
DECISION MAKING AND PROBLEM SOLVING

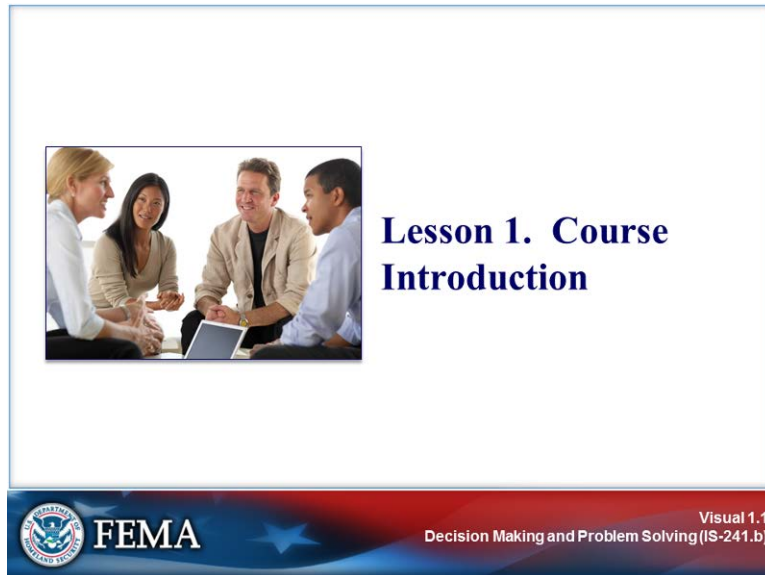
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LESSON 1. COURSE INTRODUCTION

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COURSE OVERVIEW

Visual 1.1



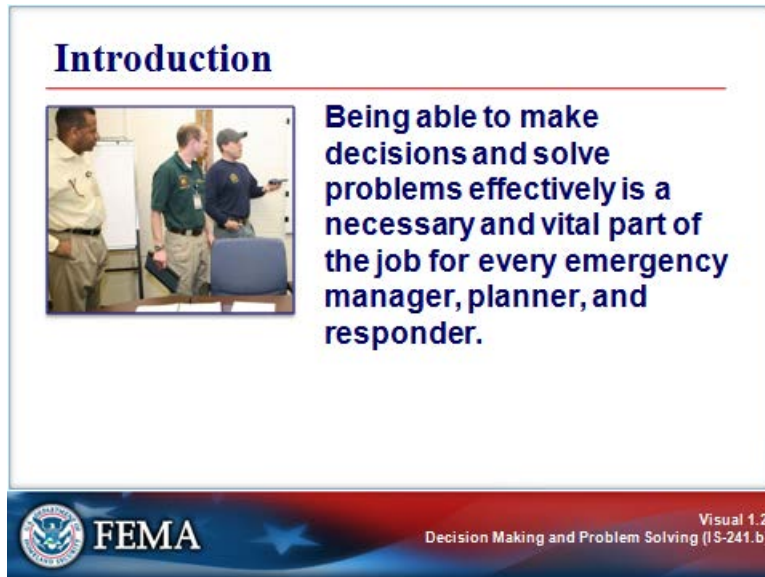
Key Points:

This course is designed to improve your decision-making skills. It addresses:

- The decision-making process.
- Decision-making styles.
- Attributes of an effective decision maker.
- Ethical decision making and problem solving.

