

# Preparing Field Staff to Respond to Public Health Emergencies

*Just in time for the Republican National  
Convention – New York City, 2004*



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# Objectives

*By the end of the talk, the audience will be able to...*

- Explain the impetus for 2004 Field Staff Unit (FSU) training
- Describe how/when NYC Department of Health recognized its first responder role
- List components of FSU training
- Discuss local/regional cooperation in capacity building

# Republican National Convention (RNC) came to New York City (NYC)



- August 30 – September 3, 2004
- Madison Square Garden (MSG)
- Delegates – 4,853
- Conference staff/media – 45,000
- Security officers – 110+
- Police posted @ MSG: 10,000
- Protesters – 250K-1 million

# Enhanced Readiness

- Implemented enhanced surveillance systems
- Reduced threshold for response
- Assigned extra personnel on call
- Goal: Rapidly detect & **respond** to public health concerns in people associated with RNC



# **The road to recognizing our role as First Responders**

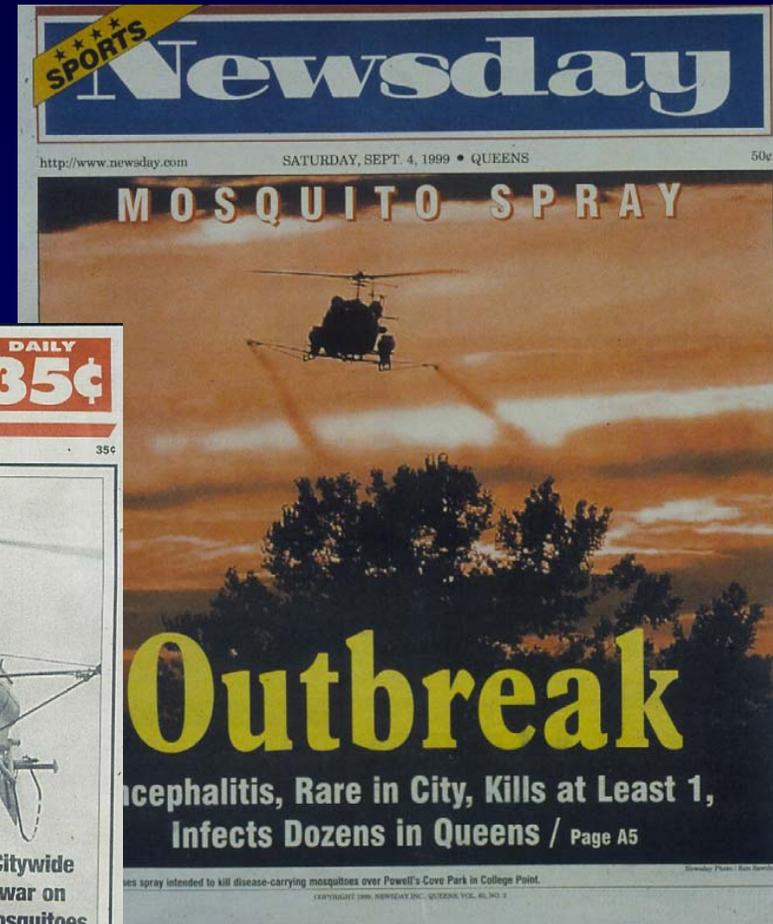


# **1995 Public Health Functions Steering Committee Deemed our functions...**

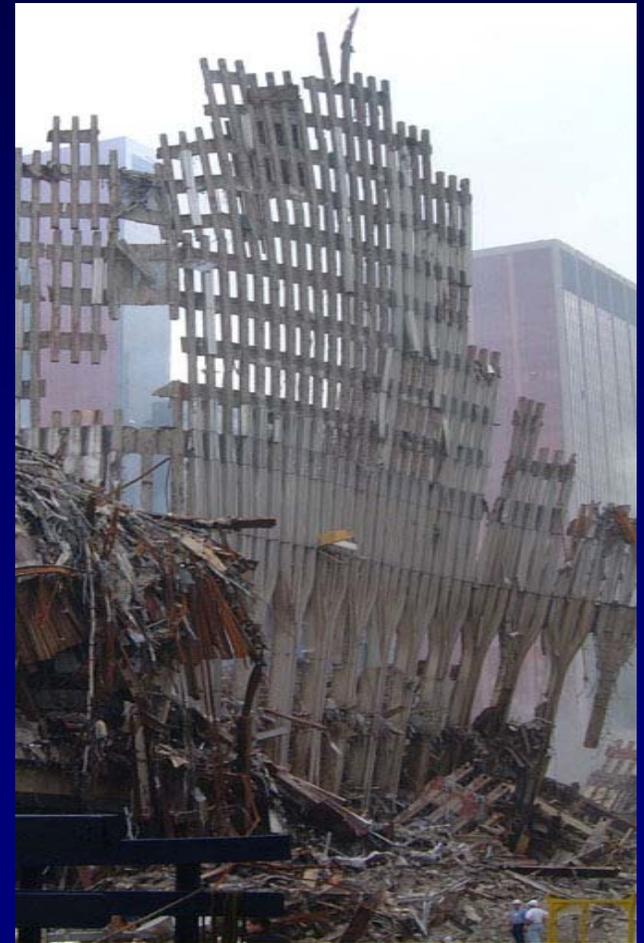
- **Prevent epidemics and spread of disease**
- **Protect against environmental hazards**
- **Work to prevent injuries**
- **Promote and encourage healthy behaviors**
- **Assure quality, accessibility of health services**
- **Respond to disasters with potential public health impact**

