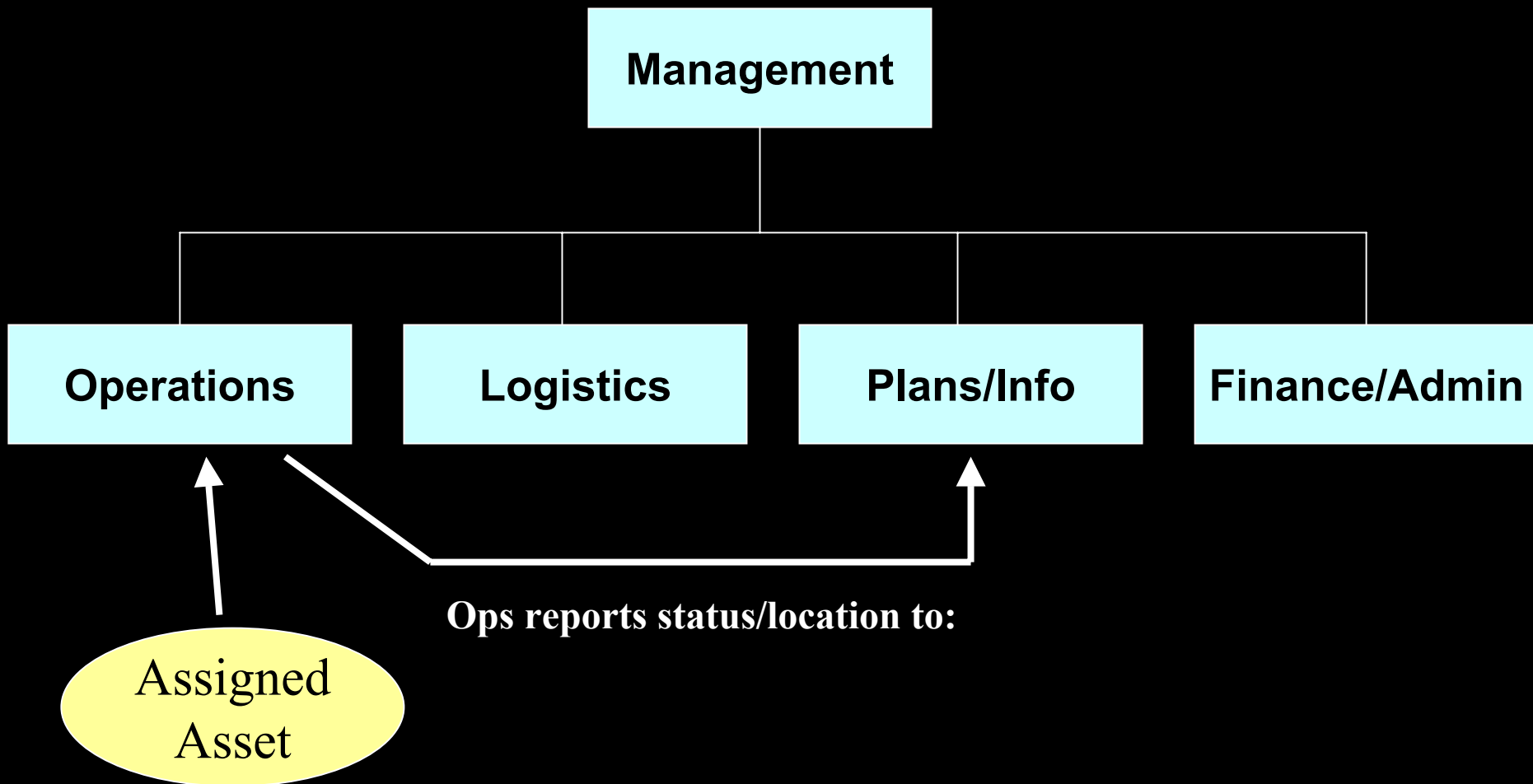
ICS Components

#7 - Comprehensive Resource Management

In order to maintain an up-to-date and accurate picture of resource utilization, it is necessary that:

- All resources be assigned a current status condition (Assigned, Available, or Out-of-Service).
- All changes in resource locations and status conditions be made promptly to the appropriate functional unit.

Comprehensive resource management?



Comprehensive resource management?

