

# Using Incident Command System in Foodborne Outbreak Response

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# Objectives

- Review key concepts of the National Incident Management System (NIMS) and Incident Command System (ICS)
- Illustrate how ICS can be used to coordinate a foodborne outbreak response of any size
- Discuss challenges related to using ICS in public health

# Assumptions

- Some level of NIMS training
- Has participated in or may participate in infectious disease emergency response
- Come from agencies have varying degrees of capacity, authority, resources, operation and structure

# What FEMA says about NIMS

- NIMS is a comprehensive, national approach to incident management
- NIMS provides the template for incident management, regardless of cause, size, location, or complexity
- NIMS is applicable at all jurisdictional levels and across functional disciplines



NATIONAL INCIDENT  
MANAGEMENT SYSTEM

# What does public health say?



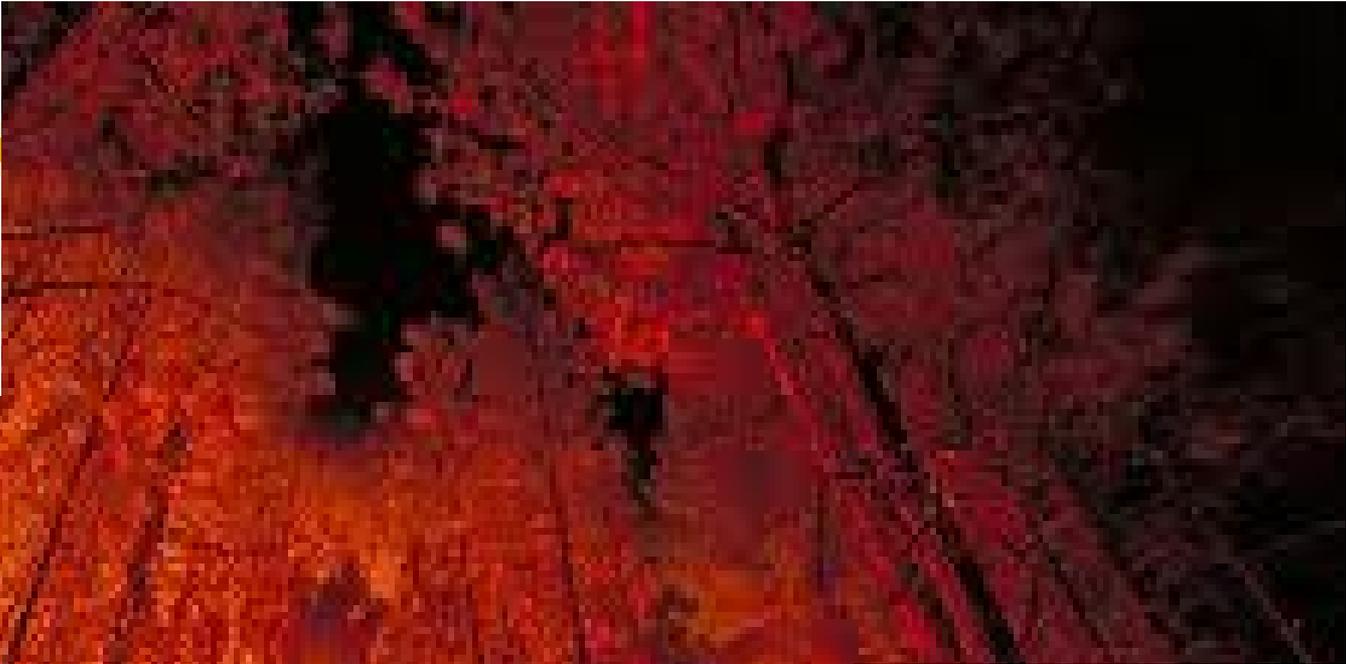
Welcome to

IS-100.SCa

Introduction to the Incident Command System



# So Why Do It?



# SNHD Experience

- Problem in foodborne outbreak coordination
- Response requires staff from 3 offices, 2 divisions who are managed by: 2 directors, 3 managers, 2 supervisors
- Nobody knew each other
- Solution - FIT = Foodborne Illness Team
- Planning and response functions
- Integrates NIMS/ICS
  - Example: Incident types



# ICS and Public Health: A Good Match

## ICS

- A wide range of tasks is necessary in any incident response
- Allows for coordination of multiple agencies and types of response personnel
- Scalable - may be used to manage routine events or to manage disasters, and for any type of event in between

## Public Health Incidents

- Vary in size, scope and complexity
- Require diverse skill sets to accomplish wide range of tasks
- Incidents may be routine or emergent

# ICS and Public Health: A Good Match

- Provides a set of critical processes that help maximize response capacity
- Management by objectives and task based
- Uses common terminology
- Establishes functional roles with clear responsibilities
- Easily adapted to rapidly changing situation