# West Nile Virus, 1999

## Transition to First Responder Agency



# First Responder Role Solidified





# Yet More Opportunities to Practice



## August 14, 2003



# DOHMH Public Health Incident Management System (IMS)

**Incident Commander**

**Senior Emergency Manager**

**Finance Officer**

**Documentation Officer**

**Health & Safety Officer**

**OEM Liaison**

**Senior-level consultant**

**Info  
Systems**

**Logistics**

**Medical/  
Clinical**

**Epi &  
Surveil-  
lance**

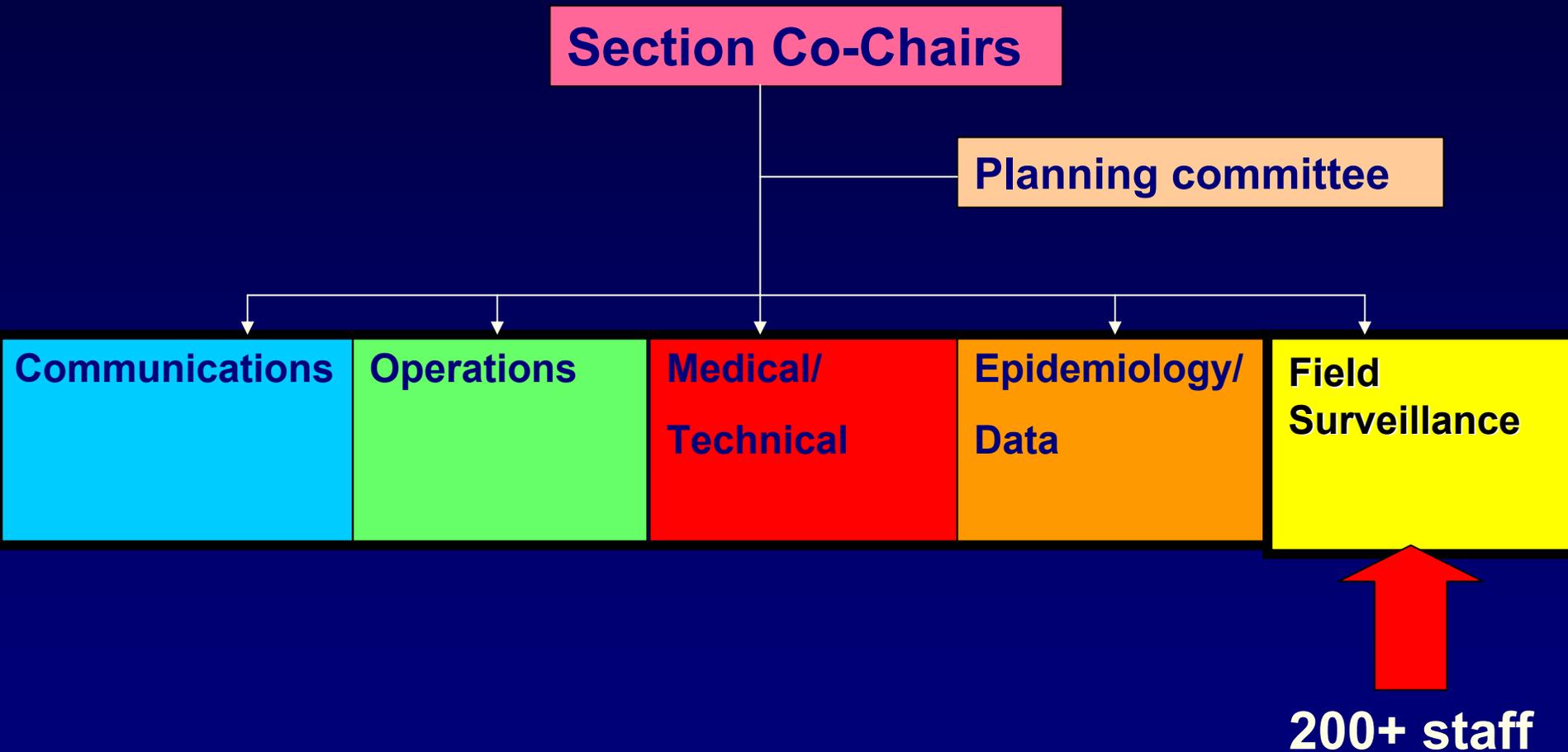
**Public/  
Provider  
Info**

**Environ-  
mental**

**Lab**

**Mental  
Health**

# Epi/Surveillance Response Section



# Field Surveillance Unit (FSU)

- **203 staff from TB, HIV, Communicable Disease & Epidemiology Programs**
- **Nurses, BA/MPH Epidemiologists, Research Scientists**
- **Role: To collect data in the field during events/emergencies**

**Were they ready?**

# FSU Training Goals

- **Introduce IMS, FSU**
- **Explain “essential” status**
- **Provide instruction on**
  - **How to respond when activated**
  - **FSU staff role within IMS**
- **Standardize field data collection**
  - **Chart review**
  - **Interviewing**
- **Instill appreciation for how data collected informs further action**

