Developing Central America’s
Emergency Preparedness Assessment Tool
Marydale Oppert | Rollins School of Public Health

Central America has one of the greatest disaster exposures in the world. Between 1980 and 2006, an average of 21 disasters occurred annually in the region. Due to changing climate patterns, natural disasters are expected to increase in magnitude and frequency.

**Lack of Preparedness: A Heavy Price to Pay**

The disasters that occurred in the region between 1980 and 2006 resulted in the deaths of over 47,000 people. More recently, the extensive flooding and landslides that occurred in 2011 as a result of the Atlantic hurricane season caused more than US $1 billion in damages in El Salvador and more than US $500 million in Guatemala. Decreasing vulnerability and increasing emergency preparedness at the community, regional, and national levels can mitigate losses in property, resources, and lives.

**Problem Statement**

- Central America is a region rife with disasters.
- The negative impact of emergencies can be mitigated through proper health preparedness.
- Currently, there are no existing tools that can be used to document the region’s emergency preparedness. There is a need for instruments that measure emergency preparedness in the region.

**Objectives**

1. Document the development of an emergency preparedness assessment tool created to evaluate Central America Ministries of Health preparedness.
2. Document the progress made at the country and regional level over time.
3. Guide the selection of appropriate allocation of resources, trainings, and interventions to strengthen each country’s and the region’s response capacity.

**Methods**

1. Existing national and international tools were reviewed by subject matter experts from the Centers for Disease Control and Prevention (CDC) and the Council of Ministers of Health from Central America and Dominican Republic (COMISCA, Spanish acronym).
2. Four tools were selected for their breadth of application to all types of emergencies, integration of concepts supported by empirical research in emergency preparedness, and applicability to the needs of the Ministers of Health (MoHs) of Central America:
   - Public Health Preparedness Capabilities: National Standards for State and Local Planning
   - Global Assessment of National Health Sector Emergency Preparedness and Response
   - Emergency Operations Center (EOC) assessment developed by CDC EOC
   - Gap Analysis of Global Disease Detection Center instrument
3. CDC, COMISCA, and Central America emergency preparedness experts selected elements common to all four tools, as well as elements of specific importance to Central America to be included in the Emergency Preparedness Assessment Tool.

**Results**

The EPAT is divided into eight functional elements determined as most important to the region by CDC, MoH, and COMISCA experts. The eight functional elements are:

1. Public Health Emergency Plan
2. Command and Control
3. Communications Infrastructure
4. Public Information and Risk Communication
5. Logistic and Operational Process
6. Medical Coordination
7. Training, Exercise, and Evaluation
8. Surveillance Systems

**Conclusions**

- Establishing a baseline of information allows experts to monitor and evaluate progress over time towards efforts in emergency preparedness.
- This tool represents a formative step towards developing a foundation of information for the region.
- The questionnaire provides quantitative data that will be measured over time, as well as qualitative data that provides feedback from experts in the field. This information will be used to guide future efforts in providing training, education, and resources in emergency preparedness.

**Building Partnerships, Fostering Collaboration**

CDC, COMISCA, and Central American Ministers of Health conference to discuss first annual EPAT assessment results. Cooperation, collaboration, and information sharing play important roles in regional improvement in emergency preparedness.

**Acknowledgments**

The author would like to acknowledge Dr. Lise Martel of the CDC; Dr. Matthew Strickland, Dr. Matthew Freeman and Deborah Millette of Emory University; Luis Hernandez of CDC Guatemala; Nuria Canizalez and Janette Ortiz of COMISCA; and Dr. Bryan Christensen for all their hard work and assistance in this project.