ICS In Action

Using the Incident Command System in Public Health Outbreak Investigations

Produced in 2009 by

North Carolina Center for **Public Health Preparedness**

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Introduction

Welcome to *ICS in Action: Using the Incident Command System in Public Health Outbreak Investigations*, a training program from the North Carolina Center for Public Health Preparedness (NCCPHP) at the University of North Carolina Gillings School of Global Public Health. This training is designed to help public health professionals at the local level integrate use of the Incident Command System (ICS) into a common public health department activity: investigating a disease outbreak.

Program Objectives

At the end of this training, participants will be able to:

1. Describe how ICS can benefit disease outbreak investigations undertaken by local public health department staff.

2. Use appropriate ICS terminology to describe the roles and tasks that public health staff assume in an outbreak investigation.

3. Give examples of the ICS steps taken in outbreak investigations.

4. *For a hypothetical disease outbreak*: Demonstrate the ability to develop an Incident Action Plan, carry out an operational briefing, and formulate positions and an organizational chart for how an outbreak response might be organized.

Training Audience

This training is intended for staff at small to medium-sized rural local health departments, but may also be useful for staff at larger health departments. The training may be particularly useful for organizational units that are responsible for investigation and management of disease outbreaks (e.g., epidemiology teams, epidemiology rapid response teams, outbreak investigation teams).

Prerequisites

The prerequisites for this training are completion of ICS trainings 100, 200, and 700 and training or experience in disease outbreak investigation. In addition, completion of ICS 300 is strongly recommended for persons who might serve as Command Staff or General Staff.

- You may access ICS 100 (now called IS-100.a), IS-200.a, and IS-700.a at the FEMA Web site, www.training.fema.gov.
- ICS 300 is a state-administered program available through your state's emergency management agency: http://www.fema.gov/about/contact/statedr.shtm.

Program Format

ICS in Action is presented in 2 modules and takes approximately 2 ½ hours to complete. The training may be conducted in a single session or 2 shorter sessions

Module 1 provides a review of the core concepts of ICS in public health followed by an example of ICS as it was used by local health departments during an outbreak of gastrointestinal illness in a rural area. Module 2 walks you through a case study scenario using ICS during a hypothetical disease outbreak investigation. Throughout the training are activities that allow you to test your knowledge and practice skills.

This training can be implemented in 2 ways:

1. **Small group training session** (*recommended approach*) facilitated by a training coordinator or other staff person in face-to-face training sessions with up to 20 people. (Note: The facilitator does NOT have to have previous ICS experience in an actual incident. See the **Facilitator's Guide** for more information.)
2. **Self-paced training** when small group training is not available or if self-paced instruction is preferred.

The materials and resources associated with this training package are:

1. **Training Program Video** (order the DVD by emailing nccphp@unc.edu OR view online at http://nccphp.sph.unc.edu/trainingpackages/ics_in_action)
2. **Participant Workbook** with 7 activities
3. **Facilitator's Guide** for small group training
4. **Web Page** with additional ICS resources for further study (visit http://nccphp.sph.unc.edu/trainingpackages/ics_in_action)

This training program requires one of the following:

- DVD player and TV monitor *OR*
- Computer with DVD drive and speakers (and LCD projector if using with group)

Instructions for Using This Training Package

For small group training (recommended approach):

Before the training:

1. Acquire the **Training Program Video** and equipment described above.

2. The person facilitating the training program should follow the instructions in the **Facilitator's Guide**, which may be downloaded from http://nccphp.sph.unc.edu/trainingpackages/ics_in_action.

3. Print copies for each participant of the **Participant Workbook**, which may be downloaded from http://nccphp.sph.unc.edu/trainingpackages/ics_in_action.

For self-paced training:

Before the training:

1. Acquire the training program DVD and equipment described above

2. Print a copy of the **Participant Workbook**, which may be downloaded from http://nccphp.sph.unc.edu/trainingpackages/ics_in_action.

During the training:

3. Review the Module 1 Overview in the **Workbook**.

4. Start the **Training Program Video**. Stop the video when instructed to complete Module 1 Activities 1-3. Restart the video after each activity is complete.

5. After completing Module 1, participants may take a break between modules or complete the remainder of the program in a separate training session.

6. Review the Module 2 Overview in the **Workbook**.

7. Start the **Training Program Video**. Stop the video when instructed to complete Module 2 Activities 4-7. Restart the video after each activity is complete.

After the training:

8. Complete the training program evaluation found in the **Workbook**.

9. Find resources for further study on the *ICS in Action* resources **Web Page** at http://nccphp.sph.unc.edu/trainingpackages/ics_in_action.

Acknowledgements

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This program was developed in partnership with North Carolina Public Health Regional Surveillance Team 6 (PHRST 6), 1 of 7 teams in North Carolina that work with the state Office of Public Health Preparedness and Response to prepare for, respond to, and conduct surveillance for bioterrorism and other public health threats. PHRST 6 is based in Buncombe County and serves the 19 westernmost counties of North Carolina and the Eastern Band of Cherokee Indians.

Materials in this training program were developed by:

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Module 1: ICS for Public Health

Overview

Module 1 of *ICS in Action*, "ICS for Public Health," provides a review of the core concepts of ICS in public health followed by an example of ICS as it was used by local health departments during an outbreak of gastrointestinal illness in a rural area.

Total time: 60 minutes

Module 1 Learning Objectives

The learning objectives for Module 1 are tied to the overall learning objectives for the training program. Specific objectives for Module 1 are to:

- List 2 ways in which using ICS can benefit disease outbreak investigations in local health departments.

- Use appropriate ICS terminology to describe the roles and tasks that public health staff assume in an outbreak investigation.

- Using the real life example, identify how ICS can support multi-jurisdictional and multi-disciplinary collaboration in outbreak investigations.

- Describe the chain of command in the real-life disease outbreak.

- List 3 ways in which ICS assisted with communication during the real-life disease outbreak.

- Identify points in the real-life disease outbreak when ICS briefings occurred.

Module 1 Activities

Activities are an essential feature of the *ICS in Action* training program. The 3 activities in Module 1 support the overall learning objectives, enabling participants to explore the concepts presented in the **Video**. The activities are designed to be completed in small groups, but can also be completed individually. This **Workbook** includes instructions and answer keys for each activity.

Training Program Video Slides – Module 1

ICS in Action
Module 1

ICS for Public Health

What is The Incident Command System (ICS)?

- A standardized, on-scene, all-hazard incident management concept
- Part of the National Incident Management System (NIMS)
- Used for a variety of incidents and events:
  – disease outbreaks
  – terrorist attacks
  – natural disasters
  – parades or festivals

Benefits of ICS

- Organizes the response
- Easily allows for partnering with other agencies through a common management system
- Works for incidents of any size or type
- Is cost-effective
- Allows for prioritizing of resource allocation
- Provides documentation for reimbursement

Essential Features of ICS

- Interoperability
- Organized Authority
- Accountability

Complete Activity 1

- Please STOP the presentation
- Go to Activity 1 in your workbook.
- When you have finished, START the presentation to continue.

Organize to Respond

Incident Commander

- Sets incident objectives and has overall responsibility and authority for the incident
- Examples include: County Health Director, Environmental Health Supervisor, Public Health Nursing Director and others

Command Staff

Operations Section

Planning Section

Incident Action Plan

- Basic AP
  - Incident Objectives (Form 202)
  - Organization Assignment (Form 203)
  - Division Assignment (Form 204)
  - Communications Plan (Form 205 or existing agency plan)
  - Medical Plan (Form 206 or existing agency documentation)
- IAP can be written or verbal
  - Written provides good documentation and can be reviewed in future incidents

Logistics Section

Finance/Administration Section

Finance/Administration
- Time Unit
- Procurement Unit
- Compensation/Claims Unit
- Cost Unit
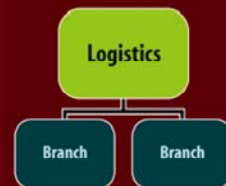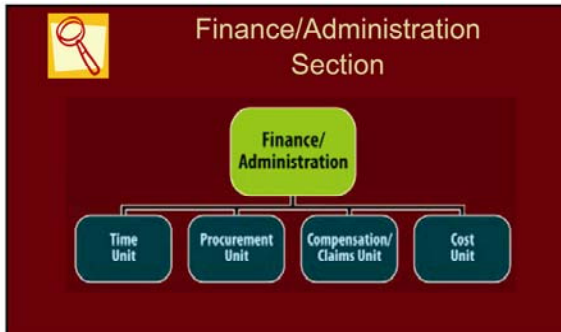
Complete Activity 2

- Please STOP the presentation
- Go to Activity 2 in your workbook.
- When you have finished, START the presentation to continue.

ICS Planning "P"
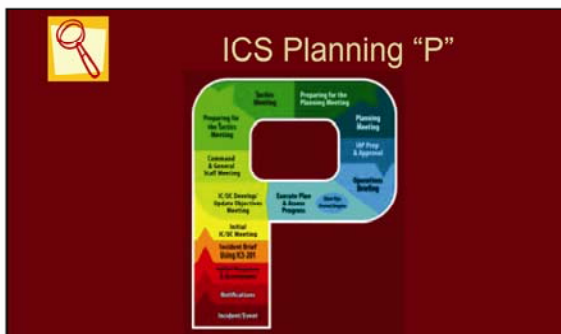
Summary

- ICS is a management system, not just an organizational chart

- Next: real-life example of ICS as it was used by local health departments during an outbreak of gastrointestinal illness.

Preview: Activity 3

- Next activity – observation checklist
- May want to STOP the presentation and go to Activity 3 in your workbook
- START the presentation to continue

Module 1 Conclusion

- STOP presentation to complete Activity 3.
- START the presentation to continue with Module 2.

Activity 1: Principles of ICS

Instructions

- Form groups of 2-3 people.

- Complete all parts of Activity 1 according to the directions below. (Refer to Module 1 slides as needed.)

- Compare your answers with the Answer Key on page 12.

- Restart the **Training Program Video** to continue Module 1.

Part A

There are several important steps in the process of establishing and implementing objectives. Put the following 6 steps in the correct order in the table below. (*Hint: Follow the logic shown in Figure 1*).

Figure 1. Objectives, Strategies and Tactics

FEMA Image
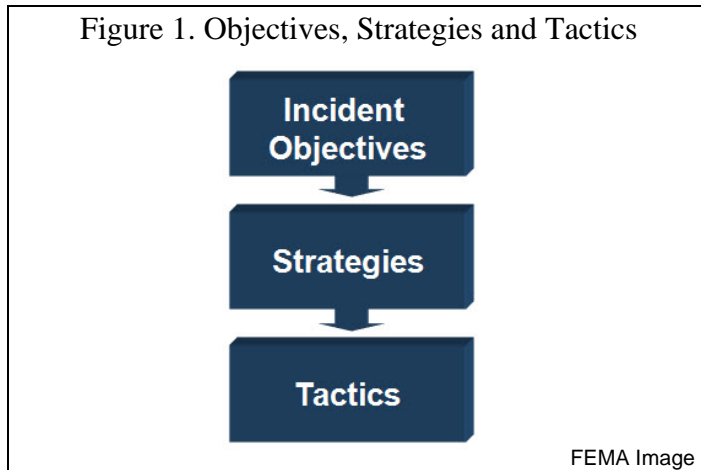
Steps for establishing and implementing objectives:
- Select appropriate strategy
- Understand agency policy
- Perform tactical direction
- Establish incident objectives
- Provide necessary follow-up
- Assess incident situation

Step 1	
Step 2	
Step 3	
Step 4	
Step 5	
Step 6	

Part B

Incident objectives are established based on which of the following sets of priorities?

    a. life saving, incident stabilization, property preservation

    b. life saving, cost preservation, incident stabilization

    c. speed, accuracy, effectiveness

Answer: _____

Part C

Which of the following scenarios shows a span of control that is NOT considered manageable according to ICS?

    a. *Scenario 1*: Robert is the Operations Section Chief. He is supervising Mary, Susan, Cheryl, and Thomas.

    b. *Scenario 2*: Lindsey leads the Planning Section. She is supervising Chris, Dave, Brett, Jackie, William, Jennifer, David, and Allison.

    c. *Scenario 3*: Julie is the Finance Section Chief. She has assigned Rachel, John, and Morgan to assist her.