COURSE OVERVIEW

Visual 1.2

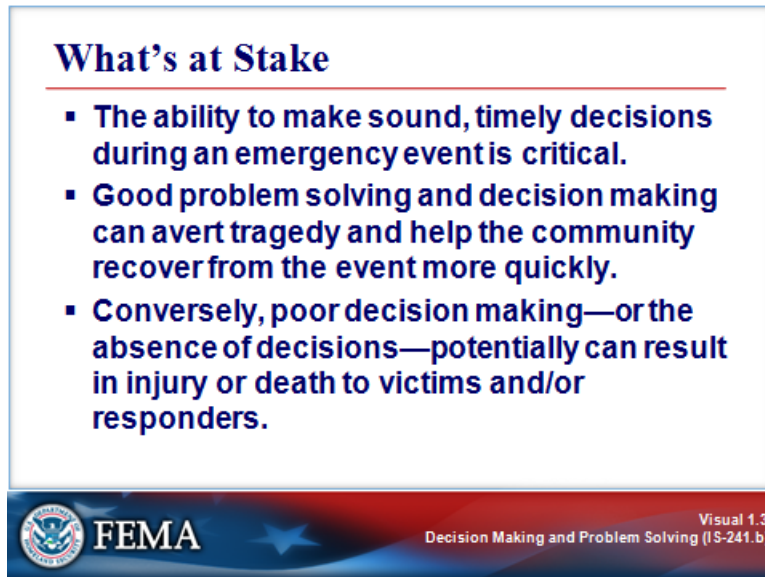


Key Points:

Being able to make decisions and solve problems effectively is a necessary and vital part of the job for every emergency manager, planner, and responder.

COURSE OVERVIEW

Visual 1.3



Key Points:

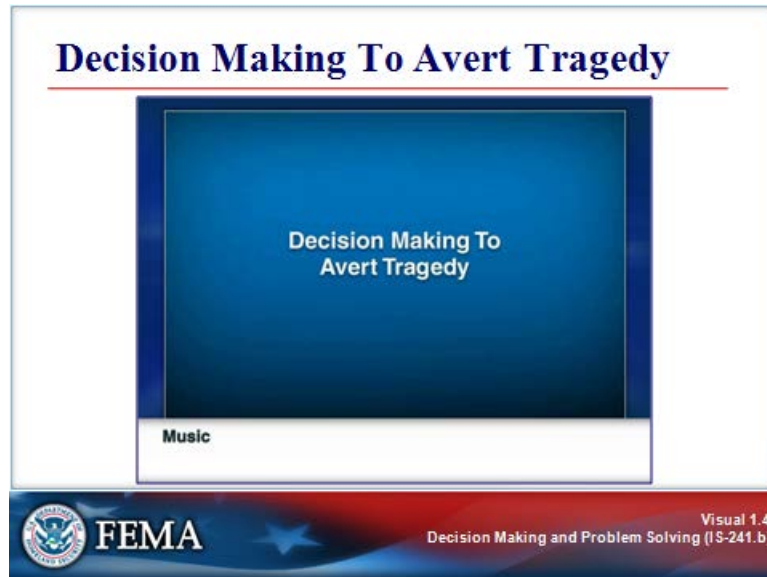
The ability to make sound, timely decisions during an emergency is critical. Effective decision making can:

- Avert tragedy.
- Help manage incidents.
- Build community trust and support.
- Help the community recover from an event more quickly.

Conversely, poor decision making—or the absence of decisions—potentially can result in injury or death to victims and/or responders.

COURSE OVERVIEW

Visual 1.4



Key Points:

Video Transcript:

When U.S. Senator Dianne Feinstein was Mayor of San Francisco from 1978 to 1988, she held department head meetings once a week. One day, the Director of Public Works told her that if an earthquake occurred, the rim around Candlestick Park would come down. His estimate of the cost for strengthening the stadium was \$6 million.

To come up with the funding for the retrofit, the city made the decision to take money from other projects.

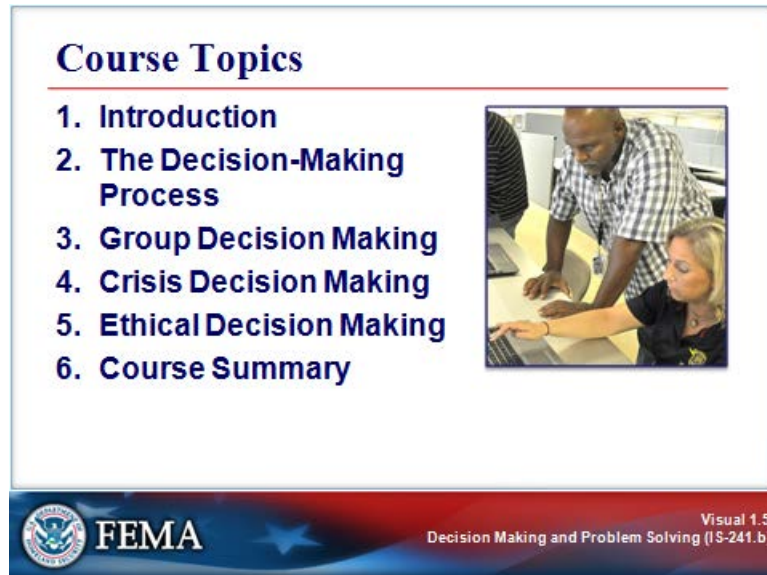
Just as game three of the 1989 World Series baseball championship was set to begin, with a capacity crowd at Candlestick Park, the Loma Prieta earthquake struck the Bay Area.