ICS Components

#8 - Pre-Designated Incident Facilities

There are several kinds and types of facilities which can be established in and around the incident area:

- Command Post, EOC
- Staging Areas - Labor pool

ICP vs. EOC

- An Incident Command Post is a location at the scene of an emergency where tactical decision-making occurs
- An Emergency Operations Center is a location remote from the scene where coordination and resource management occurs

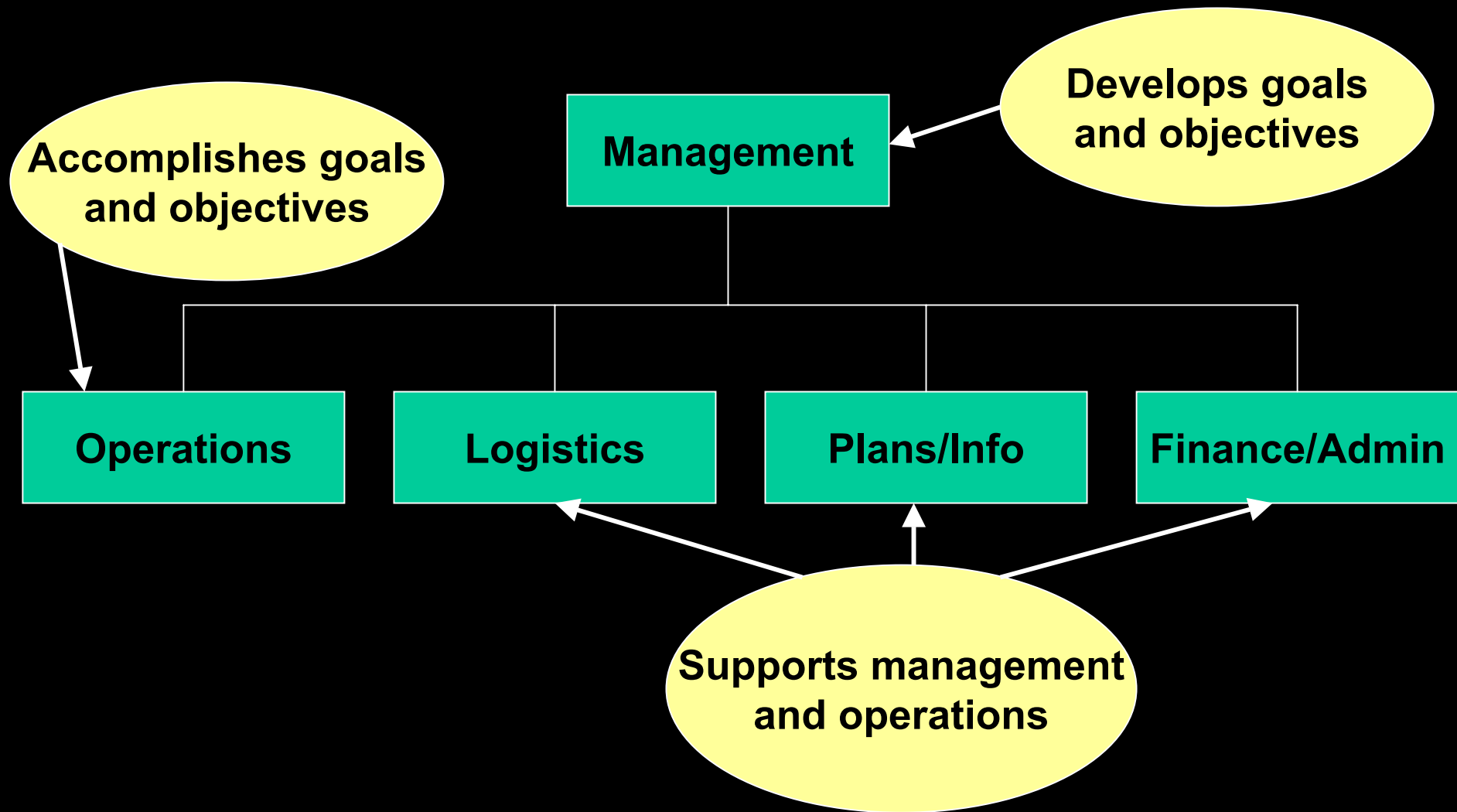
Well that is nice, but????