Answer: _____

END OF ACTIVITY 1

Review the Answer Key on page 12.

Answer Key (Activity 1: Principles of ICS)

Part A

There are several important steps in the process of establishing and implementing objectives. Put the following 6 steps in the correct order in the table below.

Answer:

Management by objectives ensures that the actions and steps taken to resolve the incident are done so deliberately, without wasting time or energy, or endangering staff.

Step 1	*Understand agency policy* The laws, regulations, and policies of a particular agency will determine that agency's scope of authority and the objectives established. For example, when investigating a public health emergency (e.g., a potential outbreak of anthrax), it would be important to understand health department responsibilities to notify law enforcement agencies before establishing objectives in order to establish overall priorities.
Step 2	*Assess incident situation* Similarly, in an outbreak response, it would be important to gather information about reported symptoms and any lab results (assessing incident situation) before creating a case definition (a potential incident objective).
Step 3	*Establish incident objectives* Objectives are communicated throughout the entire ICS organization. It is important that they be clearly defined and measurable.
Step 4	*Select appropriate strategy* Since strategies are created directly from objectives, the step of selecting appropriate strategies needs to come after the step of establishing objectives. For example, if an objective for an outbreak is to establish a case definition, strategies used to accomplish that objective might include compiling clinical information and laboratory data about ill persons.
Step 5	*Perform tactical direction* Tactics are very specific actions that are used to advance strategies. For example, assigning a nurse to conduct phone interviews with persons who became ill at a restaurant would help in the strategy of compiling clinical information for an outbreak.
Step 6	*Provide necessary follow-up* Providing follow-up both completes the response and allows for determining what can be done better in the next response. It can provide feedback on specific objectives, strategies, and tactics.

Part B

Incident objectives are established based on which of the following sets of priorities?

Answer:

  a. life saving, incident stabilization, and property preservation

While the cost and speed of the response are certainly factors to consider, they are nowhere near as important as the 3 primary priorities: saving lives, stabilizing the incident, and preserving property.

Part C

Which of the following scenarios shows a span of control that is NOT considered manageable according to ICS?

Answer:

  b. *Scenario 2*: Lindsey leads the Planning Section. She is supervising Chris, Dave, Brett, Jackie, William, Jennifer, David, and Allison.

The tenets of Manageable Span of Control, which pertain to both people AND resources, limit control to between 3 and 7 people or resources. In this scenario, Lindsey is responsible for more people than she likely can manage effectively in an emergency situation.

END OF ANSWER KEY

Return to the Training Program Video.

Activity 2: ICS Organization and Structure

Instructions

- Form groups of 2-3 people.

- Review the ICS Organization Chart in Figure 2 below

- Complete all 3 parts of Activity 2.

- Compare your answers with the Answer Key on page 17.

- Restart the **Training Program Video** to continue Module 1.

Figure 2. ICS Organization Chart
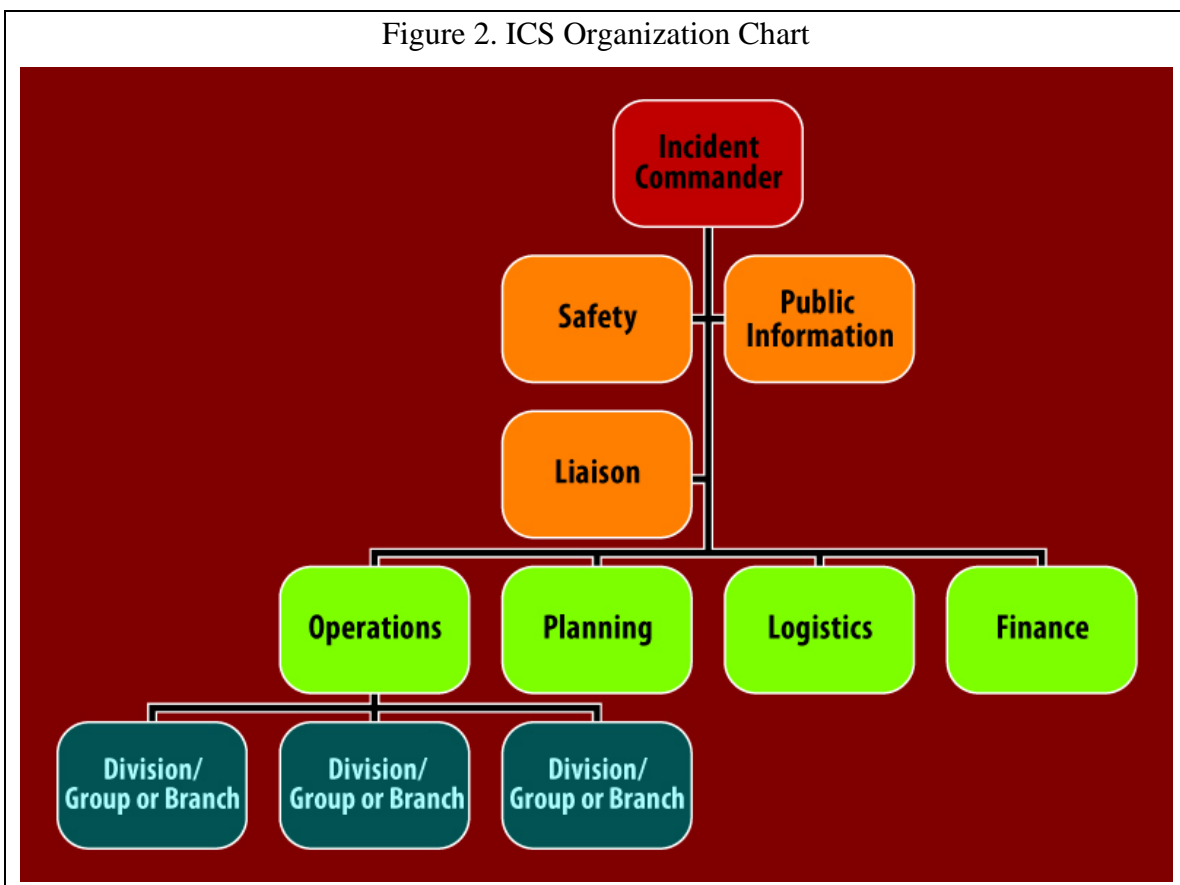
Part A

Identify which of the Command Staff would be responsible for the following outbreak investigation activities.

1. Issue a press release urging persons who ate at a particular restaurant to report to the health department

   Responsible Command Staff: _____

2. Set guidelines about personal protective equipment for environmental health personnel conducting field testing

   Responsible Command Staff: _____

3. Contact the local water and sewer authority regarding possible water contamination at one of the city treatment plants

   Responsible Command Staff: _____

Part B

Match the outbreak investigation activities listed below with the ICS section that could be responsible for performing that activity.

ICS Sections   Outbreak Investigation Activities

_____   Case investigation or mass prophylaxis

_____   Creating a situation report

_____   Allocating funds for purchase of vaccines

_____   Provision of food

Part C

Identify each of the following statements as true or false.

1. A health educator might be a good person to serve as the Public Information Officer.

             True   False

2. The Safety Officer position must be filled by the health department safety officer.

             True   False

END OF ACTIVITY 2

Review the Answer Key on page 17.

Answer Key (Activity 2: ICS Organization and Structure)

Part A

Identify which of the Command Staff would be responsible for the following outbreak investigation activities.

Answer:

1. Issue a press release urging persons who ate at a particular restaurant to report to the health department

   Responsible Command Staff: _____*Public Information Officer*_____

The Public Information Officer produces and releases all announcements, news releases, and educational material with approval of the Incident Commander.

2. Set guidelines about personal protective equipment for environmental health personnel conducting field testing

   Responsible Command Staff: _____*Safety Officer*_____

The Safety Officer approves or vetoes all incident activity on the basis of safety for responders.

3. Contact the local water and sewer authority regarding possible water contamination at one of the city treatment plants

   Responsible Command Staff: _____*Liaison Officer*_____

The Liaison Officer has responsibility for working with any other agencies that may be involved in the incident

Part B

Match the outbreak investigation activities listed below with the ICS section that could be responsible for performing that activity.

Answer:

ICS Sections	Outbreak Investigation Activities
Operations Section	Case investigation or mass prophylaxis
Planning Section	Creating a situation report
Finance/Administration Section	Allocating funds for purchase of vaccines
Logistics Section	Provision of food

The operations section is charged with performing the actions that will reach the incident objectives, such as locating additional cases or case investigation. The logistics section is charged with providing resources, such as food or other supplies, needed to achieve the objectives. The planning section carries out planning activities, tracks resources and collects or analyzes information. The finance and administration section (which may not be activated for all incidents) monitors costs and allocates funds necessary for the response.

Part C

Identify each of the following statements as true or false.

Answer:

1. A health educator might be a good person to serve as the Public Information Officer.

      (True)   False

The Public Information Officer's tasks might include producing and releasing all announcements, news releases, and educational material under approval from the Incident Commander. A health educator would be well-suited for these tasks, due to his/her experience creating and disseminating educational material. Ideally, a Public Information Officer should have specific training in working with the media.

2. The Safety Officer position must be filled by the health department safety officer.

          True   (False)

Others such as an Environmental Health Specialist, Emergency Management Technician (EMT), county safety officer, laboratory technician with safety training, or a training supervisor could also serve as the safety officer. During a response, you cannot assume that any particular individual will be available to assist. Therefore, ICS is set up so that many people could adequately fill each role, such as the safety officer. While it is crucial that the person acting as the safety officer have the requisite knowledge to ensure the safety of the responders, it does not have to be the health department safety officer.

END OF ANSWER KEY

Return to the Training Program Video.

Activity 3: Observation Checklist

Instructions

- Form groups of 2-3 people.

- Watch the video where public health professionals discuss their use of ICS in a real outbreak investigation. As you watch, *each person* should use the observation checklist below to keep track of the items he/she sees discussed.

- When the video segment is complete, compare your checklist with those of the other members of your group. Take a moment to discuss any missing answers.

- Compare your answers with the Answer Key on page 21.

- Restart the **Training Program Video** to continue Module 1.

Please check the boxes below when you hear any of the items discussed during the presentation of the real life disease outbreak.

☐ The name of the disease in the outbreak

☐ The number of jurisdictions involved in the outbreak

☐ At least 2 ICS roles assumed by staff from different public health agencies during the incident

☐ A benefit of including outside agencies at ICS briefings

☐ A way that communication during the outbreak was improved by using ICS

☐ A benefit of using ICS to define roles and responsibilities during the outbreak

☐ A benefit of using ICS for multi-jurisdictional incidents

☐ A lesson learned by the health agencies involved from using ICS during the outbreak

END OF ACTIVITY 2

Compare your answers with others in your group.
Then review the Answer Key on page 21.