# Teaching methodologies

1. **Didactic: lectures**
2. **Interactive: guided practice in groups**
  - **Crisis communication role play**
  - **Hands-on exercise**
3. **Evaluative: content assessments**
  - **Objective**
  - **Subjective**

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The trainees will understand the...

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- **Abstracting data from hospital records**

# A doctor or nurse note: "C.C." stands for "Chief Complaint"

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## EMERGENCY DEPARTMENT MEDICAL RECORD PAGE 1 OF 2

MR. SER 400354413 F  
 DOB 42  
 VST DATE 05/25/04

ALLERGIES?  N  Y:  PCP:  PHONE: *None*

Time seen: *1605* Hx by: *pt* Interpreter:

**c.c.** > I have diarrhea & vomiting  
 42 yo ♀ c 2 day h/o vomiting and  
 diarrhea symptoms started on  
 Saturday pm @ ~ midnights  
 Had seafood at a restaurant on  
 Sat pm - 7 then sx started ~ 5 hrs.  
 later - 1st vomiting → diarrhea -  
 soft stools @ blood @ melena  
 2-3 x a day - tried to eat  
 a mango - vomited & came in -  
 has no pain - has taken no med  
  
 no travel, no ill  
 contacts  
  
 Tolerated po challenge

H  
I  
S  
T  
O  
R  
Y

ROS (circle positives, slash negatives)