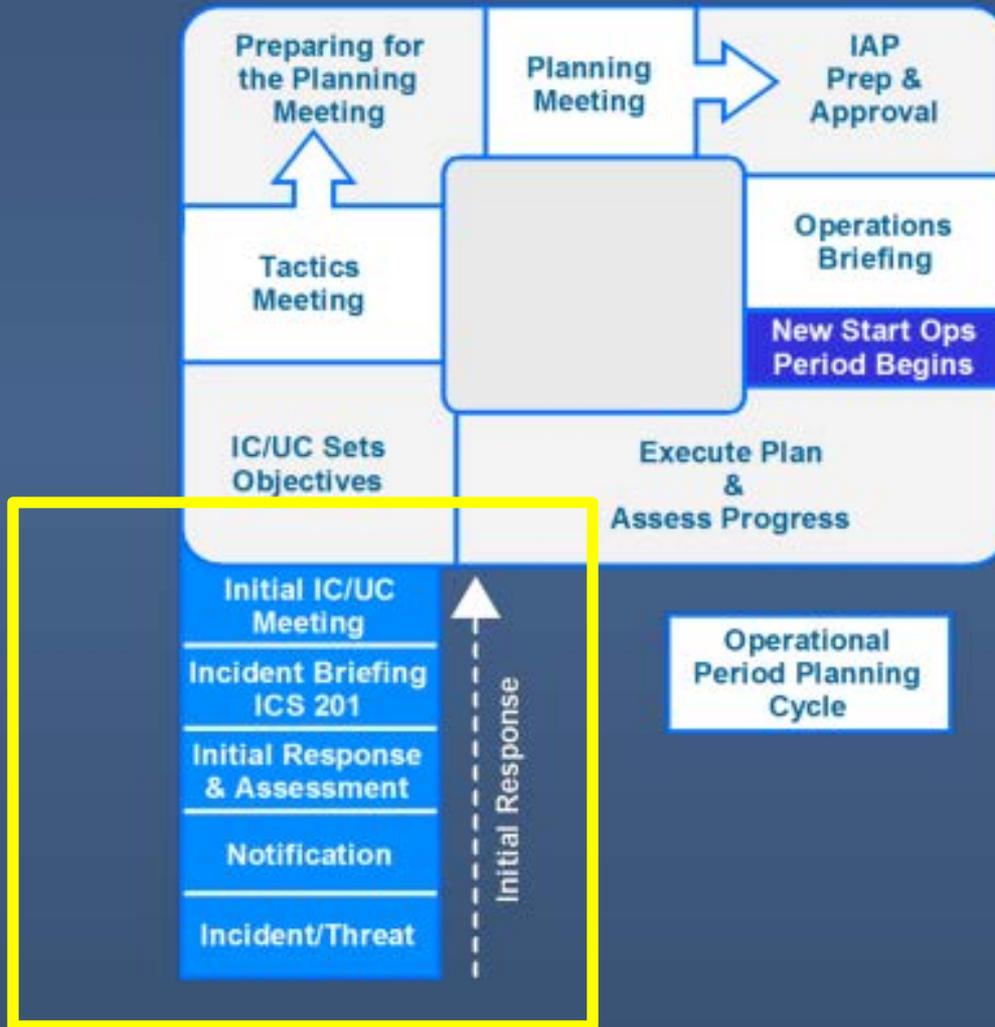
Ultimate Goal – move from *reacting* to, to *managing* an incident



## Using ICS to coordinate a Foodborne Illness Outbreak

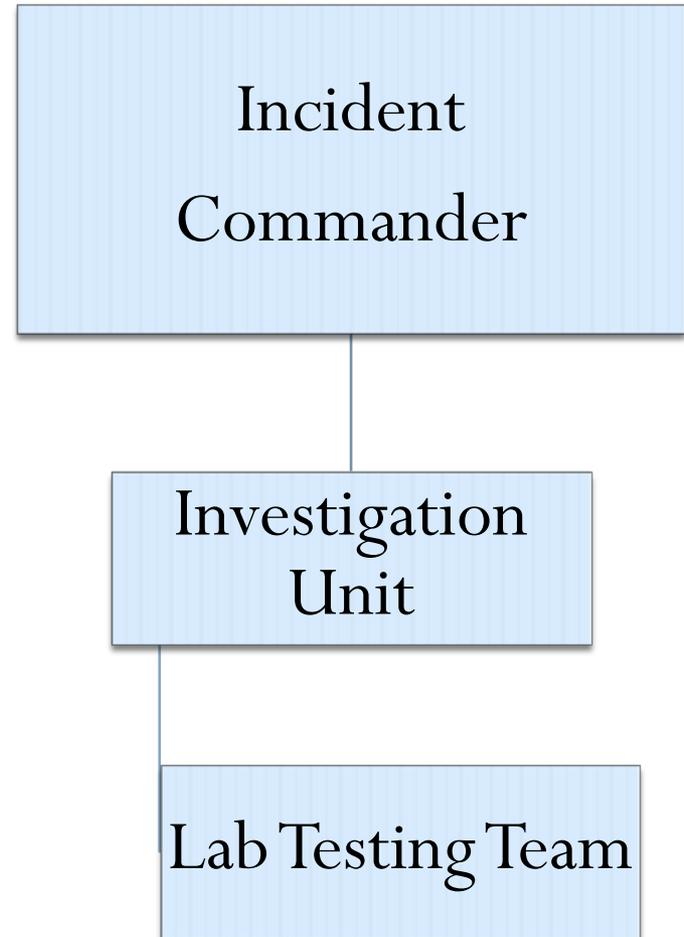
Salmonellosis Outbreak Associated with a Tapas Restaurant, Las Vegas, NV, April 2013