Answer Key (Activity 3: Observation Checklist)

Answers:

☑ The name of the disease in the outbreak

This was a shigellosis outbreak.

☑ The number of jurisdictions involved in the outbreak

Three different jurisdictions (Health and Medical Division of the Eastern Band of the Cherokee Indians, Jackson County Department of Public Health, and Swain County Health Department) were involved in the incident. A regional public health team was also involved.

☑ At least 2 ICS roles assumed by staff from different public health agencies during the incident

The role of Incident Commander was assumed by the deputy director of the EBCI Health and Medical Division. An environmental health officer from Swain County served as the Safety Officer. The compliance officer for the EBCI Health and Medical Division served as the Public Information Officer. In addition, laboratory personnel from Jackson County provided surge capacity in the local laboratory at Cherokee Indian Hospital.

☑ A benefit of including outside agencies at ICS briefings

The response team had an easier time making decisions about daycare closings and fast food restaurant closings because key members of those organizations were present at the ICS briefings.

☑ A way that communication during the outbreak was improved by using ICS

All staff involved in outbreak management, including those at local public health agencies and other agencies were able to receive real-time information and updates through daily ICS briefings and ICS meetings. In addition, by using ICS, the 3 jurisdictions involved were able to give a single message out to the public rather than incomplete messages from several sources.

| ✓ | A benefit of using ICS to define roles and responsibilities during the outbreak |

The clearly defined roles in ICS reduced duplication and redundancy of work in the outbreak response and allowed for work to be done more quickly and efficiently.

| ✓ | A benefit of using ICS for multi-jurisdictional incidents |

Using ICS allowed the multiple jurisdictions involved in outbreak management to utilize a common structure that complemented, without overriding, the organization structures of individual agencies. Also, cooperating in a single ICS structure allowed the different jurisdictions to share resources easily.

| ✓ | A lesson learned by the health agencies involved from using ICS during the outbreak |

It was easier to manage a difficult outbreak using ICS thanks to the common language, shared resources, communication system, clearly-assigned roles and responsibilities.

END OF ANSWER KEY

Return to the Training Program Video.

Module 2: A Public Health Case Study

Overview

Module 2 of *ICS in Action*, "A Public Health Case Study," walks you through a case study scenario using ICS during a hypothetical disease outbreak investigation.

Total time: 80 minutes

Module 2 Learning Objectives

The learning objectives for Module 2 are tied to the overall learning objectives for the training program. Specific objectives for Module 2 are to:

- Complete an Incident Briefing Form (ICS Form 201).

- Use appropriate ICS terminology to describe the roles of public health staff in an outbreak investigation.

- Assign staff to roles in an ICS organizational chart.

- Given a list of steps in the Planning "P," arrange activities in the appropriate order.

- Match strategies and tactics to corresponding incident objectives.

- Determine points in the outbreak response when briefings and demobilization should occur.

- List the 4 main elements of an Incident Action Plan and describe which ICS forms address each element.

- Given the list of typical roles in ICS, identify people who would present specific items during an operational briefing.

Module 2 Activities

Activities are an essential feature of the *ICS in Action* training program. The 4 activities in Module 2 support the overall learning objectives, enabling participants to explore the concepts presented in the **Video**. The activities are designed to be completed in small groups, but can also be completed individually. This **Workbook** includes instructions and answer keys for each activity. At the start of each activity, you will find background ICS information (📚) and/or case study details (🔍) designed to aid you as you complete the activities.

Training Program Video Slides – Module 2

ICS in Action
Module 2

A Public Health
Case Study

ICS in Public Health
- Organize to respond using ICS
- Planning "P" includes steps in ICS

About the Case Study
- Details about the case study scenario
- General information about ICS
- Workbook activities

Initial Notification
Monday, Feb 16th, 12:00 p.m.
- Nancy, the nursing director, receives phone call from Richard at Texler College Student Health Services

Summary of Initial Information
- Probable gastrointestinal disease outbreak
  - 11 ill students, 1 hospitalized; all presented in past 30 hours
  - Usual number of students with GI complaints are 2-3 per day
  - All with vomiting and/or diarrhea
  - Some with abdominal cramps and fever
  - Eat at main cafeteria; other exposures unknown
  - Student health recommended hydration and over-the-counter diarrheal medication

Summary of Initial Information

Nancy's Actions:
- Requested contact info for all cases
- Recommended collecting stool from some cases

Planning "P"

Initial Response & Assessment

Taking Command

- First person who receives notification about a possible outbreak is the Incident Commander

- Incident Commander is responsible for incident until a transfer of command to a new Incident Commander

Incident Size-Up

- What is the immediate problem?
- Is there an immediate threat to health or safety?
- Are there injuries or illness that require immediate care or action?
- Are there measures that need to be taken immediately to prevent further harm?
- What resources are necessary right now?

ICS Form 201: Incident Briefing

- Incident Name, Date, and Time
- Map Sketch
  - In public health, can be used for incident description
- Summary of Current Actions
  - Actions that have been taken
  - Objectives
- Current Organization (aka ICS organizational chart)
- Resources Summary

Preparing for Team Meeting

- Nancy prepares to meet with her team by:
  - Completing ICS Form 201 (Incident Briefing Form)
  - Deciding which staff members will fill general and command roles in ICS

Preview: Activity 4

- Review Incident Briefing Form (Form 201)

- Complete missing sections of Incident Briefing Form

- Assign people to roles in ICS organizational chart
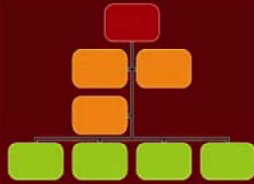
Complete Activity 4

- Please STOP the presentation.
- Go to Activity 4 in your workbook and complete Parts A and B.
- When you have finished, START the presentation to continue.

Incident Brief Using ICS-201

IC/UC Develop/ Update Objectives Meeting

Initial IC/UC Meeting

Initial Command Meeting Monday, 3:00 p.m.

- Nancy briefs the team using the Incident Briefing Form (ICS 201)

- Nancy tells everyone their role in ICS using organizational chart

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Management by Objectives

- Objectives are:
  – Determined by Incident Commander
  – Usually limited to 5 or fewer
  – SMART
- Operational Period
  – Determined by Incident Commander
  – Time period to achieve objectives

Incident Objectives: Form 202

- Documentation of incident objectives
- Form also includes other info
  – Incident name and date
  – Operational period
  – Weather forecast and safety message
- Attachments may include:
  – Organization and assignment lists
  – Case definitions
  – Questionnaires

ICS Form 202

ICS Form 202			
INCIDENT OBJECTIVES	**1. INCIDENT NAME** Texler College GI 09	**2. DATE** 2/16/09	**3. TIME**
4. OPERATIONAL PERIOD (DATE/TIME) 2/17/09 - 0900			

5. GENERAL CONTROL OBJECTIVES FOR THE INCIDENT (INCLUDE ALTERNATIVES)
1. By next operational briefing (0900), get preliminary or final lab results on at least one suspect case.
2. By 0900, identify all suspect cases.
3. By 0900, initiate environmental investigation of possible sources of outbreak.

Tactics Meeting

Tactics Meeting

- Run by Operations Section Chief
- Identify strategies…
  - Using case definition, search for additional suspect cases by 0900 tomorrow.
- …and tactics

Tactics for GI Outbreak Investigation

- Strategy: Using case definition, search for additional suspect cases by 0900 tomorrow.
- Tactics
  - Nurse A will send blast fax with case definition to area health care providers to identify additional suspect cases
  - PIO will write a message to Texler students, faculty, and staff asking them to visit Student Health Services or call health department if they meet case definition

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Preview: Activity 5
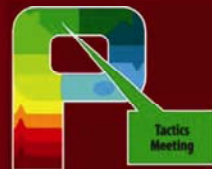
- Match each strategy and tactic with the correct objective.

Objectives and Strategies	**Tactics** List number of tactic(s) matching each strategy
1. By next operational briefing (0900), get preliminary or final lab results on at least one suspect case.	
Strategy:	_____
Strategy:	_____

Complete Activity 5

- Please STOP the presentation
- Go to Activity 5 in your workbook.
- When you have finished, START the presentation to continue.

Tactics Meeting

Update: Monday, 4:00 p.m.

- Rebecca (Investigation and Surveillance Group) is conducting interviews with suspect cases
- Ramon (Liaison Officer) is talking with the lab at Hornbeck General Hospital
- Anya (Public Information Officer) is preparing an email message to be sent to Texler students, faculty and staff

Preparing for the Planning Meeting

Planning

- Planning Process:
  - Led by Planning Section Chief
  - Informed by Tactics Meeting
- Planning Activities:
  - Monitor situation status and develop situation report
  - Create Incident Action Plan (IAP)
  - Think ahead to next operational period

Planning Meeting
Monday, 6:00 p.m.

- Kendra, Planning Section Chief, runs this meeting
- Team reviews and finalizes objectives, strategies, and tactics in the Incident Action Plan (IAP)
- Team identifies resource requirements

IAP Prep & Approval

Preview: Activity 6

- List the part of the IAP where each of the 4 key elements is addressed.
- Choose the ICS position responsible for each IAP section

Key Element	IAP Section	IAP Position Responsible
WHAT must be done		
WHO is responsible		
HOW information will be communicated		
WHAT should be done if someone is injured		

Complete Activity 6

- Please STOP the presentation.
- Go to Activity 6 in your workbook.
- When you have finished, START the presentation continue.

IAP Prep & Approval

Update
Tuesday, Feb 17th, 8:30 a.m.

- 14 suspect cases
- 4 have been interviewed
- Lab results expected today for hospitalized student
- Case definition provided to health care providers, college community

Operations Briefing

Operational Period Briefing
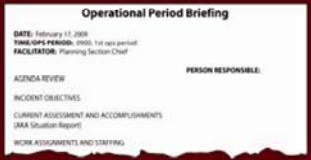
- Occurs at the start of each operational period
- Covers the upcoming operational period
- IAP is presented
- Should be brief (~10-15 min)
- Facilitated by Planning Section Chief
- All command and general staff must attend

Preview: Activity 7

- Identify person responsible for each section of briefing

- Match each agenda item with statement

Operational Period Briefing

DATE: February 17, 2009
TIME/OPS PERIOD: 0900, 1st ops period
FACILITATOR: Planning Section Chief

AGENDA REVIEW

PERSON RESPONSIBLE:

INCIDENT OBJECTIVES

CURRENT ASSESSMENT AND ACCOMPLISHMENTS
(AKA Situation Report)

WORK ASSIGNMENTS AND STAFFING

Complete Activity 7

- Please STOP the presentation.
- Go to Activity 7 in your workbook.
- When you have finished, START the presentation to continue.

Operations Briefing

Investigation Progress
Tuesday, Feb 17th

- Identified the pathogen as norovirus
- Created case definition
- Sent email notice to college students, faculty and staff
- Conducted interviews with 10 of 14 original cases
- Identified 4 additional cases (18 total)
- Submitted 3 stool specimens for lab testing
- Visited main cafeteria

Ongoing Investigation
February 18-24th

- Held Operational Period Briefings daily for one week
- Updated objectives based on lab findings of norovirus in stool samples
- Identified one additional case through continued surveillance
- Collected environmental samples during cafeteria site visit
- Discovered that two cafeteria staff had been ill with diarrheal illness

Outbreak Subsides
February 25th

- New cases stopped occurring
- Norovirus outbreak traced to cafeteria worker
- Cafeteria closed and disinfected
- Implemented appropriate control measures

Outbreak Summary

- 21 total cases
- Food safety practices improved in campus cafeterias
- ICS structure led to organized outbreak response
- ICS forms are documentation of response

Summary – Benefits of ICS

- Organizes the response
- Easily allows for partnering with other agencies through a common management system
- Works for incidents of any size or type
- Is cost-effective
- Allows for prioritizing of resource allocation
- Provides documentation for reimbursement

Video Footage

- Martha Salyers, PHRST 6

Learn More…

- ICS tools available on Web site
- NC Center for Public Health Preparedness Web site: http://nccphp.sph.unc.edu/
- Select "Ready to Use Training Packages" from the menu.