As Senator Feinstein commented afterwards, "The field rippled. The rim shook. But it held. That was a big learning lesson for me. When you've got information that could save lives and property, you've got to act."

The decision by the Mayor and City to prioritize and fund the seismic protection for Candlestick Park was crucial in saving lives. The decision was most effective because it was made well before an actual emergency.

COURSE OVERVIEW

Visual 1.5



Key Points:

Decision Making and Problem Solving consists of six lessons. Each lesson is described below.

- **Lesson 1: Course Introduction** provides an overview of the course.
- **Lesson 2: The Decision-Making Process** presents a five-step problem-solving model. The lesson also explores factors that affect decision making.
- **Lesson 3: Group Decision Making** discusses the advantages and limitations of group decision making, as well as ways to make group decision making more effective.
- **Lesson 4: Crisis Decision Making** identifies the challenges associated with, as well as ways to improve, decision making in a crisis.
- **Lesson 5: Ethical Decision Making** focuses on ethical decision making and discusses the components of ethical decision making. The lesson also addresses some common ethical “do’s and don’ts.”
- **Lesson 6: Course Summary** summarizes key concepts from the entire course.

COURSE OVERVIEW

Visual 1.6

Introductions



- Name
- Position/organization
- Past experience related to emergency management or community service

**FEMA**

Visual 1.6
Decision Making and Problem Solving (IS-241.b)

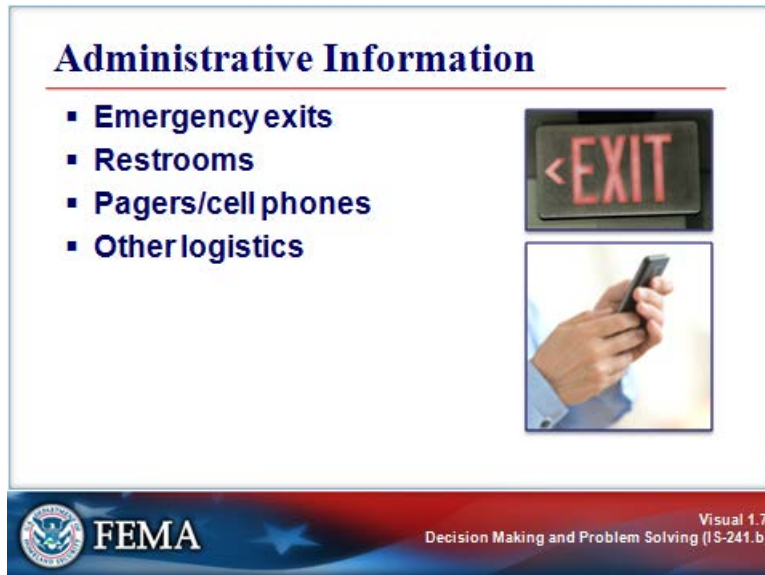
Key Points:

You will be given an opportunity to introduce yourself. Please include the following information:

- Name
- Position/organization
- Past experience related to emergency management or community service

COURSE OVERVIEW

Visual 1.7



Key Points:

The ability to make sound, timely decisions during an emergency event is critical. Good problem solving and decision making can avert tragedy and help the community recover from the event more quickly. Conversely, poor decision making—or the absence of decisions—potentially can result in injury or death to victims or responders.

But the repercussions don't stop there. Poor decisions in the early stages of an event can make the responders' job more difficult and more dangerous. In addition, they can give rise to much more critical or complex decisions later on—to say nothing of the effect on community relations.

Good decision-making skills are one of your most critical assets as an emergency management professional. This course will help you develop those skills.