Constitutional	Musculoskeletal	ENT
Negative Review	Negative Review	Negative Review
Fever	Myalgias	Rhinorrhea
Chills	Arthralgia	Epistaxis
Fatigue	Neck pain	Nasal Obstruction
Weakness	Stiffness	Ear pain
Sweats	Swelling	Otorrhea
Weight loss	Back pain	Sore throat
Cardiovascular	Respiratory	Eyes
Negative Review	Negative Review	Negative Review
Chest pain	SOB	Eye pain
Palpitations	Cough/wheeze	Redness
Leg swelling	Sputum	Discharge
Claudication	Pleuritic pain	Photophobia
Orthopnea	Hemoptysis	Visual changes
Neuro	GI	GU
Negative Review	Negative Review	Negative Review
Headache	Nausea/vomiting	Dysuria
Neck stiffness	Abdominal pain	Frequency
Lightheadedness	Cramps	Hematuria
Vertigo	Diarrhea	Discharge
Unsteady gait/falls	Constipation	Vulval/Scrotal pain
Syncope	Blood/melena	Dyspareunia
Skin	Endocrine	Hem/Lymphatic
Negative Review	Negative Review	Negative Review
Rash	Heat/cold intolerance	Anemia
Bites	Excessive thirst/hunger	Easily bruises/bleed
Itching	Polyuria	Swollen nodes
Eczema		
Tobacco?	Psychosocial	Allergic/Immuno
	Negative Review	Negative Review
	Depression	Hay fever
	Anxiety	HIV
	Suicidal/Homicidal	Immunization UTD
		Tetanus UTD

# **Crisis communication**

- **Collaboration with Columbia University Center for Public Health Preparedness**
- **Objective: Trainees will learn to communicate with public & professionals outside DOHMH**
  - **Three CPHP staff facilitated 3 trainee groups**
  - **Provided principles of crisis communication**
  - **Facilitated role-play**
    - **Gaining access to patient charts**
    - **Patient interview**

# Capstone: Hands-on Activity

- **Scenario: diarrhea signal during RNC**
- **Ten groups, each moderated by 1 clinically- and 1 classically-trained epidemiologist**
- **Goal: to illustrate importance of data quality**
- **Trainees' activities included**
  - **Reviewing charts**
  - **Calculating summary statistics**
  - **Interviewing mock patients**
  - **Summarizing results**
  - **Writing talking points for press conference**