Credits

- Developed by the North Carolina Center for Public Health Preparedness (NCCPHP) at the University of North Carolina's Gillings School of Global Public Health in partnership with North Carolina Public Health Regional Surveillance Team 6.

- NCCPHP is part of a national network of Centers for Public Health Preparedness funded by the Centers for Disease Control and Prevention through Grant/Cooperative Agreement U90/CCU424255.

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  Jackson County Department of Public Health

- Susan Leading Fox, Deputy Director
  Health & Medical Division
  Eastern Band of Cherokee Indians

- Linda White, Director
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Disclaimer

- The materials contained in this presentation were obtained from a variety of sources. They are provided solely for educational purposes and are to be used as guidelines and reference materials only. Due to possible changes and updates after publication of this presentation, viewers are encouraged to obtain the most current information from additional sources when implementing programs.

Activity 4A: Incident Briefing Form

Instructions

- Form groups of 2-3 people.

- Review the ICS information ( ) and case study details ( ) below.

- Complete the following sections of the Incident Briefing Form on pages 36-37 using the information gathered during the incident size-up.
  - Section 4: Map Sketch
  - Section 6: Summary of Current Actions
  - Section 7: Current Organization (*Hint:* Not every component of this section may be completed at this time.)

- Compare your answers with the Answer Key on page 38.

- Begin Activity 4B on page 40.

ICS Form 201

ICS Form 201 (Incident Briefing) includes the following information:

1. Incident Name

2. Date Prepared

3. Time Prepared

4. Map Sketch
   - In public health, can be used for a brief incident description
   - Showing a map of cases might be useful depending on the type of outbreak (See Figure 3.)

5. Prepared by (Name and Position)

6. Summary of Current Actions
   - Actions that have been taken
   - Current objectives (often global objectives based on initial steps of outbreak investigation)

7. Current Organization
   - ICS organizational chart

8. Resources Summary

Figure 3. John Snow's map of London cholera outbreak, 1854
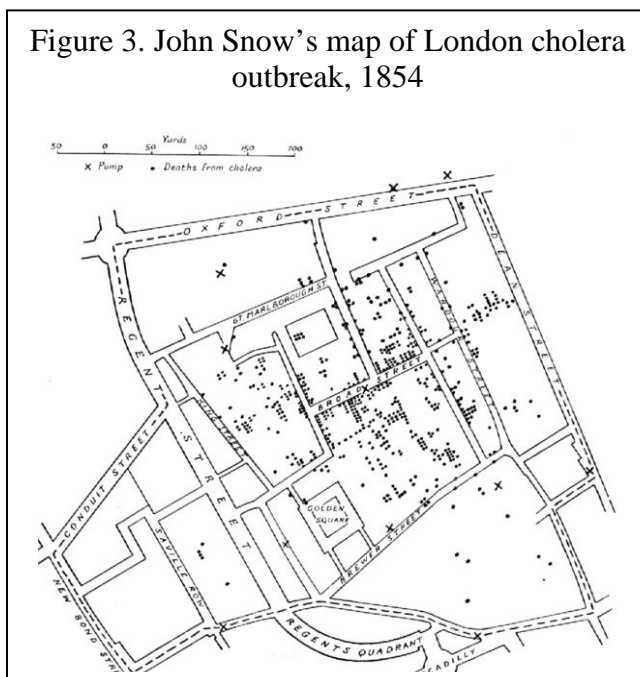
Benefits of using Form 201:

- Documents the initial outbreak response

- Makes it easy for the initial responder to brief the health director or other superiors

- Can be used as reference for similar outbreaks in the future

Information from Size-Up

- Probable gastrointestinal disease outbreak at Texler College with 11 ill students

- Health department has 4 communicable disease nurses (although some must work in clinics) and 2 environmental health specialists

- Midterm exams at Texler College occur in 2 weeks

- Nurse at Student Health Services called health department at noon on 2/16/08; his name is Richard and his work phone number is 333-333-3333

- Texler usually sees 2-3 students with GI illness each day

- Local health department has not dealt with a GI outbreak in the past year

- All ill students have vomiting and/or diarrhea, some have abdominal cramps and fever

- Texler College has approximately 2,500 students and 300 faculty and staff; most students (~2,000) live on campus

- One student was sent to Hornbeck General Hospital for further evaluation

- Nancy, the nursing supervisor at the health department, has assumed Incident Command, called Hornbeck General Hospital to get test results on the affected student, and scheduled a 3 p.m. meeting of the outbreak response team; Nancy's cell phone number is 333-222-4444

- The health director is on vacation

- Nancy requested a list of affected students with names and contact information from Texler Student Health Services

- Using information gathered during the incident size-up and the steps of an outbreak investigation, Nancy developed some initial incident objectives:
  – Determine the existence of an outbreak
  – Verify diagnosis
  – Create working case definition
  – Identify cases

Incident Briefing Form (Form 201)

Incident Briefing	1. Incident Name **Texler College GI 09**	2. Date 02/16/09	3. Time 1330

4. Map Sketch

5. Current Organization

```
                          ┌──────────────┐
                          │ Incident     │
                          │ Commander    │
                          └──────┬───────┘
                                 │
            ┌────────────┐       │     ┌──────────────────┐
            │ Safety     ├───────┼─────┤ Public Information│
            │            │       │     │ Officer          │
            └────────────┘       │     └──────────────────┘
                                 │
            ┌────────────┐       │
            │ Liaison    ├───────┤
            │            │       │
            └────────────┘       │
              ┌──────────┬───────┴───────┬──────────────┐
        ┌─────┴─────┐ ┌──┴──────┐ ┌──────┴────┐ ┌───────┴───┐
        │ Operations│ │ Planning│ │ Logistics │ │ Finance   │
        └─────┬─────┘ └─────────┘ └───────────┘ └───────────┘
     ┌────────┼────────┐
┌────┴───┐ ┌──┴─────┐ ┌┴───────┐
│Division│ │Division│ │Division│
└────────┘ └────────┘ └────────┘
```

Page 1 of 2	6 Prepared by (Name and Position): Nancy Henderson, Nursing Supervisor

6. Resource Summary				
Resources Ordered	Resource Identification	ETA	On Scene	Location/ Assignment
Local Outbreak Response Team		1500		Rm 225

7. Summary of Current Actions

Page 2 of 2	

END OF ACTIVITY 4A

Review the Answer Key on page 38.

Answer Key (Activity 4A: Incident Briefing Form)

Answer:

Incident Briefing	1. Incident Name **Texler College GI 09**	2. Date 02/16/09	3. Time 1330
	4. Map Sketch		

- *Texler College Student Health Services notified health department of possible outbreak of gastrointestinal illness at 1200 (2/16/09).*

- *11 students have reported symptoms of nausea and vomiting. Some have also reported abdominal cramps and fever.*

- *1 student was sent to Hornbeck General Medical Center for further evaluation.*

- *College has approximately 2,500 students and 300 faculty and staff.*

5. Current Organization

IC – Nursing Supervisor, Nancy Henderson, 333-222-4444 (cell)

Cooperating Agencies

- *Texler College Student Health Services, Richard, Nurse, 333-333-3333 (cell)*

- *Hornbeck General Hospital, Judy, Infection Control Nurse, 333-400-4000*

Org chart may be incomplete when Form 201 is filled out. Also, at this initial meeting the IC can enter additional staff and add resources as they are identified.

Incident Commander: *Nancy*

Safety

Public Information Officer

Liaison

Operations — Planning — Logistics — Finance

Division — Division — Division

Page 1 of 2	6 Prepared by (Name and Position): Nancy Henderson, Nursing Supervisor

ICS in Action – Participant Workbook – Activity 4A Answer Key

6. Resource Summary				
Resources Ordered	Resource Identification	ETA	On Scene	Location/ Assignment
Local Outbreak Response Team		1500		Rm 225

It's okay to have only one resource requested at the time this form is completed. Other resources can be requested later.

7. Summary of Current Actions

Current Objectives and Actions:

- *Determine that there is an outbreak*
  - *Obtain information on symptoms, numbers affected, and baseline number of persons presenting with similar symptoms from Texler Student Health Center*

- *Verify diagnosis*
  - *Obtain test results on affected student from Hornbeck General Hospital*

- *Create working case definition*
  - *Use symptoms, person, place and time course to create working case definition*

- *Identify cases*
  - *Request names and contact information for suspect cases from Texler Student Health Services*

Objectives can be global and based on initial steps of an outbreak investigation.

Page 2 of 2

END OF ANSWER KEY

Continue to Activity 4B on the next page.

Activity 4B: Organizational Chart

Instructions

- Form groups of 2-3 people.

- Review the case study details ( ) below.

- Read the specific directions to complete the ICS Organizational Chart on page 42.

  - Step 1: Using the list of roles provided on page 42, write the name of the ICS role in each box of the blank Organizational Chart.

  - Step 2: Assign each of the employees listed in the case study details ( ) on page 41 to a position in the chart. (*Hint:* An employee can fill multiple positions if those positions report to the same supervisor and would not comprise an unmanageable workload.)

  - Step 3 (Optional): Write a brief justification for the role assignments you chose.

- Compare your answers with the Answer Key on page 44.

- Restart the **Training Program Video** to continue Module 2.
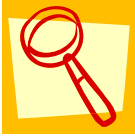
 Local Health Department Staff

The following is a list of available employees in your health department. You will assign these employees to fill the roles in the ICS chart on the next page.

- Nancy, Nursing Supervisor
  − 26 years public health experience. Trained in ICS 100, 200, 300, 400, 700, and 800. Has used ICS in several incidents, including a large multi-agency response.

- Rebecca, Communicable Disease Nurse
  − 5 years public health experience. Trained in ICS 100 but has never used ICS in an actual event.

- Kendra, Communicable Disease Nurse
  − 9 years public health experience. Trained in ICS 100, 200, and 700. Has used ICS in 1 incident. Very organized and thorough, always completes work on time. Has experience developing communicable disease reports, analyzing data, and planning community interventions.

- Anya, Health Educator
  − 2 years public health experience. No ICS training. Currently provides health education to health department patients and develops educational materials for the general public.

- Ed, Environmental Health Supervisor
  − 15 years public health experience. Trained in ICS 100, 200, 300, 400, 700, and 800. Has used ICS in several past incidents. Familiar with tasks necessary to control an outbreak.

- Diane, Environmental Health Specialist
  − Less than 1 year public health experience. No ICS training or experience. Skilled at collecting environmental samples.

- Ramon, Preparedness Coordinator
  − 4 years public health experience. Trained in ICS 100 and 200. Has used ICS in 1 incident. Knows many community partners from planning for pandemic influenza.

- Natalie, Administrative Assistant
  − 10 years working in local health department. Trained in ICS 100. Strong knowledge of internal health department operations. Familiar with vendors and purchasing supplies.