DECISION MAKING IN EMERGENCY MANAGEMENT

Visual 1.8

Lesson 1 Objective

- Describe the impact of effective decision making in an emergency.



**FEMA**

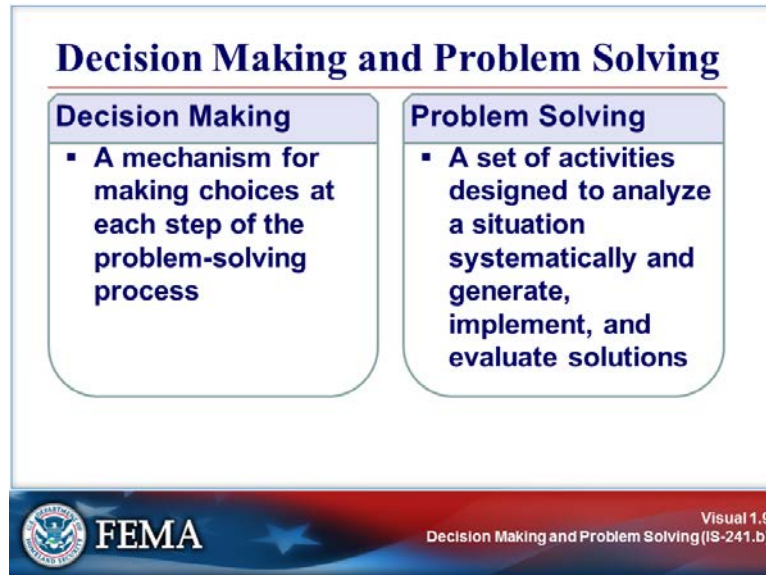
Visual 1.8
Decision Making and Problem Solving (IS-241.b)

Key Points:

The objective of Lesson 1 is to describe the impact of effective decision making in an emergency.

DECISION MAKING IN EMERGENCY MANAGEMENT

Visual 1.9



Key Points:

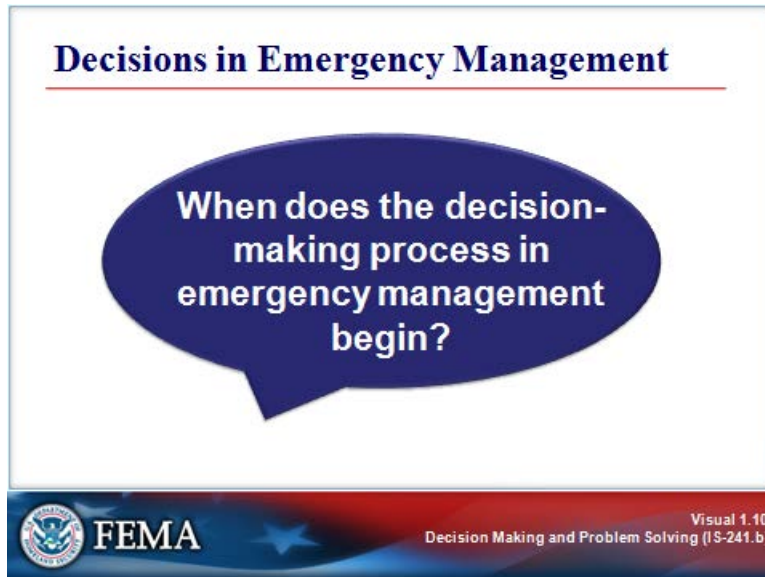
Decision making and problem solving are closely related activities. Very often, if you're doing one you're doing both.

- **Problem solving:** a set of activities designed to analyze a situation systematically and generate, implement, and evaluate solutions.
- **Decision making:** a mechanism for making choices at each step of the problem-solving process.

Decision making is part of problem solving, and decision making occurs at every step of the problem-solving process.

DECISION MAKING IN EMERGENCY MANAGEMENT

Visual 1.10



Key Points:

Answer the following discussion question: When does the decision-making process in emergency management begin?

The two case studies provided on the following pages illustrate the importance of decision making during a crisis.

CASE STUDY 1: SEBRING COUNTY**Visual 1.11**

Case Study 1: Sebring County

Instructions:

1. Read the case study in your Student Manual.
2. As you read, try to identify what decisions must be made by the emergency manager or other emergency management officials.
3. Jot down your ideas before continuing.