# Planning “P” and Initial Response



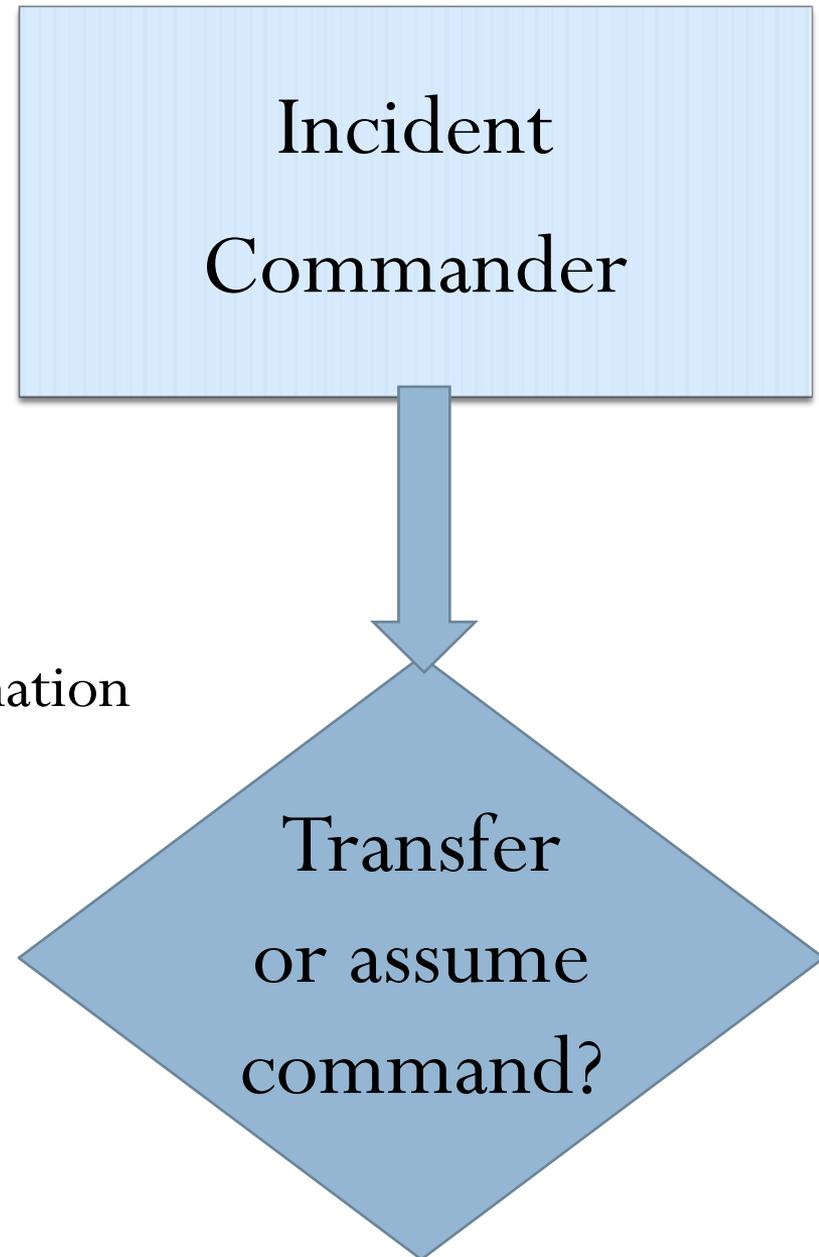
# Initial Response

- Person who takes report is the 1<sup>st</sup> incident commander
- Command may be transferred before initial
- Collect information to confirm possible outbreak
- Form 201
- Incident Briefing