Organizational Chart

```
                    ┌─────────────────┐
                    │ 1. ICS Role:    │
                    │                 │
                    │ Name:           │
                    └─────────────────┘
┌─────────────────┐                   ┌─────────────────┐
│ 2. ICS Role:    │                   │ 3. ICS Role:    │
│                 │                   │                 │
│ Name:           │                   │ Name:           │
└─────────────────┘                   └─────────────────┘
                                      ┌─────────────────┐
                                      │ 4. ICS Role:    │
                                      │                 │
                                      │ Name:           │
                                      └─────────────────┘
```

5. ICS Role: Name:	6. ICS Role: Name:	7. ICS Role: Name:	8. ICS Role: Name:

```
     ┌─────────────────┐
     │ 9. ICS Role:    │
     │                 │
     │ Name:           │
     └─────────────────┘
     ┌─────────────────┐
     │ 10. ICS Role:   │
     │                 │
     │ Name:           │
     └─────────────────┘
```
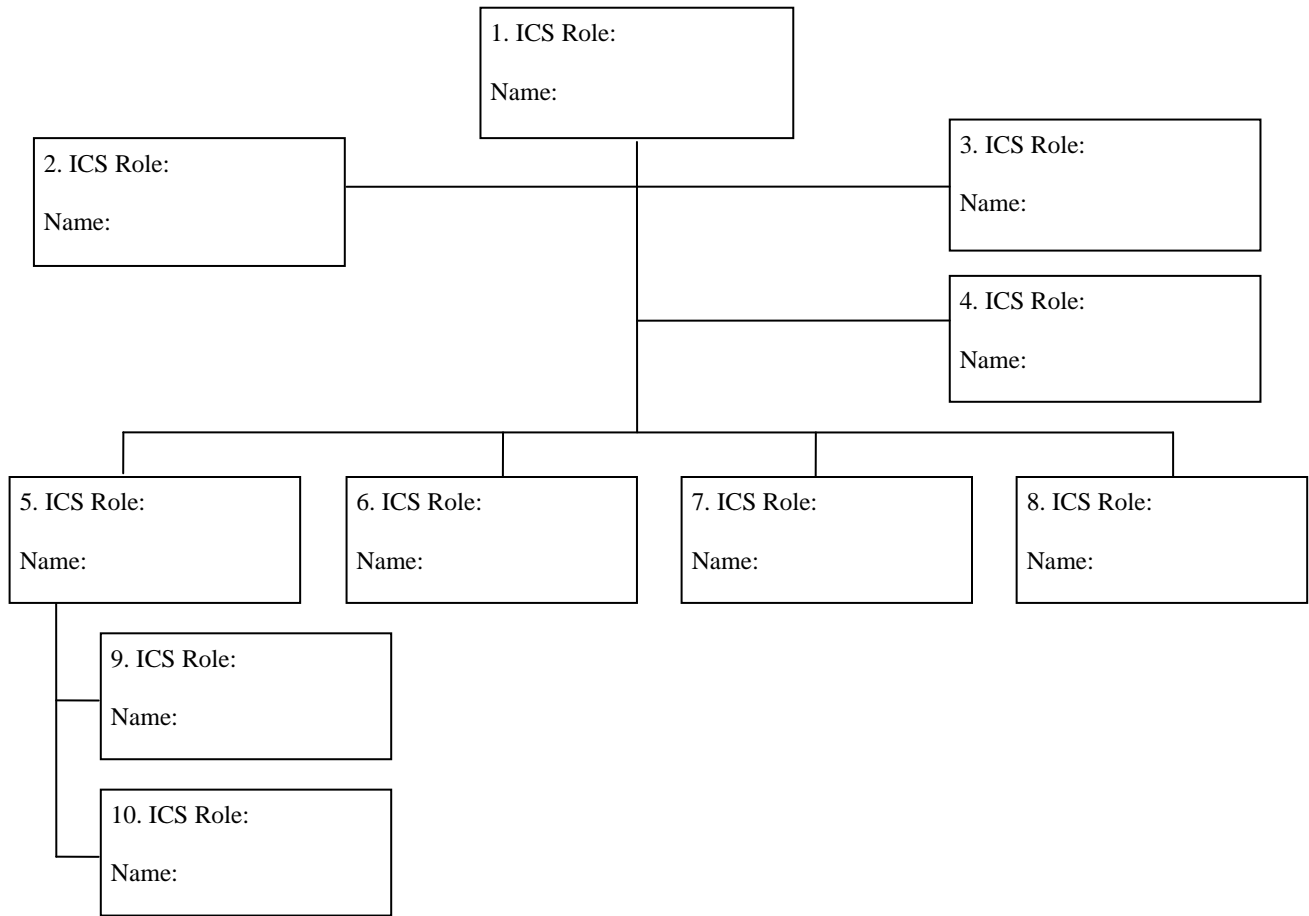
Use the following roles to complete the ICS Organizational Chart above.
- Operations Section Chief
- Liaison Officer
- Logistics Section Chief
- Incident Commander
- Planning Section Chief
- Safety Officer
- Public Information Officer
- Finance and Administration Section Chief
- Clinical Investigation Group
- Lab Group
- Environmental Investigation Group

Brief Justification for Role Assignments (Optional)

Write a brief justification for the role assignments you chose.
Ex: Joe was chosen for Planning Chief because of his ICS training and experience and his responsibility for planning community interventions.

1. _____

    _____

2. _____

    _____

3. _____

    _____

4. _____

    _____

5. _____

    _____

6. _____

    _____

7. _____

    _____

8. _____

    _____

9. _____

    _____

10. _____

    _____

END OF ACTIVITY 4B

Review the Answer Key on page 44.

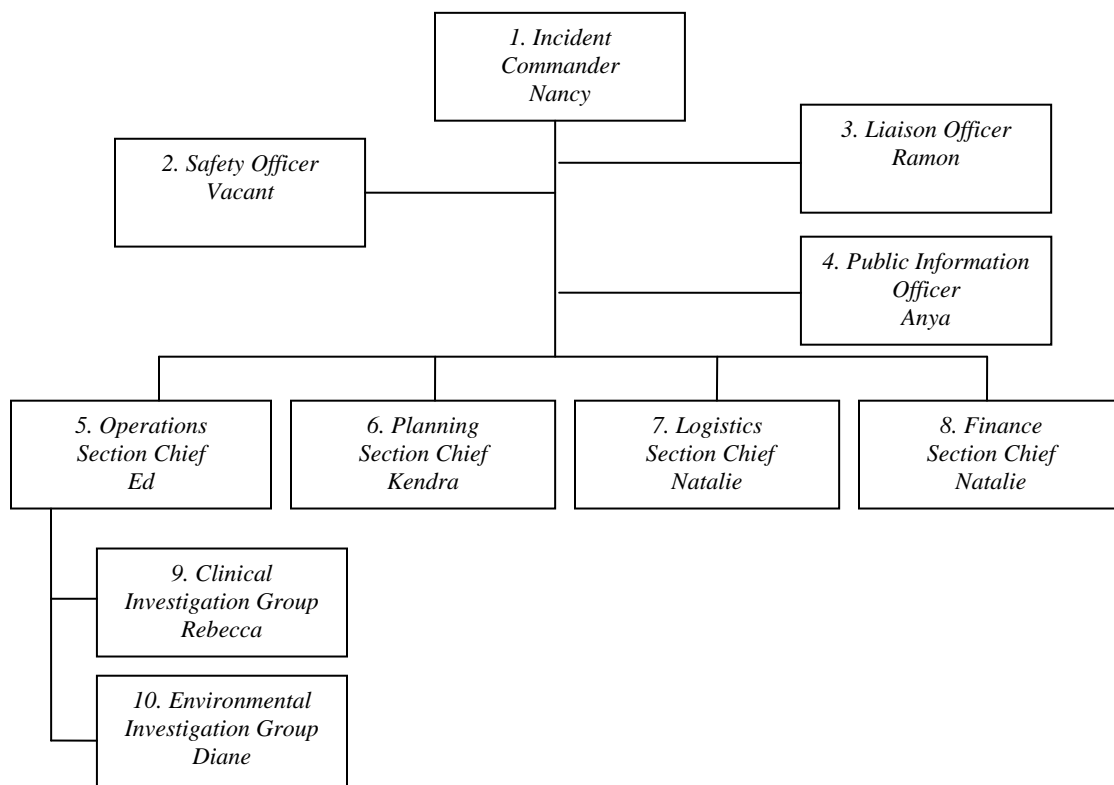# Answer Key (Activity 4B: Organizational Chart)

Example Organizational Chart:

The chart below is one possible structure to respond to the GI outbreak. However, it is certainly not the only option. One useful feature of ICS is its scalability, so the structure can be smaller or larger depending on the situation. The structure should be reassessed during each operational period.

Roles may change from one response to another. For example, if the health director were to be available as Incident Commander during the next outbreak, Nancy may be the Operations or Planning Section Chief, and other positions would be adjusted accordingly.

Note that there is no separate Laboratory Group in the Operations Section at this point, partly because this small health department does not have dedicated laboratory personnel. Laboratory duties will be handled by the Environmental Investigation Group. However, if the outbreak grows to exceed laboratory capacity, the health department may expand the organizational chart to include a Laboratory Group and seek lab staff from a neighboring health department.

```
                    ┌─────────────────┐
                    │  1. Incident    │
                    │   Commander     │
                    │     Nancy       │
                    └─────────────────┘
  ┌──────────────┐                        ┌──────────────────┐
  │ 2. Safety    │                        │ 3. Liaison       │
  │   Officer    │                        │   Officer        │
  │   Vacant     │                        │   Ramon          │
  └──────────────┘                        └──────────────────┘
                                          ┌──────────────────┐
                                          │ 4. Public        │
                                          │  Information     │
                                          │   Officer        │
                                          │     Anya         │
                                          └──────────────────┘
 ┌───────────┐ ┌───────────┐ ┌───────────┐ ┌───────────┐
 │ 5. Oper.  │ │ 6. Plan.  │ │ 7. Logist.│ │ 8. Finance│
 │ Section   │ │ Section   │ │ Section   │ │ Section   │
 │ Chief Ed  │ │Chief Kendra│ │Chief Natalie││Chief Natalie│
 └───────────┘ └───────────┘ └───────────┘ └───────────┘
    │ ┌──────────────────┐
    ├─│ 9. Clinical      │
    │ │ Investigation    │
    │ │ Group Rebecca    │
    │ └──────────────────┘
    │ ┌──────────────────┐
    └─│ 10. Environmental│
      │ Investigation    │
      │ Group Diane      │
      └──────────────────┘
```

1. Incident Commander Nancy

2. Safety Officer Vacant

3. Liaison Officer Ramon

4. Public Information Officer Anya

5. Operations Section Chief Ed

6. Planning Section Chief Kendra

7. Logistics Section Chief Natalie

8. Finance Section Chief Natalie

9. Clinical Investigation Group Rebecca

10. Environmental Investigation Group Diane

Example Brief Justifications for Role Assignments:

1. *Nancy was chosen as the Incident Commander because she has the most experience using ICS and is the senior person available while the health director is on vacation.*

2. *The position of Safety Officer is not critical at this time. Someone will be assigned to the position if the situation merits.*

3. *Ramon is an ideal liaison officer because he already knows and has worked with a number of community partners.*

4. *Anya is a good match for the Public Information Officer position based on her work as a health educator.*

5. *Ed is a good choice for Operations Section Chief because he has a great deal of experience with ICS and public health investigations generally.*

6. *Kendra was chosen as the Planning Section Chief because she is well-organized and has some experience with ICS.*

7. *Natalie is the person with the best knowledge of internal health department processes. As Logistics Section Chief, she can be sure the necessary supplies and resources are available when needed.*

8. *Natalie can also serve as Finance Section Chief. Because the Finance Section Chief and the Logistics Section Chief both report to the Incident Commander, having Natalie serve in both positions does not violate unity of command (everyone reports to only 1 person). For an incident of this size, the FSC will not have a large role so it is okay for Natalie to "wear 2 hats."*

9. *As a communicable disease nurse, Rebecca is a natural choice for the Clinical Investigation Group. Note that group supervisors have been assigned proactively because it is possible they will have additional staff working under them if the outbreak spreads.*

10. *Diane can work on the Environmental Investigation, especially because she will be supervised by Ed. Her skill at collecting environmental samples will be useful in this position, especially because there is no separate Laboratory Group at this point. If the laboratory duties become unmanageable, the health department may ask a neighboring health department for laboratory assistance.*

END OF ANSWER KEY

Return to the Training Program Video.