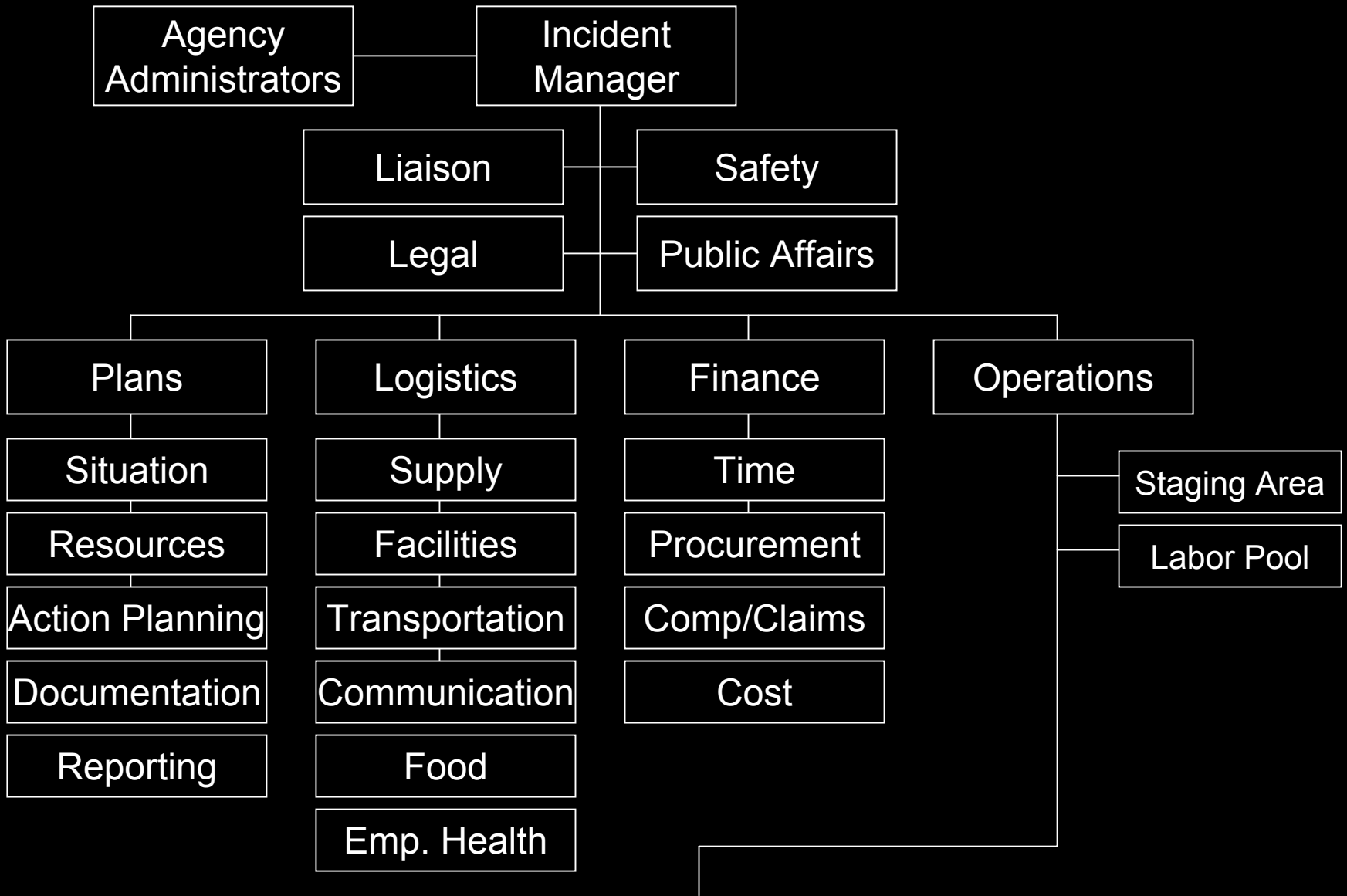
ICS, A System

- A system is defined by clearly described functional structure, with defined processes, that coordinates disparate parts to accomplish a common goal (ref MaHIM).
- Two essential components:
 - System description (‘anatomy’)
 - Concept of Operations (‘physiology’): How to coordinate the components of the system to achieve response objectives

ICS Functions

- Command or Management
- Planning
- Logistics
- Finance
- Operations





Command or Management

Command is responsible for the overall management of the incident. Command also includes several staff functions:

- Information Officer
- Safety Officer
- Liaison Officer

Command or Management

- The operative term is responsible
- Requirements
 - Must know the EOP
 - Must be present
 - Must know the system's capacity and capabilities
 - Understanding of safety and finance issues
 - Leadership abilities

Planning

The Planning function is responsible for:

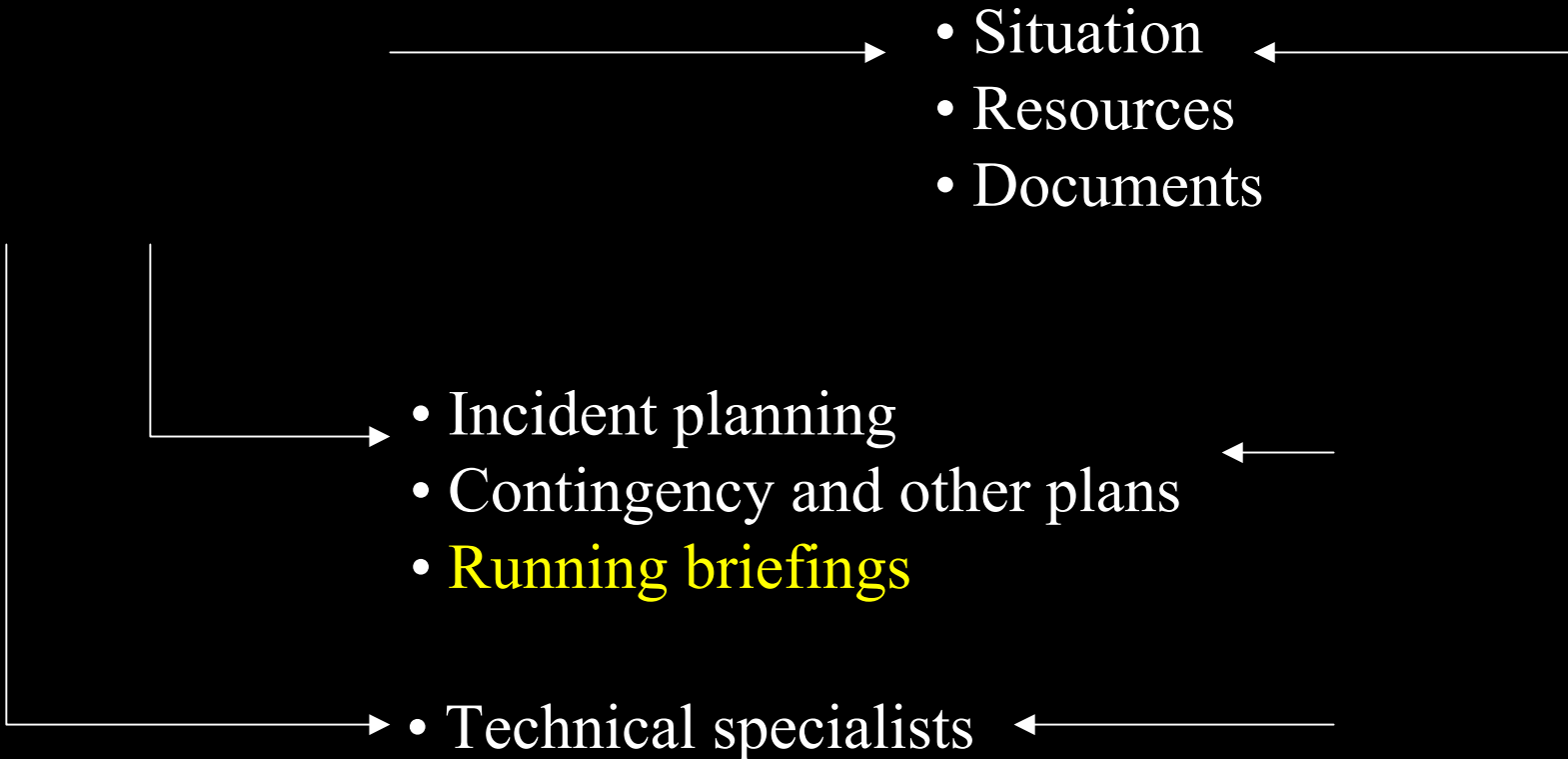
- The collection, evaluation and dissemination of tactical information about the incident.
- Maintaining information on the current and forecasted situation, and on the status of resources assigned to the incident.
- The preparation and documentation of action plans.
- **Technical Specialists**

Planning

- Situation
- Resources
- Documents

- Incident planning
- Contingency and other plans
- **Running briefings**

- Technical specialists



Logistics

The Logistics Section is responsible for providing all service and support needs to the incident, such as:

- Facilities
- Transportation
- Supplies
- Equipment maintenance and fueling
- Feeding
- Communications.
- **Medical support of responders**

Logistics

Traditional

Application to the HCF

Finance

- The Finance Section is established on incidents when the agency(s) who are involved have a specific need for finance services.
- Admin includes:
 - Regulatory relief
 - Liability
 - Others

Operations

- How is Operations defined?
- For events dealing with large numbers of casualties during a response, this has been the focus of prior training and preparedness efforts.