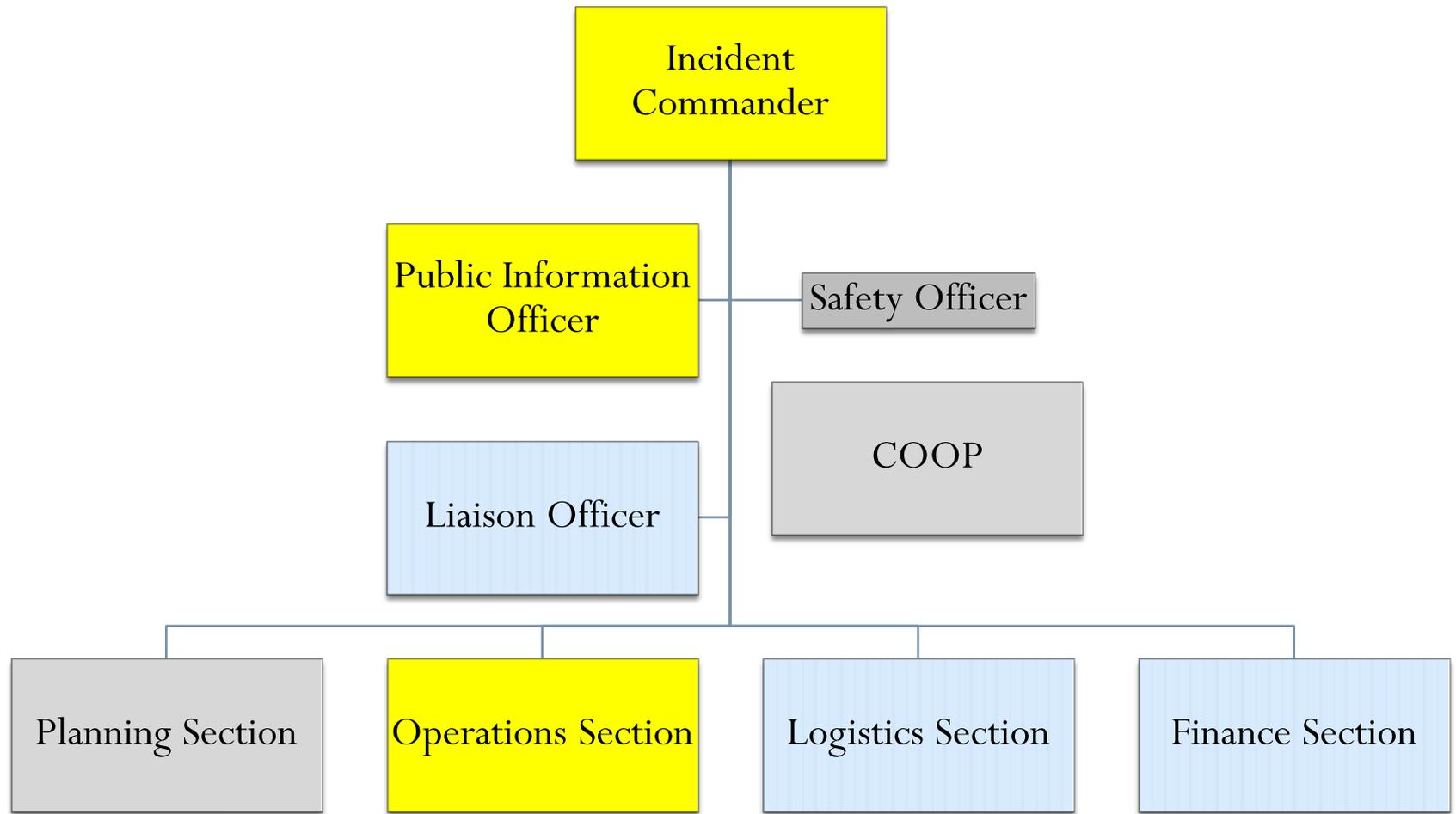


# Incident Briefing

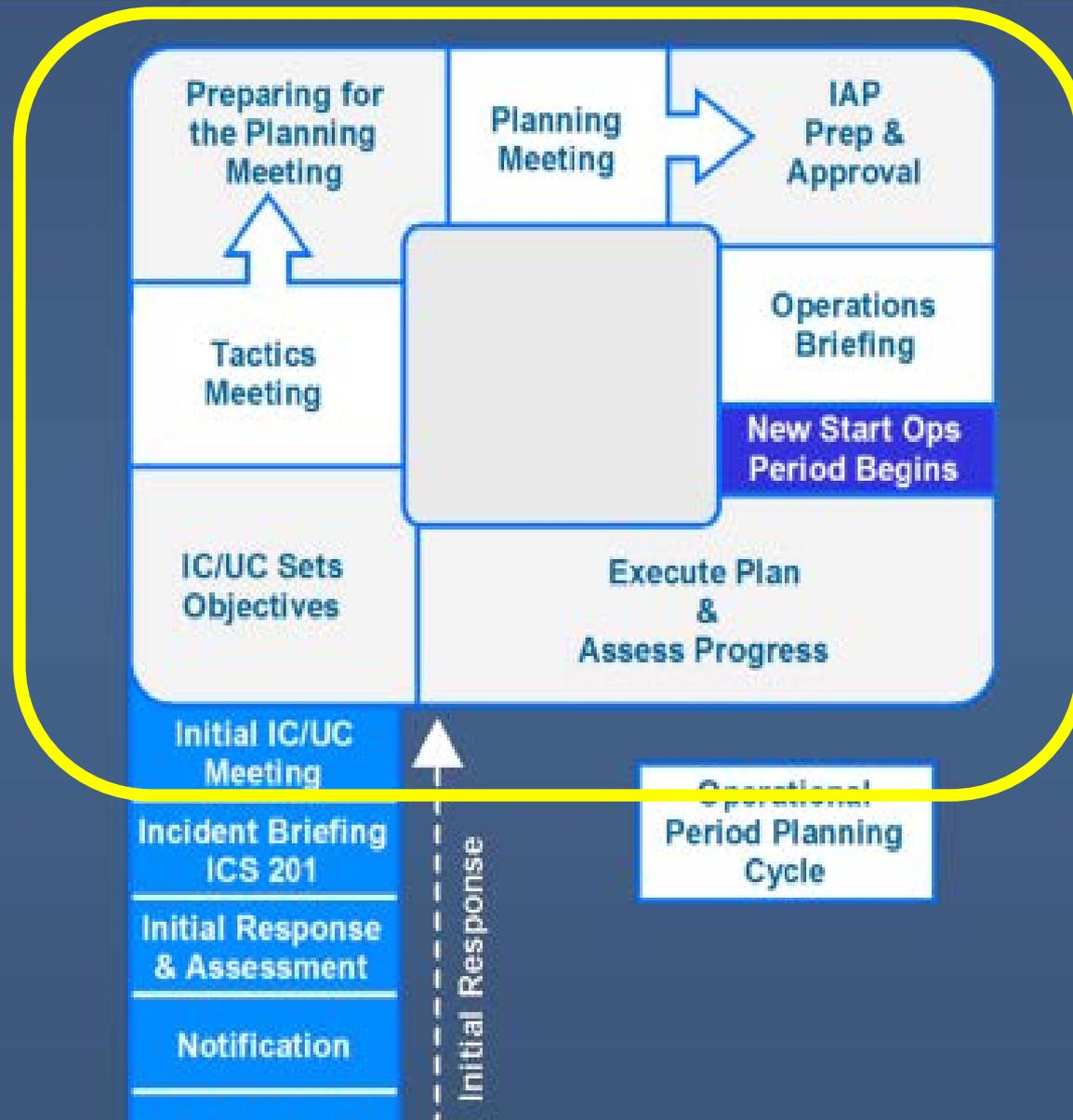
- Background information
- Determine command structure
  - Type – Single, multiple, unified
  - Incident Commander(s)
  - Command and General Staff
- Preliminary Resource Determination
- Assignments by management



# Incident Management Team



# Planning “P” and Initial Response



# Develop an Incident Action Plan



- What - objectives
- How – strategy and tactics
- How many - resources
- When - report
- By When – set up period
- Where – facilities, geographic, staging