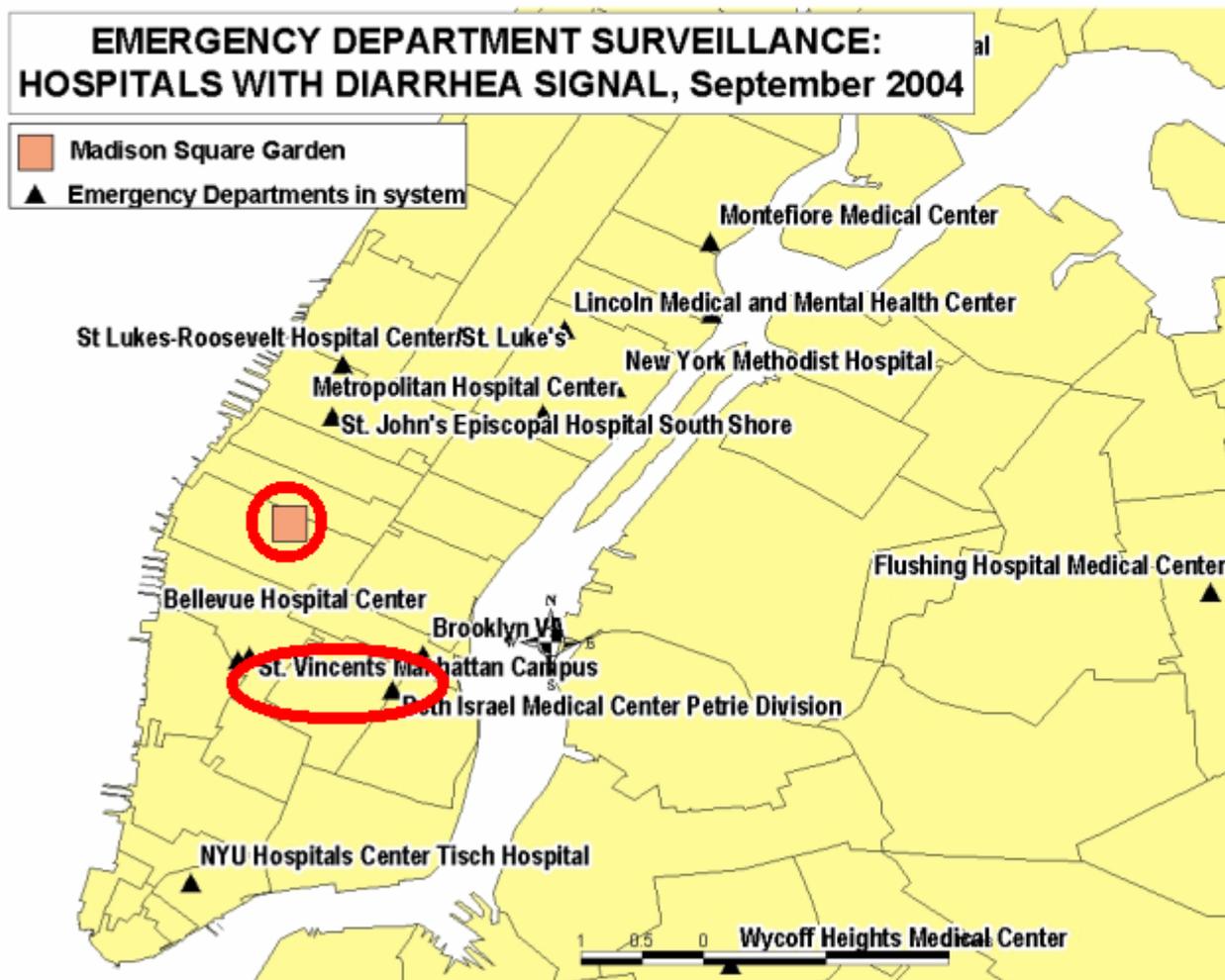
## Common Place

One of the epidemiologists notices that according to the map Beth Israel, Bellevue and St. Vincent's are near Madison Square Garden, the site of the Republican National Convention (RNC).

Unfortunately the press notices, too. So we have to move quickly.

The Epidemiologists decide we need to contact these patients to determine if they have a common exposure, particularly whether they had any affiliation with the RNC.

The epidemiologists obtain the names and contact information of patients who were found to have GI illness in Beth Israel, Bellevue and St. Vincent's so the Field staff can interview



# How did it go? Attendance

- **Of 203 FSU staff, 189 (93%) returned completed pre- and post-training assessments**
  - **June 10: 90 pre, 87 post**
  - **July 8: 107 pre, 102 post**
- **Difficult to keep track of trainees throughout the day**

# **Subjective Content Evaluation: Chart reviews**

- **Many review medical charts for regular job**
- **Gaps in knowledge/confidence**
  - **Format of Emergency Department charts when expertise in other illness**
  - **Medical abbreviations outside area of expertise**