Activity 5: Strategies and Tactics

Instructions

- Form groups of 2-3 people.
- Review the ICS information ( ) and case study details ( ).
- Read the specific directions and complete all parts of Activity 5.
- Compare your answers with the Answer Key on page 49.
- Restart the **Training Program Video** to continue Module 2.

Management by Objectives

Managing an outbreak using clear objectives is a key concept in ICS. Management by objectives assures that all responders maintain perspective on the incident and keep from becoming overwhelmed by the details.

Objectives are:
- Determined by the Incident Commander
- Designed for one operational period
- Simple and attainable
- Recorded in ICS Form 202
- Reassessed and updated during each operational period

The Operations Section decides how to achieve objectives in the Tactics Meeting. Objectives are broken down into strategies and tactics. Tactics are very specific actions that can be assigned to one person or group.

Objectives

The objectives identified by Nancy and approved by the team are:

1. By next operational briefing (0900), get preliminary or final lab results on at least one suspect case.

2. By 0900, identify all current suspect cases (may be carried over to next operational period).

3. By 0900, initiate environmental investigation of possible sources of outbreak.

Part A

Read the list of strategies provided below. Match each strategy with the corresponding objective by writing the strategy under to the appropriate objective. Each objective can have multiple strategies, but each strategy only fits under 1 objective.

Strategies

a. Identify possible common sources of exposure among suspect cases.

b. Determine which suspect cases have submitted specimens for testing.

c. Using case definition, search for additional suspect cases.

d. Using case definition, classify known suspect cases.

e. Determine if hospital lab testing is completed.

Objectives   **Tactics**

1. By next operational briefing (0900), get preliminary or final
    lab results on at least one suspect case.

    Strategy: _____

    _____   _____

    Strategy: _____

    _____   _____   _____

2. By 0900, identify all current suspect cases.

    Strategy: _____

    _____   _____   _____

    Strategy: _____

    _____   _____

3. By 0900, initiate environmental investigation of possible
    sources of outbreak.

    Strategy: _____

    _____   _____

Part B

Read the list of tactics provided below. Next to each strategy listed in Part A above, write the number of the tactic(s) that fits within each strategy. Each strategy can have multiple tactics, but each tactic only fits within 1 strategy.

Tactics

1. Ramon will call Hornbeck General Hospital Laboratory to determine status of lab testing for affected student.

2. Rebecca will send blast fax to area health care providers with case definition to identify additional suspect cases.

3. Rebecca will call Student Health Services for names, contact information, and symptoms of suspect cases.

4. Rebecca will contact Student Health Services to ask whose specimens have been collected, where tests are being conducted, and when results will be available.

5. Anya will write a message asking Texler students, faculty, and staff to visit Student Health Services or call health department if they meet the case definition.

6. Environmental Health Group will interview 3-5 suspect cases to obtain a 7-day food history and list of activities.

7. Ramon will obtain copy of hospital lab result if available.

END OF ACTIVITY 2

Review the Answer Key on page 49.

Answer Key (Activity 5: Strategies and Tactics)

Part A

Match each strategy with the corresponding objective by writing the strategy under to the appropriate objective.

Answers:

Objectives   **Tactics**

1. By next operational briefing (0900), get preliminary or final lab results on at least one suspect case.

> **Strategy**: b. Determine which suspect cases have submitted specimens for testing.   _____

> *Before getting lab results, it is necessary to determine which suspect cases have submitted specimens for testing.*

> **Strategy**: e. Determine if hospital lab testing is completed.   _____   _____

> *To find out if results are available yet, you first need to determine if hospital lab testing is completed.*

2. By 0900, identify all current suspect cases.

> **Strategy**: c. Using case definition, search for additional suspect cases.   _____   _____

> *After creating a case definition, you must search for additional cases that match the definition.*

> **Strategy**: d. Using case definition, classify known suspect cases.   _____

> *An initial step is to determine whether known cases fit the case definition.*

3. By 0900, initiate environmental investigation of possible sources of outbreak.

> **Strategy**: a. Identify possible common sources of exposure among suspect cases   _____

> *The first step in the environmental investigation is to find common sources of exposure among the suspect cases.*

Part B

Next to each strategy, write the number of the tactic(s) that fits within each strategy.

Answers:

Objectives	Tactics
1. By next operational briefing (0900), get preliminary or final lab results on at least one suspect case.	
Strategy: Determine which suspect cases have submitted specimens for testing.	4. Rebecca will contact Student Health Services to ask whose specimens have been collected, where tests are being conducted, and when results will be available
	Contacting Student Health Services is a good way to get information about whose specimens have been collected.
Strategy: Determine if hospital lab testing is completed.	1. Ramon will call Hornbeck General Hospital Laboratory to determine status of lab testing for affected student
	Calling the hospital laboratory is the first step to determine if testing is complete.
	7. Ramon will obtain copy of hospital lab result if available.
	Getting a copy of lab results is a logical next step.

2. By 0900, identify all current suspect cases.

Strategy: Using case definition, search for additional suspect cases.	2. Rebecca will send blast fax to area health care providers with case definition to identify additional suspect cases
	Faxing the case definition to healthcare providers is an easy first step to find additional cases.
	5. Anya will write a message asking Texler students, faculty, and staff to visit Student Health Services or call health department if they meet case definition
	Since the outbreak is on campus, it makes sense to ask students and faculty to come to Student Health Services if they meet the case definition.
Strategy: Using case definition, classify known suspect cases.	3. Rebecca will call Student Health Services for names, contact information and symptoms of suspect cases
	Student Health Services should have the names and contact information for the known suspect cases.

3. By 0900, initiate environmental investigation of possible sources of outbreak.

Strategy: Identify possible common sources of exposure among suspect cases	6. Environmental Health Group will interview 3-5 suspect cases to obtain 7-day food history and list of activities
	A good way to identify common sources of exposure is to conduct some initial interviews with suspect cases.

END OF ANSWER KEY

Return to the Training Program Video.

Activity 6: Incident Action Plan (IAP)

Instructions

- Form groups of 2-3 people.

- Review the ICS information ( ).

- Follow the specific instructions on page 54 and complete all parts of Activity 6.

- Compare your answers with the Answer Key on page 56.

- Restart the **Training Program Video** to continue Module 2.

Planning Processes and Activities

Planning Process:

- Led by Planning Section Chief.

- Informed by Tactics Meeting.

Planning Activities:

- Monitor situation status and develop situation report (see Figure 4, next page).

- Create Incident Action Plan (IAP).

- Think ahead to next operational period.

Incident Action Plan:

- Brief summary of the incident so far.

- Response plan for the upcoming operational period.

- Can be written or verbal. A written IAP provides good documentation of the incident, can be used for future responses, and may be required in certain incidents.

- Includes several sections addressing objectives, organization and assignments, communication, and safety.

- May include existing health department plans in place of some ICS Forms.

Figure 4. Sample Planning Meeting agenda (from FEMA ICS 300)

Planning Meeting Activities	Responsibility
Give situation & resources briefing; conduct planning meeting	Planning Section Chief
State incident objectives & policy issues	Incident Commander
State primary & alternative strategies to meet objectives	Operations Section Chief; Planning/Logistics Section Chiefs contribute
Specify reporting locations & additional facilities needed	Operations Section Chief; Logistics Section Chief assists
Develop the resources, support, & overhead orders	Planning/Logistics Section Chiefs; Logistics Section Chief places orders
Consider additional support requirements needed because of communications, traffic, safety, medical, etc.	Logistics Section Chief; Planning Section Chief contributes
Finalize, approve, & implement the IAP	Planning Section Chief finalizes IAP; Incident Commander approves IAP; General Staff implements IAP

Part A

Using the list of ICS forms and plans listed below, select the letter of the form/plan that best addresses each key element of the IAP listed in the chart below. (*Hint*: The IAP includes ICS forms and local health department plans)

Then write the ICS position responsible for completing that section of the IAP.

ICS Forms

 a. Organization Assignment (Form 203)

 b. Medical Plan (Form 206 or existing agency documentation)

 c. Communications Plan (Form 205 or existing agency plan) or Agency Contact List

 d. Incident Objectives (Form 202)

 e. Division Assignment (Form 204)

Key Element	IAP Section	ICS Position Responsible
WHAT must be done	_____	_____
WHO is responsible	_____ _____ _____	_____ _____
HOW information will be communicated	_____	_____
WHAT should be done if someone is injured	_____	_____

Part B

Provide examples of documents that might be attached to an IAP (*Hint:* Consider typical documents created during an outbreak investigation.)

1. _____

2. _____

3. _____

END OF ACTIVITY 6

Review the Answer Key on page 56.

Answer Key (Activity 6: Incident Action Plan (IAP))

Part A

Using the list of ICS forms and plans listed below, select the letter of the form/plan that best addresses each key element of the IAP listed in the chart below

Then write the ICS position responsible for completing that section of the IAP.

Answer:

Key Element	IAP Section	ICS Position Responsible
WHAT must be done	*d. Incident Objectives (Form 202)*	*Incident Commander*
WHO is responsible	*a. Organization Assignment List (Form 203)*	*Operations Section Chief*
	e. Division Assignment List (Form 204)	*Planning Section Chief*
HOW information will be communicated	*c. Health Department Communication Plan*	*Logistics Section Chief*
WHAT should be done if someone is injured	*b. Health Department Medical Plan*	*Logistics Section Chief*

> You don't need to create a new communications and medical plan for every incident. Many health departments have existing plans that are appropriate to use.

Part B

Provide examples of documents that might be attached to an IAP (*Hint:* Consider typical documents created during an outbreak investigation.)

Answer:

Examples include:

1.   *Case definition*

2.   *Contact lists*

3.   *Surveillance questionnaire*

4.   *De-identified line list*

5.   *Situation report*

END OF ANSWER KEY

Return to the Training Program Video.

Activity 7: Operational Briefing

Instructions

- Form groups of 2-3 people.
- Review the ICS information (📚) and case study details (🔍).
- Complete the operational briefing agenda as instructed below.
- Compare your answers with the Answer Key on page 61.
- Restart the **Training Program Video** to continue Module 2.

Operations Briefing

- Occurs at the start of each operational period (ops period).
- Covers the upcoming operational period
- Should be brief (~10-15 min)
- Conducted by Operations Section Chief
- Everyone with an assigned role in ICS must attend

Operational Period

- The ops period was defined as 24 hours, beginning at 0900 each morning.
- The first ops briefing would occur Tuesday at 0900 and cover objectives for the next 24 hours.

Part A

Write the name of the person responsible for each agenda item and their ICS role into the operational period briefing agenda. Refer to Activity 4B (pages 40-45) for the names of people in your health department and ICS roles.