Incident  
Commander/ Ops

Public Information  
Officer

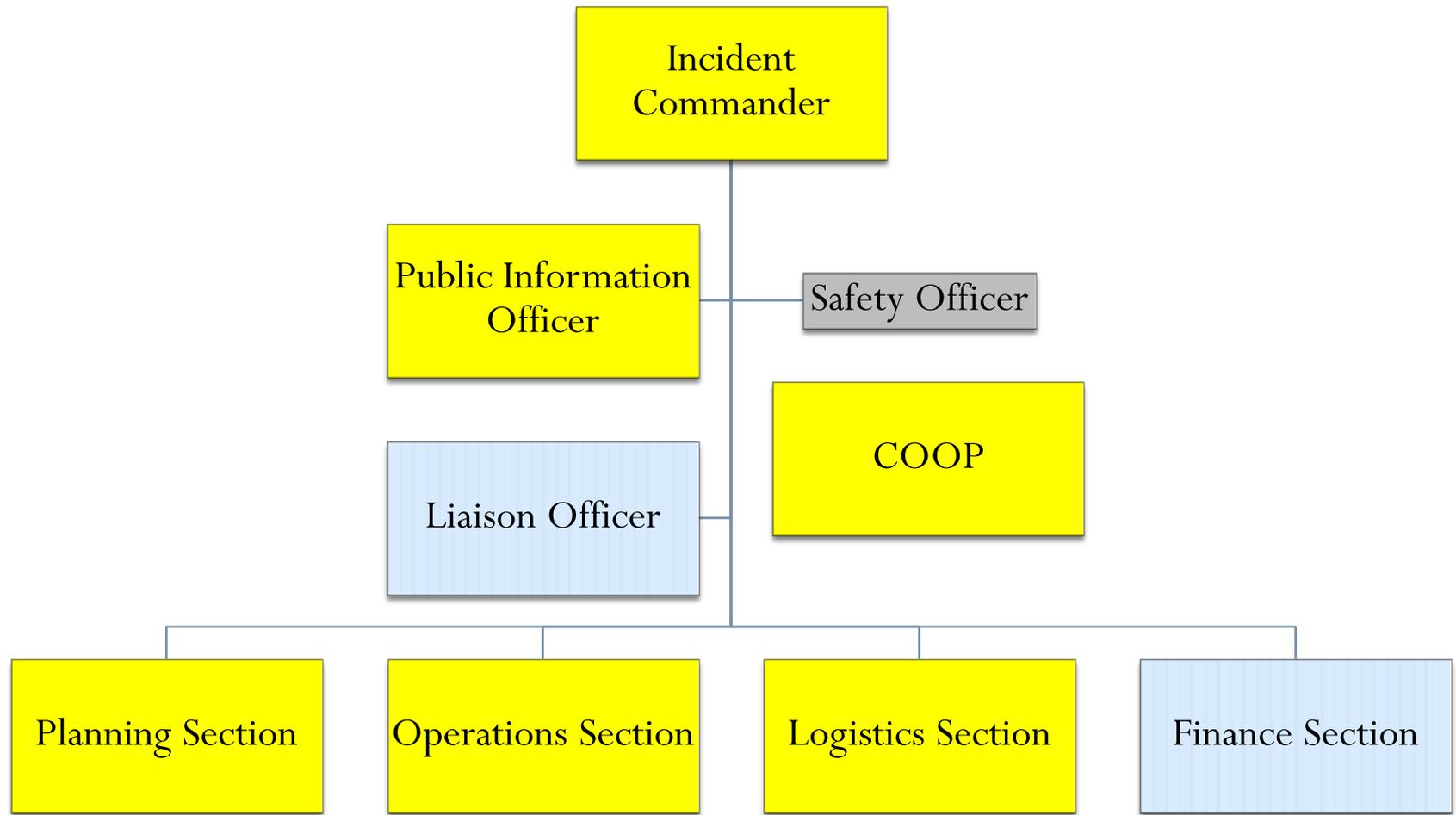
Investigation Unit

EH Field Team

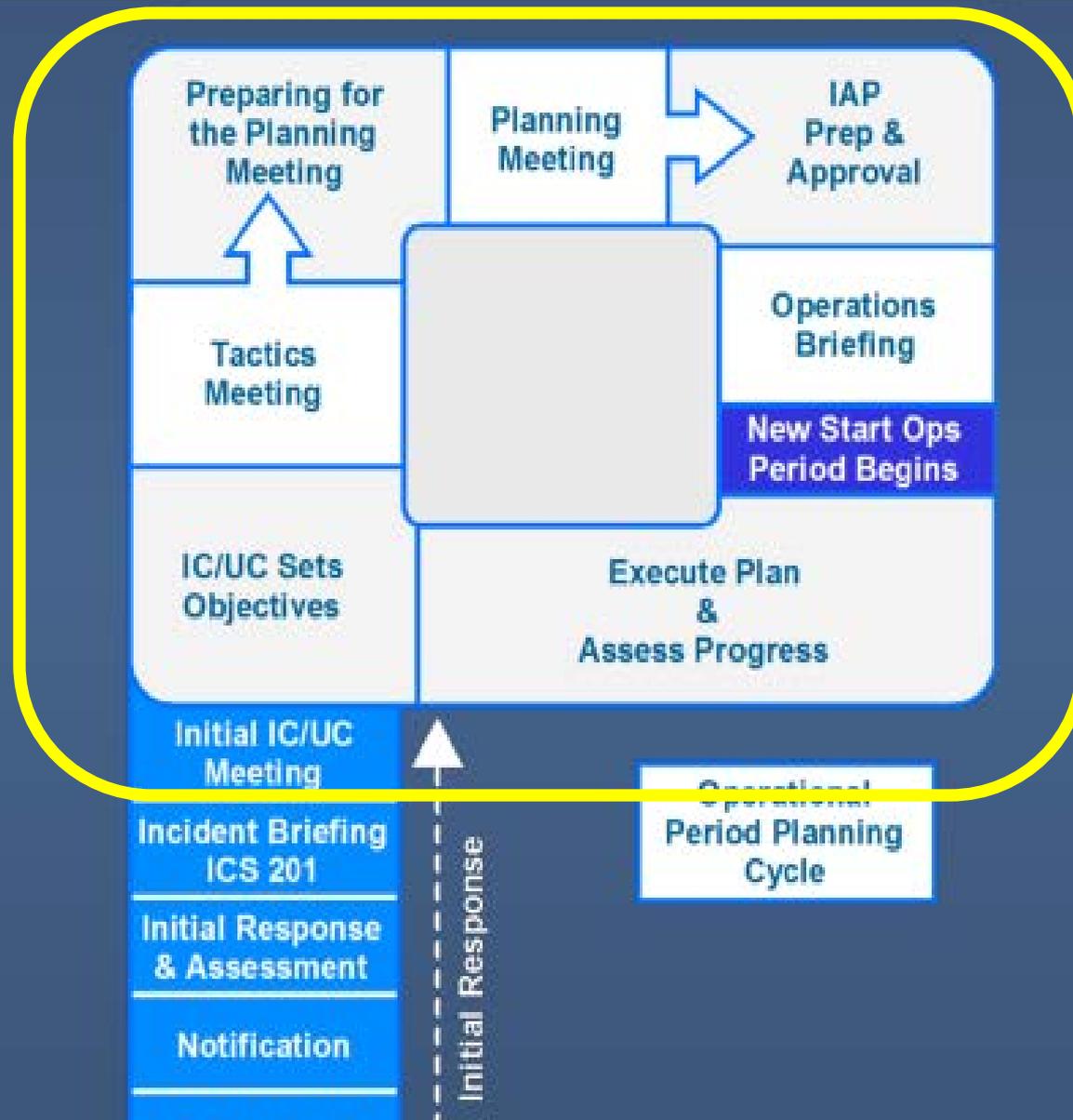
Lab Testing Team



# Incident Management Team



# Planning “P” and Initial Response



# Revise Incident Action Plan

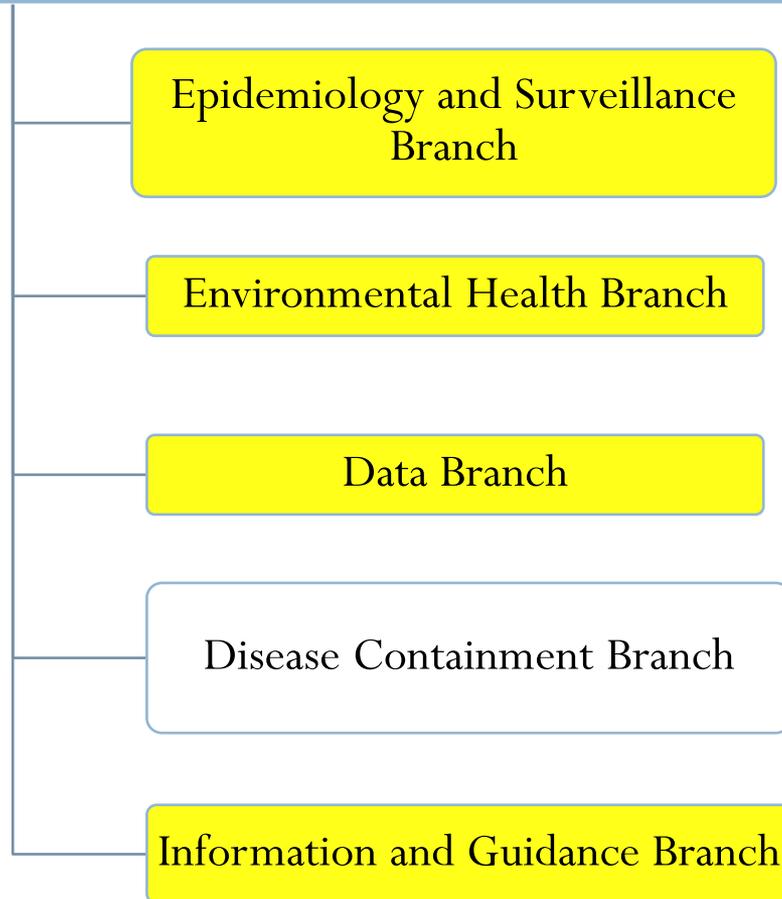


# Planning “P” and Initial Response





# Operations



**Achieves Command's objectives through execution of tactics.**

# Epi and Surveillance



Comparable

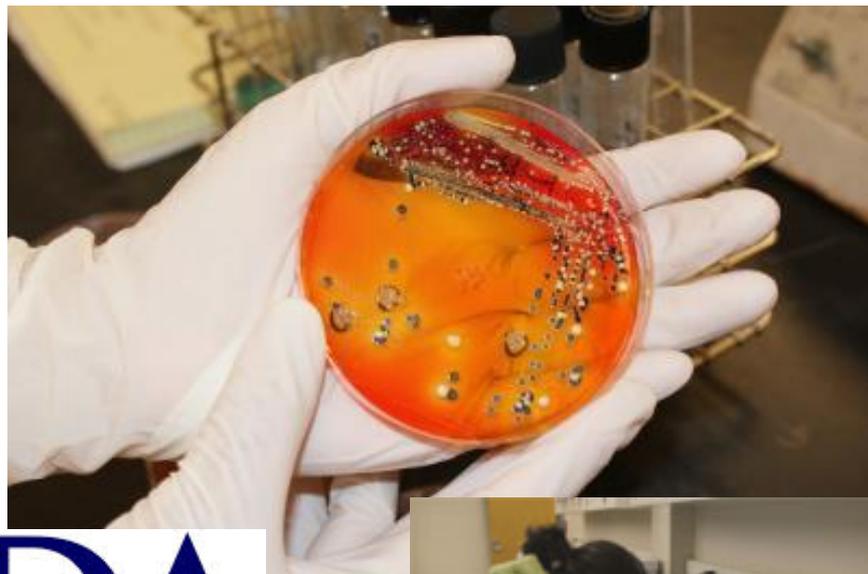


image: photostock

# Lab Testing

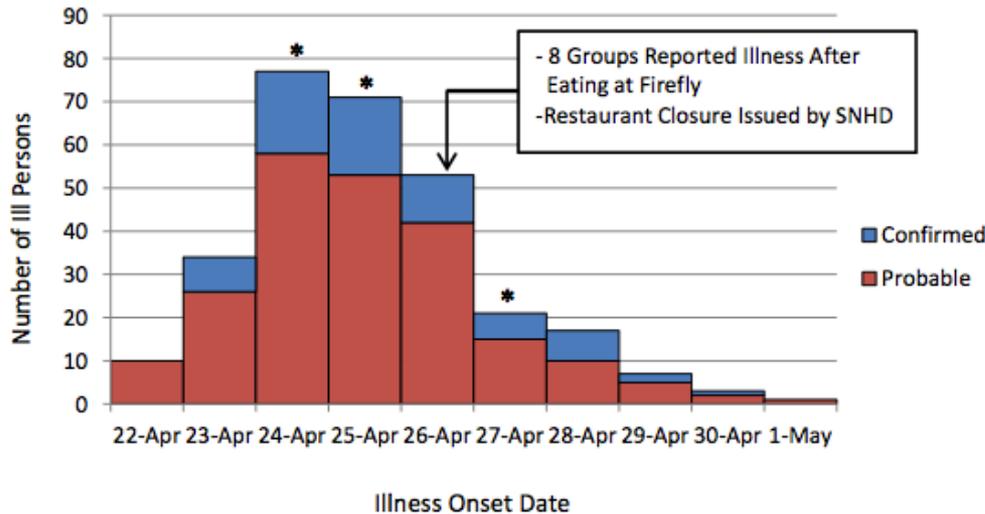
**FDA**

**USDA**



# Data Branch

**Epidemic Curve of Gastrointestinal Illness Associated with Eating at Firefly Restaurant (Paradise Road) on April 21–26, 2013 — Las Vegas, Nevada (n=294)**



Cases verified through May 20, 2013