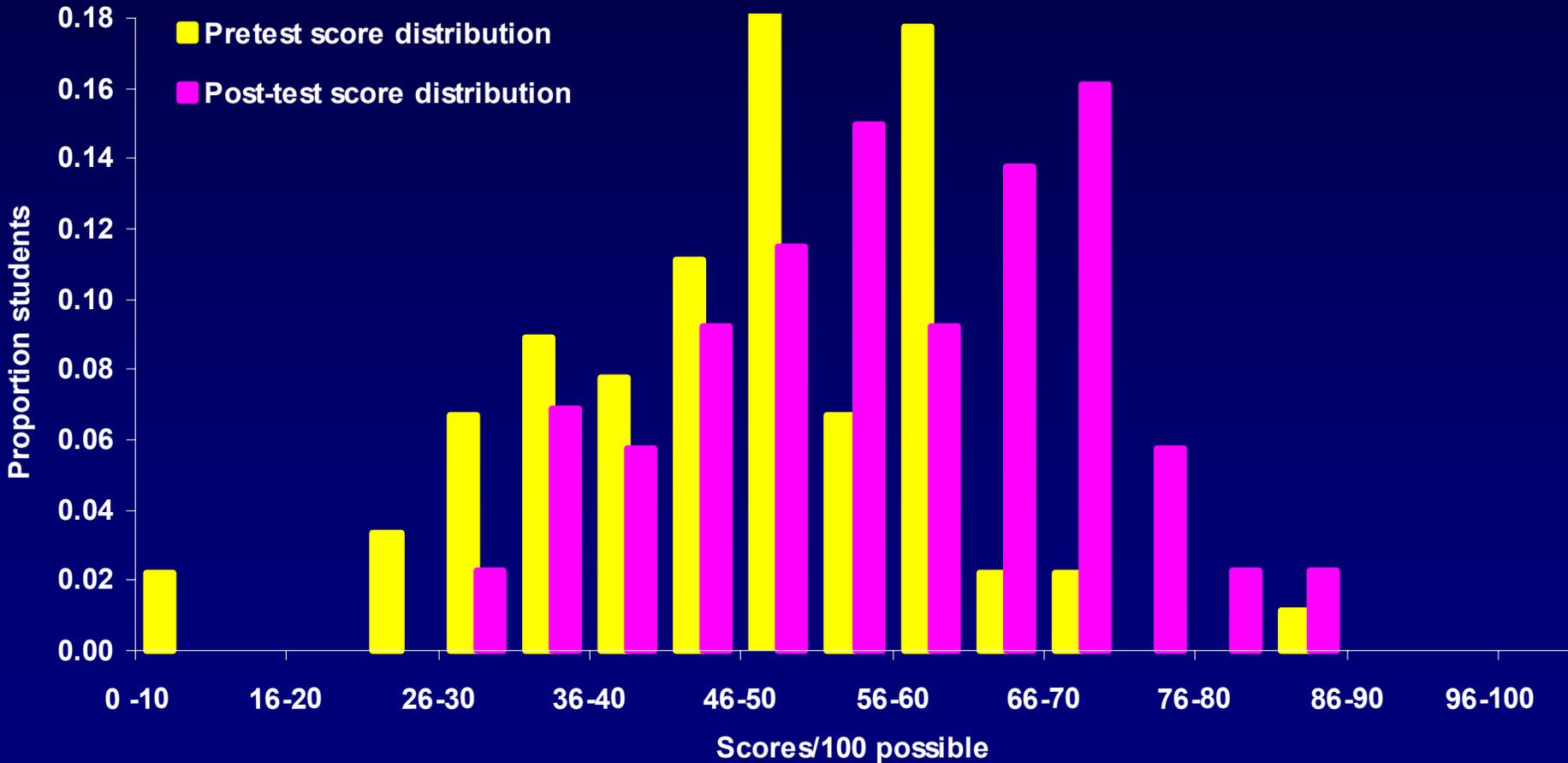
# **Subjective Content Evaluation: Interviewing**

- **Many had experience but few were trained on standardized data collection**
- **Gaps in knowledge/confidence**
  - **Importance of asking questions in order**
  - **Should read questions as written**

