



# **Rapid Needs Assessment**

## **Unit 4 - Data Collection and Transmission**



**FEMA**

Unit 4 - 1



# Objectives

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

- Describe the importance of planning for data collection
- Describe the importance of redundant data transmission systems and means



# What is important?

As part of the planning process

- A standardized means of data collection should be implemented
- Regional or statewide systems are best to assure uniformity
- Focus on what data you need to interpret what *is really going on!*





# Data

Data is simple information

- It provides a base, but not a means
- It is just facts and figures until the data is analyzed





# Data Analysis

Analysis provides useful intelligence

- It turns facts and figures into useful information
- To be effective, analysis requires the collection of the proper data



# Data Details

The more detailed or specific the data

- The more useful it becomes
- The more focused the analysis

Better intelligence is produced

*But all data is useful depending on how it is used*



# Example

1. Debris is widespread
2. Debris is blocking roads
3. Debris is blocking main roads on the SW side of the city and making travel difficult
4. Debris is blocking access to the hospital and preventing ingress of emergency traffic



# Identifying Data Needs

Look at cause and effect relationships

- Power is out therefore MRI scans cannot be made
- If MRI scans cannot be made, medical diagnosis is compromised
- If medical diagnosis is compromised, patient care becomes more difficult

Therefore, power failures complicate patient care and efforts should be made to restore power





# Formatting Data

- Data should be formatted to ease and speed collection
- Communications *must be* taken into account
- Data collection should support multiple communication platforms
- Data collection should require minimal expertise on the part of field staff





# Transmission

Think about use of multiple systems

- Plan for system congestion
- Remember stress factor
- Think about minimal training prior to use
- Make everything as simple as possible!





# Methods

## Voice

- Most common method
- Radio, cell phone, landline

## Issues

- Data loss in translation
- Time consuming
- May tie up communications channels





# Methods

## Fax

- Available at larger fixed sites
- Usually dependent on landlines

## Issues

- Requires fixed equipment
- Subject to connection issues
- Not readily available from mobile operations





# Methods

## E-mail

- Message will usually get through, eventually
- Information translation excellent

## Issues

- Requires internet connectivity
- Requires electronic equipment
- Requires monitoring on receiving end





# Methods

## Data Compression

- Very effective if available
- Much more reliable than e-mail

## Issues

- Requires equipment
- Certain level of receiver training required
- Software dependent





# Training and Use

System must be

- Self evident
- Provide reference instructions
- Be easy to handle
- Require minimal training



# Example Form

- Easy to use layout
- Identified lines and boxes for easy transmission.
- Formats available:
  - Paper
  - Electronic
  - Fax
  - Text Only
- Data entry self explanatory