\*Includes 4 restaurant employees, 3 of whom had confirmed cases of illness

## Odds Ratio (OR)

Contingency (or 2 x 2) Table

	Cases	Controls	Total
Exposed	a	b	a+b
Unexposed	c	d	c+d
Total	a+c	b+d	a+b+c+d

$$OR = (a/c) / (b/d)$$

$$= (a*d) / (b*c)$$

# informatics

# Environmental Health

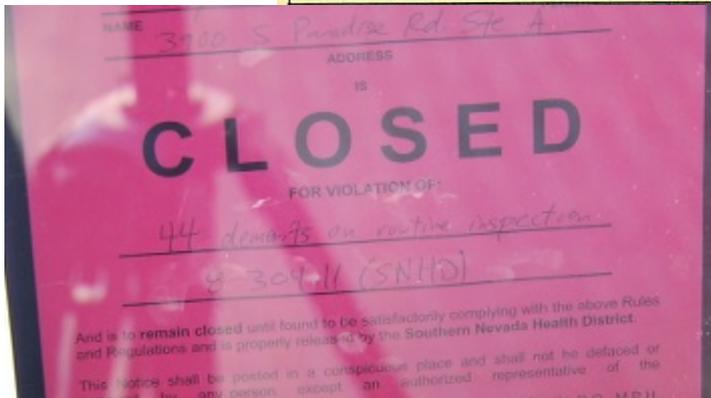
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**SNHD**  
Southern Nevada Health District

**SOUTHERN NEVADA HEALTH DISTRICT  
FOOD ESTABLISHMENT INSPECTION**

330 SOUTH VALLEY VIEW BLVD • LAS VEGAS, NV • 89107 • 702-759-0588 (DIRECT) • 702-759-1000 (24 HOURS)

FACILITY INFORMATION										
PERMIT #	ESTABLISHMENT NAME	PHONE #	COMPLIANCE SCHEDULE DUE	PRIMARY EHS						
PR0013375	FIREFLY ON PARADISE FIREFLY ON PARADISE	(702) 369-3971		EE7000449						
ADDRESS 3900 S Paradise RD STE A Las Vegas, NV 89169-0931			P. E. Code 1003	DISTRICT 93	LOCATION 3HO	MILES				
NEVADA CLEAN INDOOR AIR ACT: <input checked="" type="checkbox"/> COMPLIANCE REQUIRED <input type="checkbox"/> EXEMPT					CONTACT PERSON: Ramon Triay #461-5041					
CURRENT SERVICE	EHS	SERVICE	DATE	TIME IN	TIME OUT	TRAVEL MIN	DEMERITS	GRADE	HEALTH CARDS	RESULT
	1030	916	4-26-13	1735	2300	30	44	Closure	6	86
	OPEN TIME	CLOSE TIME	CAPACITY	SEWER	WATER	PERMIT STATUS	VIOLATION	ACTION	DATE	
			100	M	M	ACTIVE				
SPECIAL NOTES WAS DRAGONFLY										
In = In compliance    OUT = Not In compliance    N/O = Not observed    N/A = Not applicable										