**FEMA**

Visual 1.11
Decision Making and Problem Solving (IS-241.b)

Key Points:**Case Study 1: Sebring County**

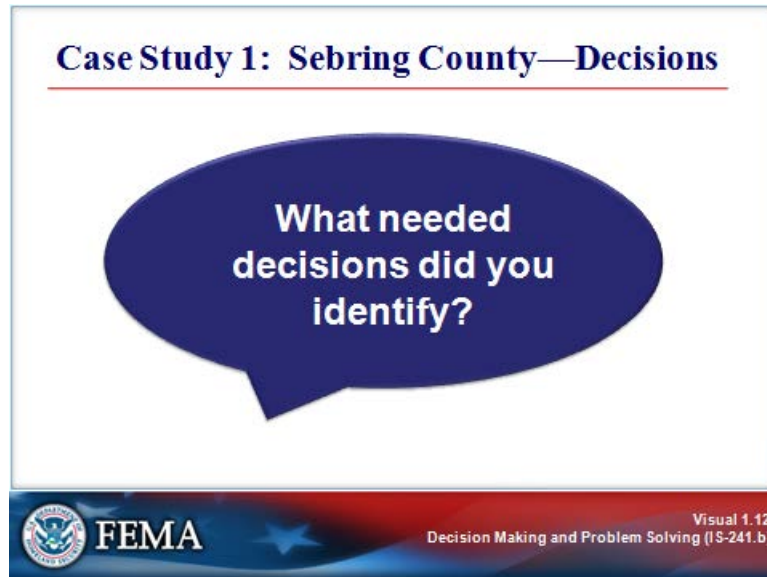
Background: Heavy rainstorms have hit, and counties across the entire State are faced with flash flooding to varying degrees. The town of Westfield, located in Sebring County, one of the hardest hit counties in the State, sits high and well away from the river, so flooding is usually not a concern. Last year, a new spillway was built to increase the capacity of the town reservoir to about 44 million gallons. Two towns downstream, Ambry and Gilson, are less than a 5-minute drive from Westfield. Each town has about 2,400 residents, most of them along U.S. Route 270.

Event Chronology:

Late afternoon	Rain begins, and weather forecasters predict it will be a strong, slow-moving storm that will produce heavy rain.
7:41 p.m.	A flash-flood watch is issued by the National Weather Service.
8:00 p.m.	Heavy rains begin.
9:30 p.m.	The county engineer stations an employee on the dam to watch for and report any problems. The employee sees water pouring a good 2 feet over the spillway. (It was later estimated that the reservoir was holding 65 million gallons during and after the storm.)
11:00 p.m.	Five inches of rain have fallen over the last 3 hours.
12:30 a.m.	The employee sees a section of dirt break away.
1:00 a.m.	When water recedes below the top of the dam, county employees discover that water has eaten around the spillway and is gradually carving away the side of the earthen dam. A first attempt at closing the hole with sandbags fails when the force of the water carries the bags right through.
1:30 a.m.	The Sebring County Emergency Program Manager is now meeting with the mayor of Westfield, the county engineer, the public works director, the fire chief, and the police chief to discuss the situation.

CASE STUDY 1: SEBRING COUNTY

Visual 1.12



Key Points:

What needed decisions did you identify?

CASE STUDY 2: FORT RICE

Visual 1.13

Case Study 2: Fort Rice

Instructions:

1. Read the case study in your Student Manual.
2. As you read, try to identify potential impacts of the decision that was made.
3. Jot down your ideas before continuing.

**FEMA**Visual 1.13
Decision Making and Problem Solving (IS-241.b)

Key Points:

Case Study 2: Mandatory or Voluntary Evacuation Scenario

Background: The town of Fort Rice, North Dakota, is located on the western bank of the Missouri River. A farming and ranching community, Fort Rice's residents are known for their tenacity in fighting the weather—and the river—to earn a living.