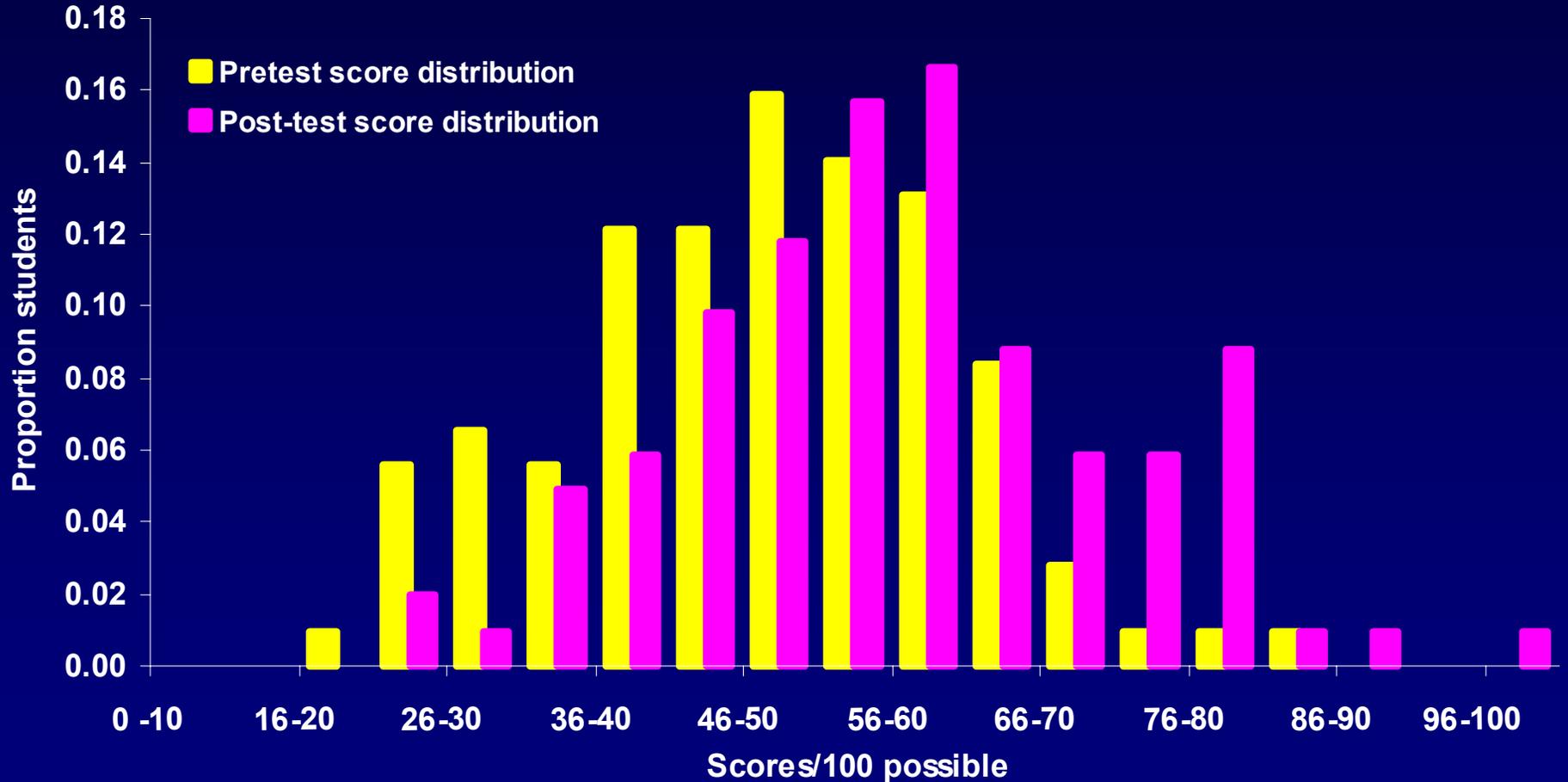
# Objective Content Evaluation

- **Pre-post tests**
- **20 multiple choice, short answer questions (June 10)**
- **25 questions (July 8)**
- **Given before first lecture and after completion of hands-on exercise**