Health Hazards - Notify SNHD and



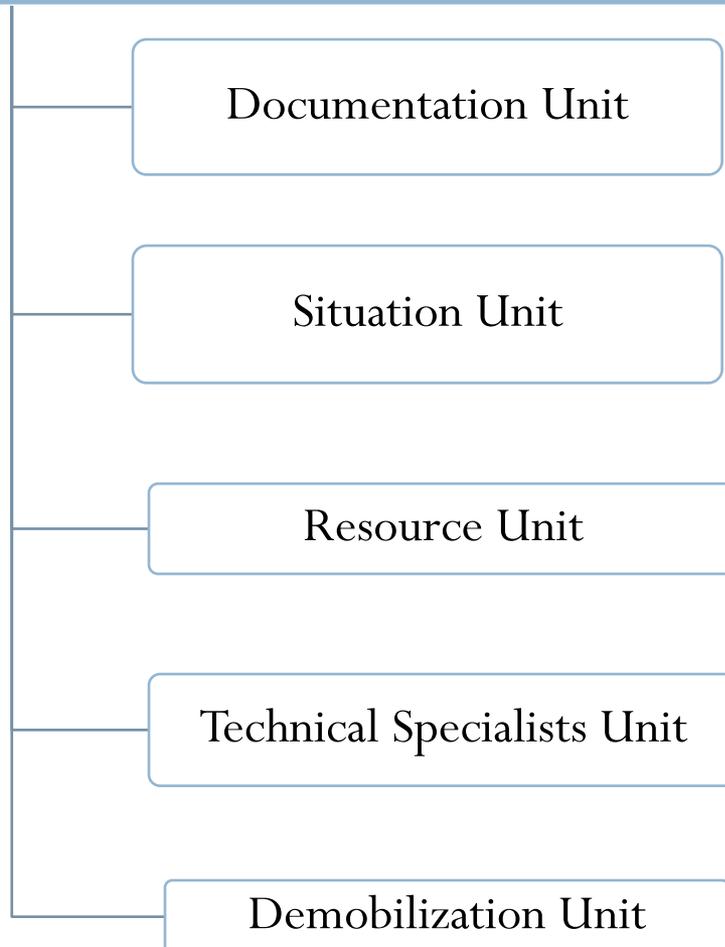
# Information and Guidance



# Public information – media inquiries.



# Planning



Supports Command and Operations.

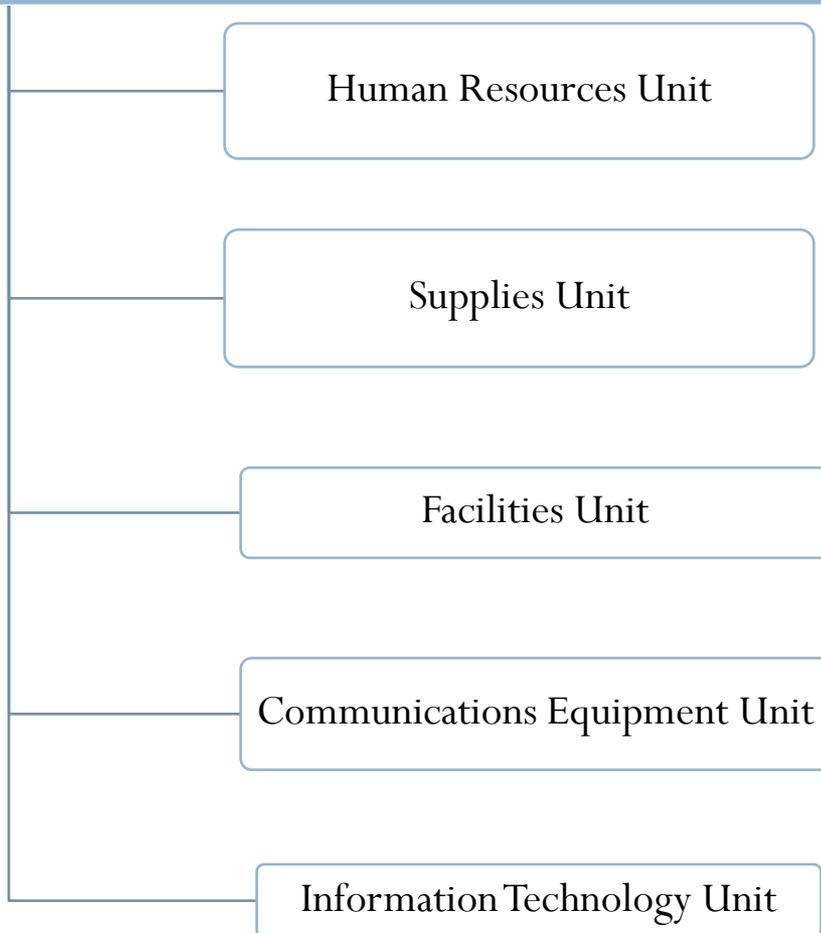
Forms, forms, forms.

Collects and distributes 214 (unit logs) and incident action plan.

Allows operations staff to focus on tasks related to response objectives.

Projects and procures resources for next op period.

# Logistics



What do you need?

More people?

More stuff?

Interviewers

Workstations

Office

Phones

Food



Tasks can be grouped by category.



# Manage by Objectives



Scale to fit – type, number, time, place.





# Why Use Incident Command System

- Decreased confusion among responders due to coordination of response actions.
- It's the difference between reacting and managing.
- It is not a guide to how to investigate – rather a framework on how to coordinate a response and manage resources.



# Challenges

- Working outside normal duties
- Reporting to different “supervisors”
- Maintaining regular job function/duties
- Planning ahead while doing
- Not enough personnel resources

# Recommendations

- Identify key personnel in each area – include OPHP
- Regular planning meetings
- Ensure buy-in from all to use ICS for incident response
- Train staff at all levels on regular basis
- Use support staff
- Consider deputy positions
- Written plans and procedures – include COOP
- Evaluate and draft improvement plans

Feel any better?





Thank You.

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