

NEW HAZARDS/DISASTERS COMING

1. More severe technological hazards
2. Greater, more deadly impacts of natural hazards
3. Less security for physical facilities, information systems and content
4. Errors in human calculation -- miscalculation unintentional and intentional
5. Biological and chemical (natural and man-made):
 - marine toxins; natural gas under lake bed
 - biotech hazards
6. Terrorism:
 - nuclear, biological, and chemical agents
 - weapons of mass destruction
7. Distant (international) source of disasters

THE CHALLENGE OF ANTICIPATING CHANGE AND DEALING WITH IT

A. Prepare for New Organizational and Institutional Steps, by means of New Organizational Arrangements, such as

- **Public and Private Efforts: Cooperation, Coordination, Partnerships.**
- **Working relationships that foster team work, sharing and trust** among the multi-disciplinary and multi-organizational teams.
- **New Equipment and New Ways and Means of Working, such as**
 - Use of the Internet
 - On-line conferencing
 - Telecommuting

B. Build on Existing National Response Plans and Experience

- Expansion of the Federal Response Plan for Counter-Terrorism efforts.
- Enhancing communications, training, information sharing via new means, such as the EIIP.

NEW THINKING IS NEEDED

- **Broader thinking**
 - multi-disciplinary
 - multi-hazard
 - multi-institutional
 - international cooperation

- **Joint planning and sharing of resources among regions, states and nations**
 - mutual planning and mutual aid for response
 - county level and sub-state planning; multi-state regional earthquake consortia

- **Regional and Bilateral organizational arrangements**

- **More research, especially empirical case studies**
 - on technological hazards triggered by large-scale natural disasters
 - case examples of what works and what does not (policies, programs, organizational arrangements)
 - cost-effective ways to deal with hazards/disasters

 - monitor and evaluate efforts; risk assessment and risk management techniques, economic analyses, behavioral studies

- **More and better risk assessment and risk management efforts**

- **More training**
 - in substantive areas of emergency management
 - in telecommunications techniques, use of computers, Internet and Intranets