Operations (con't)

- The Operations Section consists of activities designed to address incident control objectives.
- These activities are organized in these ways:
 - Branches – geographical or functional
 - Divisions – geographical
 - Groups – functional

Operations - traditional

**Sioux City, Iowa
1989**

187 survivors

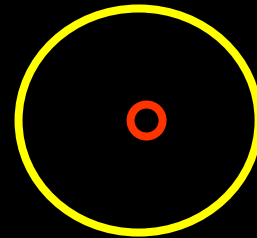
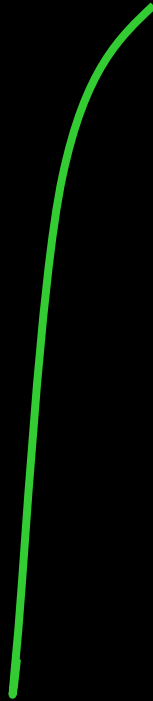
Operations – traditional?

Oklahoma City, 1995

Operations

NYC, 2003

Operations



?

ICS/IMS: The Processes

Understanding the different stages of an event

- Incident recognition
- Activation/Initial notification
- Mobilization
- Incident operations
- Demobilization
- Recovery
- Organizational learning

Incident action planning

- The difference between Incident Action Planning and Preparedness Planning

What is incident action planning?

- Pro-active management
- “Management by objectives”
- Why do Action Planning?
 - Provides MOE’s
 - Allows for sharing of specific information to provide that “common operating picture”

When is incident action planning necessary?

- Complex events
- Lengthy events
- Events that involve multiple agencies
- Purpose of the transitional management meeting

Incident action planning meetings

- Management meeting
 - Establish objectives
- Planning meeting
 - Establish strategies and tactics
 - Assignment of “large” resources
- Development of Action Plan
- Operations briefing

Incident action planning

What is in an IAP?

- Incident objectives (prioritized)
- Primary strategies (with alternatives)
- General tactics
- Types and quantities of resources assigned
- Tactical organization
- Communication plan
- Safety plan
- Supporting documentation

Example

- Objective: contain hazard (infectious disease)
- Strategy: Provide PPE to visitors, caregivers
- Tactic: N-95 masks with instructions, fit testing, etc.

ICS Forms

Emergency Phase	Operational Planning Mtg	Incident Action Plan	Executive Summary	Resource Tracking	Misc.
201: Incident Briefing	215: Planning Worksheet	202: Incident Objectives	209: Incident Summary	210: Status Change	213: General Message
		203: Organization List	230: Meeting Schedule	211: Check in list	214: Unit Log
		204: Assignments		219: T cards	
		205: Comm plan		221: Demob Checkout	
		206: Medical plan			
		207: Org chart			

ICS in Hospitals: Common Challenges

- “I get hives every time I hear the phrase ‘Incident Command System’”
- “A health event will never be managed utilizing the Incident Command System”
- Poor explanations
- Lack of understanding of utility
- Command
- Poor training

ICS in Hospitals: Common Challenges

- Pre-designating hospital management and staff to particular ICS positions
- How much adaptation is too much?
- Explaining who is “Incident Commander”
- Illustrating how ICS is implemented in response to threats or events

Current Requirements for the Use of ICS/IMS by Hospitals

- OSHA 1910.120
- NFPA 472/473
- JCAHO EC 4.1
- NFPA 99, Chapter 12
- HSPD 5

JCAHO EC 4.1 – Use of an Incident Command System

- “Defining, and where appropriate, integrating the hospital’s role in relation to community-wide emergency response agencies, including identifying the community’s command structure
- Defining a common (that is, “all hazards) command structure in the hospital ... that links with the community’s command structure”

JCAHO EC 4.1 (con't)

- “Identifying and assigning staff to cover all necessary staff functions under emergency conditions.
- Alternate roles and responsibilities of staff during emergencies, including to whom they report in the hospital’s command structure.”

*JCAHO does not require
or promote any one particular ICS model*

Hospital Emergency Incident Command System (HEICS)

- Popular adaptation of ICS for hospitals
- Focuses on an influx of patients and managing current patients
- Sample organizational chart, Job Action Sheets and lesson plans
- <http://www.emsa.ca.gov/dms2/heics3.htm>

A Specialty?

- This has become a specialty
- Often not recognized
- Should there be an independent certification for health and medical incident managers?
- What methods should be used to further apply IMS/NIMS to health and medicine?
- Should there be more???

What are your experiences?

Summary

- Health care organizations must use an incident management systems.
- That system should be consistent with community response agencies and other hospitals.
- The five functions provide the management structure and the eight components provide the “system” elements.
- Linking IMS to the facility’s EOP is important.

Questions?