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OPERATIONAL PERIOD BRIEFING AGENDA

Date: Feb 17, 2009
Time/Ops Period: 0900, 1st ops period
Facilitator: Kendra, Planning Section Chief

Agenda Item	Person Responsible (Name and ICS Role)	Quote
Agenda review		
Incident objectives		
Current assessment and accomplishments (a.k.a. Situation Report)		
Work assignments and staffing		
Current and expected conditions (weather, etc.)		
Safety risks and mitigation		
Summary of objectives, operational concerns		
Next planning meeting, ops period briefing		
Adjourn		

</div>

Part B

Match each quote below with the agenda item and person most likely to say it during the operational briefing. Write the letter of the matching quote into the agenda above.

Quotes from the Operational Briefing

a. "Those of you who will be going on-site should bring gloves. Other than that, there isn't a need for PPE."

b. "For the next 24 hours, our primary mission is to identify the cause of the outbreak. Our other key objectives are to identify the pathogen, find additional cases and ensure their treatment, and control the source of the outbreak."

c. "Don't forget the planning meeting today at 1300 – that's for me, Nancy, Ed, and Natalie. Everyone meet here again at 0900 tomorrow morning for the next briefing."

d. "That's all for now. Let's stay on top of this today!"

e. "Nancy and others made a lot of progress yesterday after the initial report from Student Health. There are now 14 suspect cases and interviews have been conducted with 4 of them. We just received lab results this morning…the hospitalized student was diagnosed with norovirus."

f. "This meeting will only last for 15 minutes. We'll go over the current objectives, give a situation report, and remind everyone of their ICS role. Basically we just want to make sure we're all on the same page before we jump into our response activities today."

g. "I just want to say thank you to everyone for responding so quickly yesterday and this morning. Remember, we've done this before…we know that our major goal is to find the source of the problem so we can prevent anyone else from getting ill. Any questions before we wrap up?"

h. "Just a reminder, Rebecca will be conducting the clinical investigation and Diane will conduct the environmental investigation. I'll be working with both of them."

i. "Nothing to note that's relevant to our investigation today."

END OF ACTIVITY 2

Review the Answer Key on page 61.

Answer Key (Activity 7: Operational Briefing)

Answers:

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OPERATIONAL PERIOD BRIEFING AGENDA

Date: Feb 17, 2009
Time/Ops Period: 0900, 1st ops period
Facilitator: Kendra, Planning Section Chief

Agenda Item	Person Responsible (Name and ICS Role)	Quote
Agenda review	*Kendra* *Planning Section Chief (PSC)*	*f*
Incident objectives	*Nancy* *Incident Commander (IC) or PSC*	*b*
Current assessment and accomplishments (a.k.a. Situation Report)	*Ed* *Current Operations Section Chief (OSC)*	*e*
Work assignments and staffing	*Ed* *Incoming OSC (here it's the same person as the current OSC, but in large incidents it may differ)*	*h*
Current and expected conditions (weather, etc.)	*Kendra* *Technical Specialist or PSC*	*i*
Safety risks and mitigation	*Nancy* *Safety Officer or IC*	*a*
Summary of objectives, operational concerns	*Nancy* *IC*	*g*
Next planning meeting, ops period briefing	*Kendra* *PSC*	*c*
Adjourn	*Kendra* *PSC*	*d*

</div>

END OF ANSWER KEY

Return to the Training Program Video.

ICS in Action Program Evaluation

To receive a certificate of completion for the *ICS in Action: Using the Incident Command System in Public Health Outbreak Investigation* training program please complete the following evaluation form.

The forms may be faxed to 919-843-5563, emailed to nccphp@unc.edu or mailed to
North Carolina Center for Public Health Preparedness
CB 8165, UNC Chapel Hill
Chapel Hill, NC 27599-8165

Participant Name (*please print*): _____

What type of organization do you work for? _____

What is your occupation? _____

		Yes	No
1.	Did this training program address the following learning objectives?		
a.	Describe how ICS can benefit disease outbreak investigations undertaken by local public health department staff	☐	☐
b.	Use appropriate ICS terminology to describe the roles and tasks that public health staff assume in an outbreak investigation	☐	☐
c.	Give examples of the ICS steps taken in outbreak investigations	☐	☐
d.	*For a hypothetical disease outbreak*: Demonstrate the ability to develop an Incident Action Plan, carry out an operational briefing, and formulate positions and an organizational chart for how an outbreak response might be organized	☐	☐
2.	Did this training program introduce you to terminologies or concepts you were previously unfamiliar with?	☐	☐
3.	Did this training program clarify terminologies or concepts that you had previously heard of, but did not feel that you had enough information about?	☐	☐

	Yes	**No**
4. Did this training program reinforce terminologies or concepts that you were already familiar with?	☐	☐

5. Please comment on the following program components:

    a. The program length was (please select one)
       ☐ Too short for the amount of material covered
       ☐ Just right for the amount of material covered
       ☐ Too long for the amount of material covered

    Comments about program length:

	Yes	**No**
b. The activities in the Training Workbook:		
Addressed the program objectives	☐	☐
Were fun and engaging	☐	☐

    Comments about the Training Workbook activities:

	Yes	**No**
c. Which of the program components were helpful learning tools?		
Module 1 – Slide review of ICS structure	☐	☐
Module 1 – Interview footage of local health departments' experience in using ICS	☐	☐
Module 2 – Case study of hypothetical disease outbreak	☐	☐

    Comments about program components:

	Yes	**No**
6. Did this training program specifically address your professional responsibilities around:		
a. Disease outbreak investigation?	☐	☐
b. Use of ICS?	☐	☐

7. As a result of this training program, do you feel more confident that you could use ICS effectively during:

   a. A disease outbreak investigation? □ □

   b. Another public health activity? □ □

   If you answered "yes" above, please specify the type of activity:

8. Please describe any changes you plan to make in your job based on the information presented in this training program:

9. Please list any topics you would like to have seen addressed in this training program:

10. Please provide other suggestions for improving this training:

Please provide an email address (*preferred*) or mailing address for your certificate:

Resources

Additional ICS resources can be found at:
http://nccphp.sph.unc.edu/trainingpackages/ics_in_action.

These online training and technical assistance resources have been selected to complement the *ICS in Action* training and provide an opportunity to further develop and sustain skills for effective response.

The resources include links to organizations such as:
- National Incident Management System
- State offices and agencies of emergency management
- Federal Emergency Management Agency
- North Carolina public health and emergency preparedness agencies
- NCCPHP Training Web Site

Appendix A:
14 Essential Features of ICS as applied to Public Health

The Incident Command System is based on a set of essential features. These features apply to management of any incident or event ("all-hazards"), including those in which a public health agency (or agencies) leads, coordinates, supports, or participates. Below are the 14 essential ICS features with examples of how they apply to public health organizations and particularly to disease outbreak investigation, which has been the public health activity of focus in the *ICS in Action* training.

1. Common Terminology

- In an investigation of a suspected bioterrorism incident, public health and law enforcement conduct 2 very different kinds of "surveillance." Public health and law enforcement colleagues on such an investigation must clarify what each means by "surveillance." In this case, public health might choose to specify their task as "public health surveillance."

- Some public health terminology, such as "epi curve," "line list," or "prophylaxis" may be obvious to public health staff, but not to responder colleagues from different types of agencies/organizations. In ICS, it is preferable to use generally understandable terms.

2. Modular Organization

- In a limited disease outbreak, the Planning Section might consist of only an epidemiologist, nursing supervisor, or disease control supervisor. In a large or expanding outbreak, the Planning Section Chief would open units as needed, e.g.:

    - Situation Unit: to produce and disseminate a line list, epi curve, maps, case descriptions, and situation updates

    - Resource Unit: to track resources such as personnel from partner health departments and other agencies deployed to help conduct case investigation, perform mitigation such as vaccinations, or other activities

- As the outbreak winds down, modular organization enables orderly demobilization of resources.

3. Management by Objectives

- The traditional steps of an outbreak investigation are:
  - Prepare for field work
  - Establish the existence of an outbreak
  - Verify the diagnosis
  - Define and identify cases
  - Describe and orient the data in terms of time, place, and person
  - Develop hypotheses
  - Evaluate hypotheses
  - Refine hypotheses and carry out additional studies
  - Implement control and prevention measures
  - Communicate findings

- Any of these can serve as the basis for an incident-specific objective to help organize and guide the response. (Some specific examples are provided in the *ICS in Action* training.)

4. Reliance on an Incident Action Plan (IAP)

- A local health department uses ICS to plan and conduct its seasonal influenza vaccination clinic campaign. They create an IAP for conduct of their multi-day, multi-location vaccination clinics. After the campaign is over, the after-action report completed, and the improvement plan implemented, the IAP is filed as documentation of the event and for re-use to help draft next year's campaign.

5. Chain of Command and Unity of Command

- The Incident Commander in a local outbreak response is the sole person to issue incident objectives and assign incident supervisory roles. This authority reduces confusion that can arise when multiple sources (e.g., health department, local government, state personnel) offer conflicting or excessively numerous objectives.

- During an outbreak response, staff in the Operations Section have a single supervisor to report to, thus cutting down on unnecessary or duplicative communication. For example, an environmental health investigator in an Investigation Strike Team reports to his/her Unit Leader, not to his/her everyday supervisor.

6. Unified Command

- In a large outbreak that involves a local hospital and the school system, the local health department forms a Unified Command with authorized representatives from the hospital and the school system to help ensure that the major stakeholders in the incident are actively involved in decision-making.

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7. **Manageable Span of Control**

- A local health director, who normally directly supervises 12 staff, is the Incident Commander in an outbreak investigation. S/he would directly supervise between 3 and 7 staff in the incident (and those staff may not be his/her usual direct reports).

- A communicable disease nurse is the Investigation Unit Leader, and is supervising 5 Investigation Strike Teams. Four more Strike Teams are assigned to her unit, a total of 9, which exceeds span of control. She discusses the situation with her Group Supervisor, and they reduce her Unit to 5 teams and start a second Investigation Unit with the other 4 teams.

8. **Pre-designated Incident Locations and Facilities**

- The health department outfits a meeting room in their facility with Internet access, multiple computer hook-ups and telephone lines, LCD projection, conference call setup, a conference table, chairs, and other equipment, and trains staff on use of this facility during incidents such as disease outbreaks. They designate this location the "health department Emergency Operations Center," draft policies and procedures for its use, and familiarize local response partners with the space.

9. **Resource Management**

- Two neighboring counties are experiencing an outbreak that significantly affects both, and both jurisdictions need additional resources, such as case investigators, vaccinators, IT staff, and vehicles. Coordinated resource management (e.g., as part of a Unified Command), can prevent the counties from competing with each other for limited numbers of available case investigators, avoiding duplicate requests for IT staff, or not effectively prioritizing where vaccinators should be sent.

10. **Information and Intelligence Management**

- An Incident Commander assigns a PIO during an outbreak. The PIO coordinates media contacts, designates appropriate spokespersons, crafts public messages, and ensures approval by the Incident Commander. This coordination assures that a single message is shared with the media and the public by appropriate persons, and enables timely response to concerns and requests for information.

- During an outbreak, the health department IT specialist is assigned to the Situation Unit of the Planning Section to produce GIS mapping to determine geographic patterns in the outbreak.

11. Integrated Communications

- A local health department requests and receives 3 Vaccination Strike Teams comprised of local emergency management services (EMS) staff, and deploys them to remote sites to conduct local vaccination clinics. EMS staff and the health department are issued radios by the Communications Unit in the Logistics Section and can communicate effectively on a shared, authorized frequency.

- A communicable disease nurse emails a spreadsheet with an updated line list, and all the recipients can open and read it because their computers have the same spreadsheet program.