Health Care Facility Report	Incident:	Reporting Unit: Planning	Form: RNA - 003Rev 07
Operational Period:	Date/Time of Report:		Prepared by:
Task/Assignment Number/Name:	<input type="checkbox"/> Assigned	<input type="checkbox"/> Opportunistic	
RNA Team ID:	Team Contact Method & Number:		
1. Report Type:	<input type="checkbox"/> A. Initial	<input type="checkbox"/> B. Follow-up	<input type="checkbox"/> C. Final
2. Survey Method:	<input type="checkbox"/> A. Aircraft	<input type="checkbox"/> B. Windshield	<input type="checkbox"/> C. Onsite <input type="checkbox"/> D. Phone/Radio <input type="checkbox"/> E. Fax
3. Location:	A. Latitude :		B. Longitude :
4. Contact Name:	Title:		
5. Street Address:	City:		
6. Facility Type	<input type="checkbox"/> A. Hospital - General	<input type="checkbox"/> B. Hospital - Specialty Only	<input type="checkbox"/> C. Hospital - Veteran's
	<input type="checkbox"/> D. Hospital - Mental Only	<input type="checkbox"/> E. Hospital - Other	<input type="checkbox"/> F. Day Surgery Center
	<input type="checkbox"/> G. Hospice	<input type="checkbox"/> H. Dialysis Unit	<input type="checkbox"/> I. Extended Care Facility
	<input type="checkbox"/> J. Medical Clinic	<input type="checkbox"/> K. Other	<input type="checkbox"/> L. Unknown
7. Bed Capacity	<input type="checkbox"/> A. <50	<input type="checkbox"/> B. 51-100	<input type="checkbox"/> C. 101-200
	<input type="checkbox"/> D. 201-400	<input type="checkbox"/> E. 401-600	<input type="checkbox"/> F. >601
	<input type="checkbox"/> G. Not Applicable	<input type="checkbox"/> H. Unknown	
8. Operational Status	<input type="checkbox"/> A. Fully Operational	<input type="checkbox"/> B. Degraded Major Surgical Capability	<input type="checkbox"/> C. Degraded Minor Surgical Capability
	<input type="checkbox"/> D. Degraded Medical Imaging Capability	<input type="checkbox"/> E. Degraded Radiology Capability	<input type="checkbox"/> F. Degraded Emergency Room Capability
	<input type="checkbox"/> G. Degraded Pharmacy Capability	<input type="checkbox"/> H. Degraded Intensive Care Capability	<input type="checkbox"/> I. Degraded Food Service Capability
	<input type="checkbox"/> J. Degraded General Patient Care Capability	<input type="checkbox"/> K. Unknown	
9. Other like Facilities in Jurisdiction	<input type="checkbox"/> A. None	<input type="checkbox"/> B. 1-3 Undamaged	<input type="checkbox"/> C. 4-10+ Undamaged
	<input type="checkbox"/> D. 1-3 Damaged	<input type="checkbox"/> E. 4-10+ Damaged	<input type="checkbox"/> F. 1-3 Status Unknown
	<input type="checkbox"/> G. 4-10+ Status Unknown	<input type="checkbox"/> H. All Info Unknown	
10. Service Area / Community Population	<input type="checkbox"/> A. <2,500	<input type="checkbox"/> B. 2,501-5,000	<input type="checkbox"/> C. 5,001-10,000
	<input type="checkbox"/> D. 10,001-25,000	<input type="checkbox"/> E. 25,001-50,000	<input type="checkbox"/> F. 50,001-100,000
	<input type="checkbox"/> G. 100,001-150,000	<input type="checkbox"/> H. 150,001-200,000	<input type="checkbox"/> I. 200,001-500,000
	<input type="checkbox"/> J. 500,001-1,000,000	<input type="checkbox"/> K. >1,000,001	<input type="checkbox"/> L. Unknown
11. Community Impacts	<input type="checkbox"/> A. No Impact on Community	<input type="checkbox"/> B. Minor Impact	<input type="checkbox"/> C. Moderate Impact
	<input type="checkbox"/> D. Major Impact	<input type="checkbox"/> E. Unknown	
12. Current External Hazards	<input type="checkbox"/> A. None	<input type="checkbox"/> B. Urban/Structural Fire	<input type="checkbox"/> C. Wildfire
	<input type="checkbox"/> D. Flash Flooding	<input type="checkbox"/> E. Riverine Flooding	<input type="checkbox"/> F. Coastal/Tidal/Surge Flood
	<input type="checkbox"/> G. Landslides	<input type="checkbox"/> H. Sinkhole/Subsidence	<input type="checkbox"/> I. Tsunami
	<input type="checkbox"/> J. Hazardous Materials	<input type="checkbox"/> K. Volcanic Ash	<input type="checkbox"/> L. Pyroclastic Flows
	<input type="checkbox"/> M. Aftershocks	<input type="checkbox"/> N. Civil Disturbance	<input type="checkbox"/> O. Adjacent Structure Collapse
	<input type="checkbox"/> P. Snow/Ice	<input type="checkbox"/> Q. High winds/Hail	<input type="checkbox"/> R. Radiation Hazards
	<input type="checkbox"/> S. Chemical Hazards	<input type="checkbox"/> T. Biological Hazards	<input type="checkbox"/> U. Unknown







# Review

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