It has been raining for 12 hours, and the National Weather Service has forecast severe flooding conditions through most of the upper Midwest. The Missouri River and the rivers and streams that feed it are on the rise and are expected to continue to rise over the next several days as the storm is held in place by a large high-pressure area that is currently stationary over the Ohio Valley. Despite the fact that sandbagging crews have been supporting all local levees, severe flooding is a near certainty.

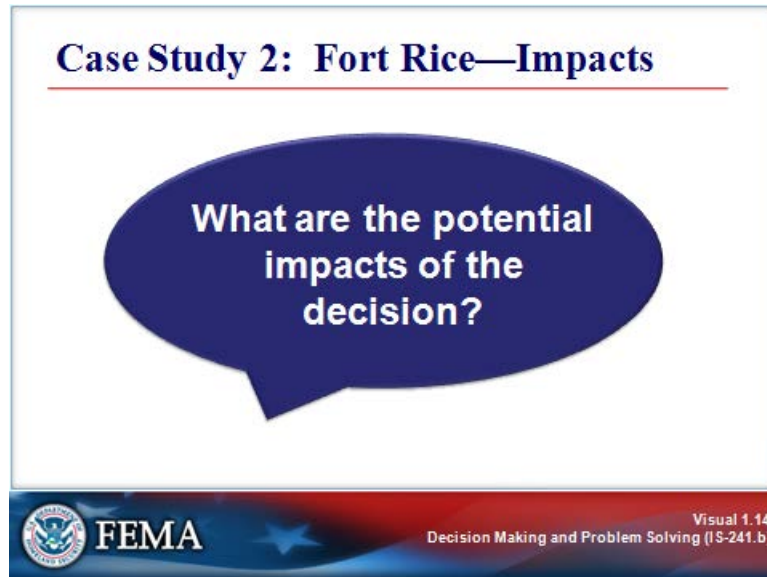
The mayor and all emergency management professionals from Fort Rice have been keeping abreast of the situation since before the rain began. They have been communicating with the local Weather Forecast Office, as well as county and State emergency management personnel. The question on the table at this point is not whether to issue an evacuation order but whether to make the evacuation mandatory.

Historically, farmers and ranchers have been unwilling to evacuate, even when flooding is severe. Most have grown up in the area and are aware of the damage that flooding can cause, but they are also aware of their investment in their land and livestock and will fight to save what they can.

After considerable discussion, the mayor, with the emergency management group's concurrence, makes the decision to activate the Emergency Alert System and issue the evacuation order. But although they decide to word the message strongly, they do not make the evacuation mandatory.

CASE STUDY 2: FORT RICE

Visual 1.14

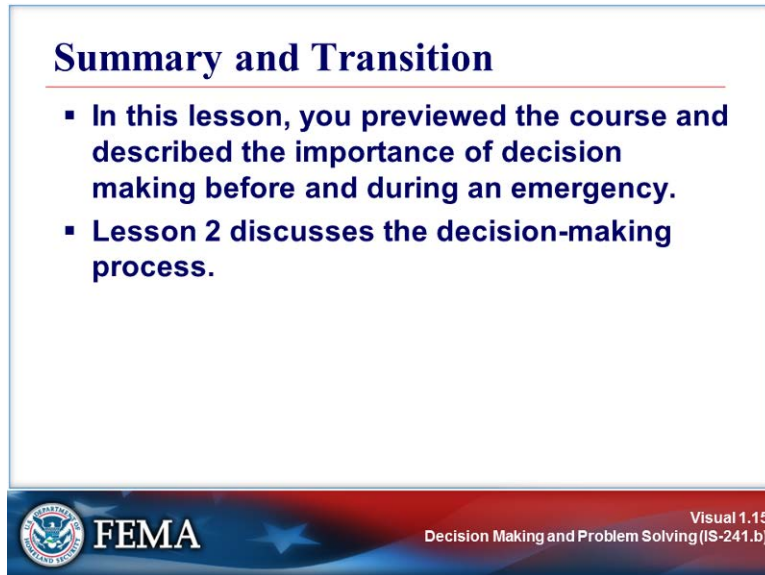


Key Points:

What are the potential impacts of the decision?

SUMMARY AND TRANSITION

Visual 1.15



Key Points:

In this lesson, you previewed the course and described the importance of decision making before and during an emergency.

Lesson 2 discusses the decision-making process.

Notes