12. Transfer of Command

- The Incident Commander is ready to leave at the end of her shift, but the oncoming IC calls and says he will be 30 minutes late. The outgoing IC waits and conducts a face-to-face briefing with her replacement to assure that all important outbreak information is shared and all questions are answered before transferring command. Then the incoming IC notifies his Command and General Staff that he is in place.

13. Accountability
1. Check-In
2. Incident Action Plan
3. Unity of Command
4. Span of Control
5. Resource Tracking

- In a large outbreak, the local health department receives mutual aid the form of personnel and equipment from several neighboring county health departments. The Planning Section (specifically the Resource Unit and Demobilization Unit, if opened) checks in the staff and equipment, sends them to their supervisors for briefing, tracks them during the incident, and demobilizes mutual aid resources at the appropriate time. Also, the Planning Section communicates with the Operations and Logistics Sections to ensure that needed resources are supplied and deployed efficiently.

- After 5 days of 12-hour shifts in another county's outbreak investigation, an exhausted nurse is ready to return to her home health department 3 hours away. The Demobilization Unit Leader tells her that the health department will provide her a place to sleep until she is rested enough to drive.

14. Deployment/Mobilization

- A large industrial explosion occurs in a town, and many residents are evacuated to shelters. The local health department is asked to help with exposure evaluation of hundreds of residents. The staff of a neighboring county health department checks their equipment, which is maintained and ready to go. They are anxious to help, but wait for a request for mutual aid and for approval from their health director before deploying.

Appendix B:
ICS Organizational Structure

Any of the ICS Sections may be subdivided into smaller organizational levels depending on the type of incident that is being managed and to maintain span of control. Typically, the larger and more complex the incident is, the more complex the organizational structure. Below is information about the different organizational elements used within each Section.

Operations Section
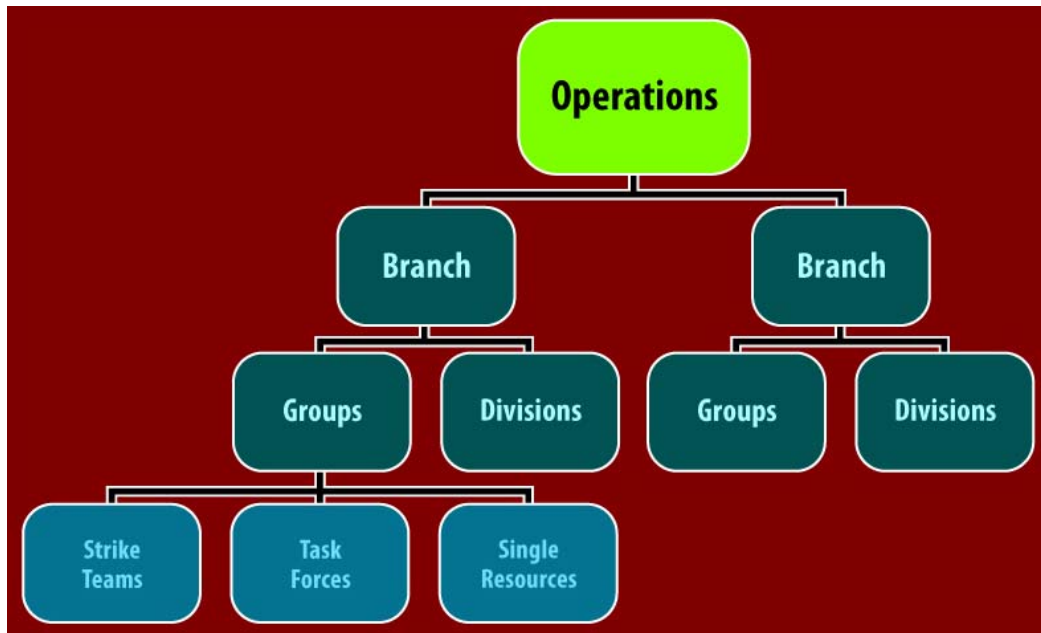
To help ensure span of control, the Operations Section can be further divided into Divisions, Groups, or Branches, with multiple possible configurations. An Operations Section can be subdivided into Groups only, Divisions only, or contain mixed Groups and Divisions. Groups and Divisions can be present with or without Branches.

- **Branches** can be organized around geography or function and may take responsibility for major parts of incident operations. In the Operations Section, Branches may be further subdivided into Groups or Divisions (see below).

- **Divisions** are used to assign responsibility geographically. Divisions may be established within the ICS organizational structure with or without establishment of Branches.

- **Groups** are another possible way to divide the Operations Section. Groups are composed of resources and are used to divide functional areas of operation. Group functions may span different geographic areas and may be organized under Branches.

- **Single Resources** (e.g., an individual or piece of equipment) may be organized into Strike Teams or Task Forces. A **Strike Team** is made up of the same resources (e.g., 4 ambulances) while a **Task Force** has mixed resources (e.g., 2 ambulances, a fire truck, and a police car).

Planning Section
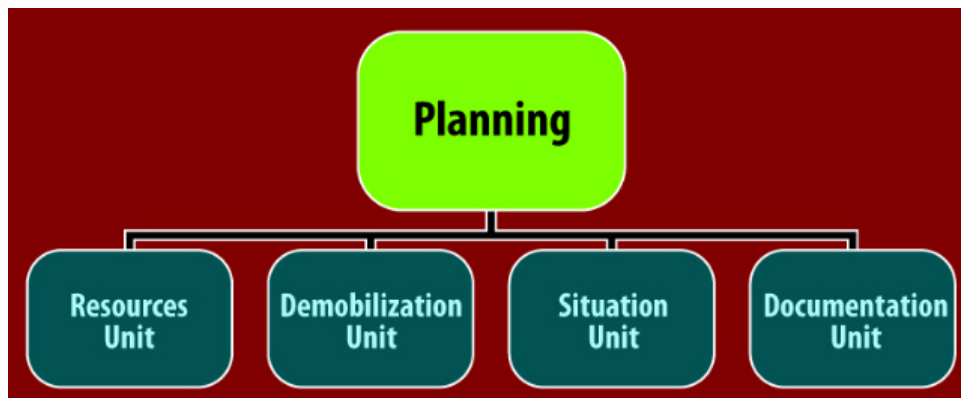
If necessary, the Planning Section can be further subdivided into Units, each with a clearly defined role and functional responsibility.

- The **Resources Unit** helps create the Incident Action Plan (IAP) and monitors resources.

- The **Situation Unit** collects and analyzes information, creates displays and maps of the situation, and disseminates information as required.

- The **Documentation Unit** maintains and archives all documentation pertaining to the incident, and is also available to make copies of the IAP, as necessary.

- Finally, the **Demobilization Unit** is responsible for organizing the return of resources used in the response.

- The Planning Section may also contain **Technical Specialists** although these staff persons may work in other Sections depending on need.

Finance/Administration Section
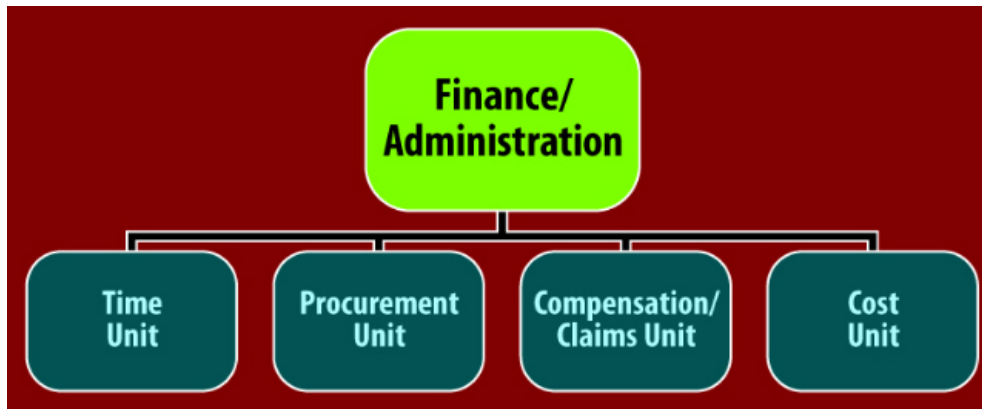
The Finance and Administration Section can also be broken down into Units as needed.

- The **Time Unit** records all of the time worked by personnel in the incident response.

- The **Procurement Unit** arranges contracts with vendors and merchants as necessary.

- The **Compensation/Claims Unit** manages claims pertaining to injuries and other activities.

- And finally, the **Cost Unit** collects all financial data and provides estimates and cost-effectiveness analyses, as well as cost-savings recommendations.

Logistics Section
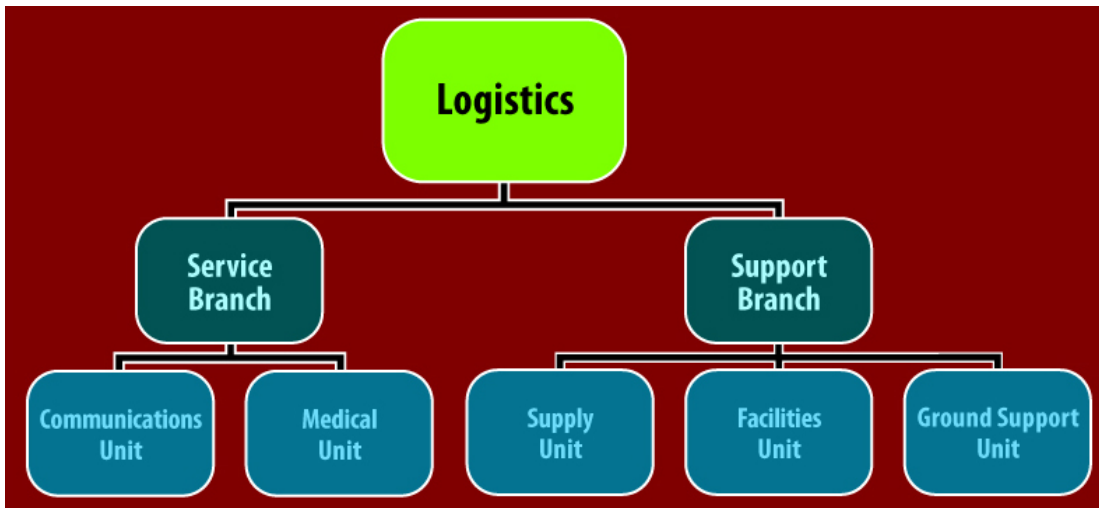
The Logistics Section may also be subdivided into Units if necessary with or without establishment of Branches (refer to the Operations Section above for the definition of Branches) to help establish span of control. Typical units for the Logistics Section are listed below.

- The **Supply Unit** is responsible for managing (i.e., ordering, receiving, storing, and processing) all resources, personnel, and supplies related to the incident.

- The **Facilities Unit**, as the name implies, is responsible for setting up, maintaining, and demobilizing all facilities used to support incident operations. This can include pre-existing facilities, as well as facilities specifically set up for the incident (e.g., personnel support facilities such as food/water service or sanitation).

- The **Ground Support Unit** maintains and services vehicles and mobile equipment (e.g., making sure vehicles have fuel or maintaining a transportation pool) and transports personnel and supplies.

- The **Communications Unit** has responsibility for effective communications planning for the incident and installing, testing, distributing, and repairing any communication equipment used during the incident.

- The **Medical Unit** is responsible for the development of the incident medical plan, preparing reports and records, and obtaining medical aid and transportation for injured/ill personnel as needed.

Appendix C:
ICS Planning "P"