

Disaster Response

Part 2

Life Cycle of a Disaster

Rick Bissell, PhD
University of Maryland
Baltimore County

NDMS Response Team Training Program

Life Cycle of Common Disasters

- Warning
- Impact
- Acute
- Post-impact
- Recovery
- Mitigation
- Planning

NDMS Response Team Training Program

Warning Phase

People are given time to prepare themselves and their dwellings for the oncoming disaster.

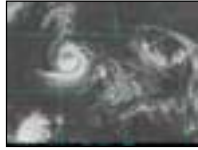
- Precedes disasters such as floods, hurricanes and to a lesser degree, tornadoes and volcanic eruptions.
- Evacuation can minimize the loss of life when the event occurs.
- Prediction and/or detection is available in advance.

NDMS Response Team Training Program

Warning Phase

Predictions by the National Hurricane Center can assist in preparation.

DMATs and other State assets may be put on "Advisory."



NDMS Response Team Training Program



Impact Phase



The actual occurrence of the disaster happens.



NDMS Response Team Training Program



Acute Phase



Most acute and/or traumatic injuries occur during this phase.

- Hurricane winds decrease.
- Earthquakes can be over in seconds.
- Floods, blizzards and volcanic eruptions have a longer acute phase.
- Radiation / hazardous materials incidents can have a long acute phase depending on the material involved.

NDMS Response Team Training Program



Post-impact Phase



Threat of the disaster has just passed.



- Population becomes aware of the results of the disaster, and its effect on their community.
- State and Federal agencies will begin their evaluation of the disaster area.
 - Assess the damage
 - Perform needs assessment
 - Plan the magnitude of response

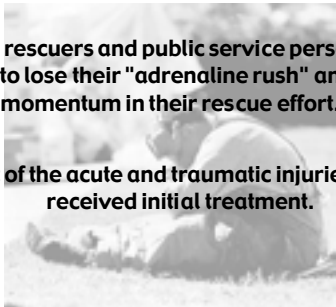


NDMS Response Team Training Program



Post-impact Phase

Local rescuers and public service personnel begin to lose their "adrenaline rush" and lose momentum in their rescue effort.



Most of the acute and traumatic injuries have received initial treatment.



NDMS Response Team Training Program



Post-impact Phase

State and Federal Disaster Response Plans are implemented and assistance is beginning to arrive at the disaster site.

DMATs "activated"



NDMS Response Team Training Program



Post-Impact Phase



Phenomenon of “convergence” escalates.

- Personnel and goods arrive from neighboring cities and states.
- Resources may even arrive from other countries if the magnitude of the disaster warrants it.
- Amount of supplies, personnel and equipment may exceed what can be of use.



NDMS Response Team Training Program



Post-Impact Phase

Post disaster environment exacerbates chronic health problems.



- Medications lost
- Dialysis, chemotherapy and other treatments interrupted
- Health care infrastructure become non-functional



NDMS Response Team Training Program



Post-Impact Phase

Population locates alternate sources of health care.



- DMAT switches role from an Emergency Department to community health center, clinic and pharmacy.
- Public health problems start to become a threat:
 - Food and water borne illness may be observed.



NDMS Response Team Training Program



Post-Impact Phase

First DMATs deployed are stood-down and replaced by new teams.

Outreach is initiated.



NDMS Response Team Training Program



Recovery Phase



Last phase of a disaster

- Population begins to rebuild their homes, businesses and the infrastructure.
- Pharmacies, health care clinics and hospitals return to normal operation.
- DMATs and other response teams phase themselves out of the response efforts as a Public Health Service.



NDMS Response Team Training Program



Recovery Phase

Other Federal agencies step in to assist in the long term recovery efforts.

Marks beginning phase of next event.

Population is most receptive to educational efforts and community preparation.



NDMS Response Team Training Program



Recovery Phase

Can extend years after the disaster as **preparedness and mitigation** (activities to reduce or prevent the impact of a disaster or its consequences) and **recovery** take place.



NDMS Response Team Training Program



Summary

Life Cycle

- Warning - Alert
- Impact
- Acute phase - 1 to 4 days post impact
- Post impact phase - 4 to 30 days
- Recovery period - one month to years



NDMS Response Team Training Program



Conclusion

A fundamental understanding of disaster response is crucial to being a productive member of an NDMS response team.



NDMS Response Team Training Program