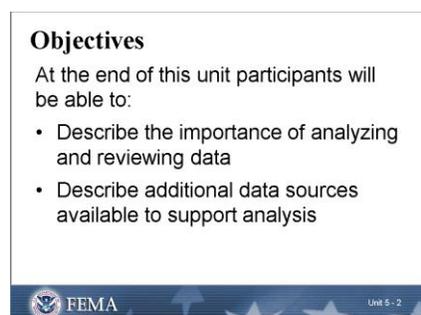


UNIT 5: ANALYSIS OF DATA

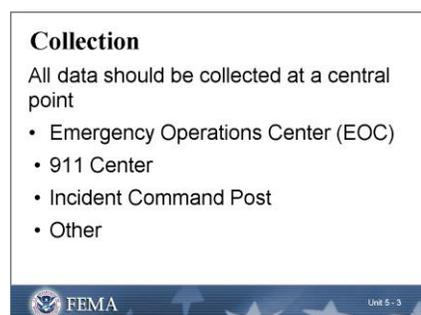
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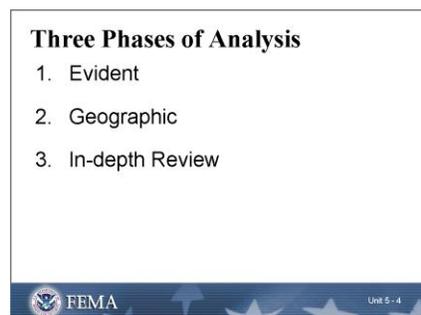
Visual 1



Visual 2



Visual 3



Visual 4

UNIT 5: ANALYSIS OF DATA

OBJECTIVES

At the end of this unit participants will be able to:

- Describe the importance of analyzing and reviewing data.
- Describe additional data sources available to support analysis.

COLLECTION

All data should be collected and analyzed at one point. This simplifies the transmission of data and also eliminates the problem of bits and pieces of information floating about. In most communities, the Emergency Operating Center is the focal point for data collection. If the EOC is operating under the incident command system, this data should be routed to the Planning Section for processing and analysis. In some communities, the 911 center is the data reception and analysis point, and in larger operations, the Incident Command Post may also be a reception point.

THREE PHASES OF ANALYSIS

Analysis of rapid needs assessment data must be quick and succinct. Therefore, highly detailed analytical procedures are not called for. Instead a simplified analysis is performed that involves three processes. These may be used together or individually. The three phases are evident, geographic and in-depth review. We will look at each of these in the upcoming visuals.

Evident

Problems are obvious:

- People trapped on rooftops after flooding

Little or no analysis required, however...

- Other sources of compounding information
- Flood waters are rapidly rising

Information forwarded to Operations Section for actions to alleviate situation.

Analysis should not delay lifesaving response!



Visual 5

EVIDENT

In evident analysis, the problems are obvious and do not require in depth study. For example, people who are trapped on rooftops after flooding are clearly in need of live saving activities. However, even though the initial reports are obvious, other information can be added into the mix to provide more accurate situational awareness. For example, by combining a weather report that shows that flood waters are rapidly rising adds more information that clearly shows the immediacy factor of the life saving efforts that are required. As with all information on rapid needs assessment, reports and findings such as these should be forwarded immediately to the Operations Section for emergency response and other actions to alleviate the situation. Remember, do not delay emergency reports of any kind for analysis or further interpretation.

Geographic

Problems and issues plotted on map(s)

- Pockets of problem areas become evident
- Additional threats or problems may be anticipated
- Transportation bottlenecks, etc
- Speed is of the essence

Do not spend significant time on electronic mapping systems when pen and ink will do!



Visual 6

GEOGRAPHIC

Geographic analysis can quickly produce good results. Pockets of problem areas, damage paths, and the like can become evident when they are plotted on a map or chart. Additionally, other problem areas can be anticipated or sent out for assessment. Transportation bottlenecks may be noted when information is plotted on a map. When performing geographic analysis like all rapid needs assessments, speed of the essence. While electronically produced geospatial information products look great, they take time to produce that may not be available in rapidly evolving events. You should be prepared to use simplified processes such as base maps, acetate overlays and marking pens and pencils to record data quickly to illustrate the information. Geographic analysis can be combined with evident analysis to provide a synergistic output of greater value.

In-Depth Review

Performed to get value added intelligence from data

- May require special skills
- Does not have to be performed locally
- Anticipates future problems
- Allows for placement of resources
- Allows for preemptive actions to prevent problems.
- Uses two previous methods as basis



Visual 7

IN-DEPTH REVIEW

In depth reviews take the most time and talent to produce. A good in depth analysis can provide significant amounts of intelligence that can support and assist decision-making efforts. Because of the special skills occasionally required to perform in depth analysis, it may not be locally produced, but may come from support centers operated by the State or other agencies miles away. In depth analysis looks at problems that have seeded themselves in the current event but have not developed. This analysis allows response planning to take place to either mitigate the problems or respond to them effectively. For example, earlier we used the example of the hospital that lost power and was operating on generator. However, the generator did not provide backup power to the ventilation system. If this facility is located in a hot climate, in as little as 36 hours it may become uninhabitable. The in depth analysis would look at how long the site could remain open and viable under these compromised conditions and the Operations Section could look at options such as restringing power lines, bringing in emergency generators, or evacuating the facility and its patients in an orderly fashion.

Additional Needs

Analysis may produce additional data needs.

- Reshuffle existing priorities
- Ad hoc assignments
- Additional data incorporation.



Visual 8

ADDITIONAL NEEDS

When you are performing analytical tasks, you may find that you need or would like additional data. These additional needs can be met by reshuffling existing priorities for assessment, making ad hoc assignments to collect the needed information, or obtaining data from other sources that are readily available to incorporate into the process, such as data from the National Weather Service. Remember, don't get trapped by analysis paralysis. In many emergencies good enough is best you can get.

Additional Data

Use data from *all* sources.

- Real time media reporting can support analysis activities.
 - While watching a live TV newscast, you witness a building collapse.
- 911 and other communications
- Reports from incoming staff



Visual 9

Activity 4

- Work in groups
- Select new leader/spokesperson
- List other sources of data which exist in your community
- How would you access these sources
- How reliable are they?



Visual 10

Activity 4

Report Out Time!



Visual 11

Review

At the end of this unit participants will be able to:

- Describe the importance of analyzing and reviewing data
- Describe additional data sources available to support analysis



Visual 12

In addition to the field teams collecting rapid needs assessments, data can be obtained from a variety of sources and effectively used. With the deluge of media that accompanies major disasters and emergency events, live broadcasts from the scene can be a good source of data. Also reports coming in from 911 centers and even reports from staff reporting to work can be a good source of data.

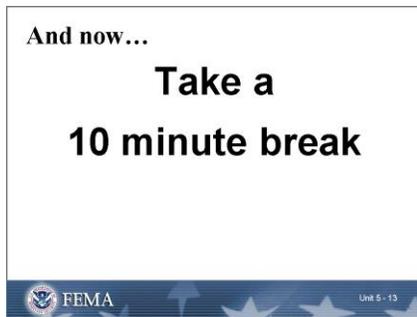
ACTIVITY 4

REPORT OUT TIME!

REVIEW

At the end of this unit participants will be able to:

- Describe the importance of analyzing and reviewing data.
- Describe additional data sources available to support analysis.



Visual 13

UNIT SUMMARY

Take a 10 minute break.

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