# Results of June 10<sup>th</sup> pre-post tests



# Results of July 8<sup>th</sup> pre-post tests



# Pre-Post Test Data Summary

	Mean Score points/100		Difference points (95% CI)	
	<i>Pretest</i>	<i>Posttest</i>	<i>Unpaired</i>	<i>Paired</i>
<i>June 10<sup>th</sup></i>				
<b>Mean</b>	<b>46</b>	<b>55</b>	<b>+9 (5-13)</b>	<b>+8 (4-11)</b>
<i>July 8<sup>th</sup></i>				
<b>Mean</b>	<b>47</b>	<b>56</b>	<b>+9 (5-13)</b>	<b>+10 (7-12)</b>

*Pre- and Post-test data compiled by C. Hemans-Henry*

Course Evaluation for Field Surveillance Unit Staff Training:  
Public Health Action During An Emergency/Event  
June 10, 2004

## Evaluation of the training

<b>Overall rating of session</b>	
Excellent	18.4%
Good	<b>60.9%</b>
Fair	13.8%
Poor	1.1%
No Opinion	0.0%
Blank	5.7%

<b>Usefulness of training to participant's work</b>	
Excellent	21.8%
Very good	<b>32.2%</b>
Good	29.9%
Poor	1.1%
No Opinion	0.0%
Blank	4.6%

<b>Able to apply course material to public health work</b>	
Yes	<b>72.4%</b>
No	10.3%
No Opinion	12.6%
Blank	4.6%

**Course Evaluation for Field Surveillance Unit Staff Training:  
Public Health Action During An Emergency/Event  
July 8, 2004**

# **Evaluation of the training**

<b>Overall rating of session</b>	
Excellent	<b>48.6%</b>
Good	<b>48.6%</b>
Fair	2.9%
Poor	0.0%
Blank	0.0%

<b>Usefulness of training to participant's work</b>	
Excellent	<b>55.7%</b>
Good	40.0%
Fair	1.4%
Poor	1.4%
Blank	1.4%

<b>Able to apply course material to public</b>	
Yes	<b>85.7%</b>
No	5.7%
No Opinion	8.6%
Blank	0.0%

# **Surge Capacity - New York State DOH**

- **NYC DOHMH requested surge capacity for data collection if an emergency occurred during the RNC**
- **Field Epidemiology Surge Team (FEST) created by New York State (NYS) DOH**

# **Soliciting Volunteers**

- **Eight NYSDOH Div. Epidemiology groups solicited volunteers from**
  - **Central office**
  - **Regional offices**
- **144 staff volunteered**
- **Job action sheets created so NYS staff could fill needs and integrate staff into NYC IMS**
- **Training adapted and conducted for FEST**

# Conclusions

- **Trainees needed training**
  - **Chart review & interviewing practice**
    - **Reinforce standardized data collection**
    - **Keep generic chart review skills fresh**
  - **Reminder that they were essential**
- **Overall**
  - **Trainees increased knowledge**
  - **Most (>90%) found training useful**
  - **Training adaptable for regional capacity building**

# Some of the Limitations

- **Trainings take**
  - **Time, \$**
  - **Commitment of higher ups and staff**
- **Logistics challenging for hands-on**
- **Hard to keep track of trainees**
- **Difficult to know how staff would perform in emergency and how well we could integrate surge capacity staff**

# Next steps

- **Establish on-going curriculum for FSU training**
- **Provide supplemental materials**
  - **Chart review abbreviation sheets**
  - **Tips for standardized interviewing**
- **Conduct exercises/drills**
- **Expand surge capacity to other jurisdictions**
- **Encourage adaptation/use of training materials**

**CDs of training materials:**

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