Dengue Integrated Management Strategy (IMS) in Guyana

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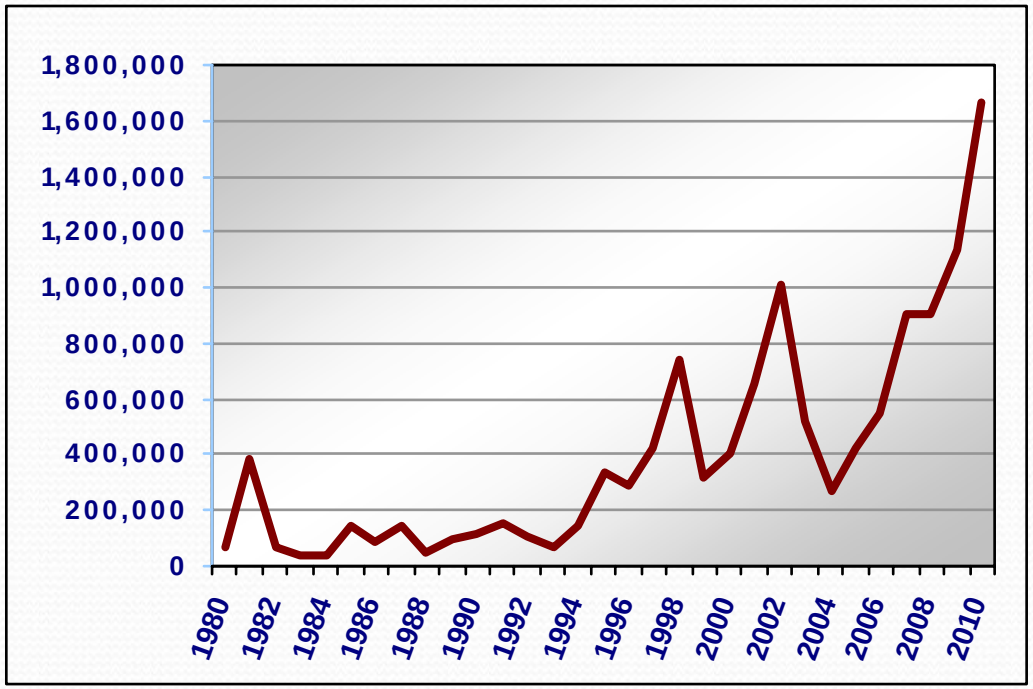
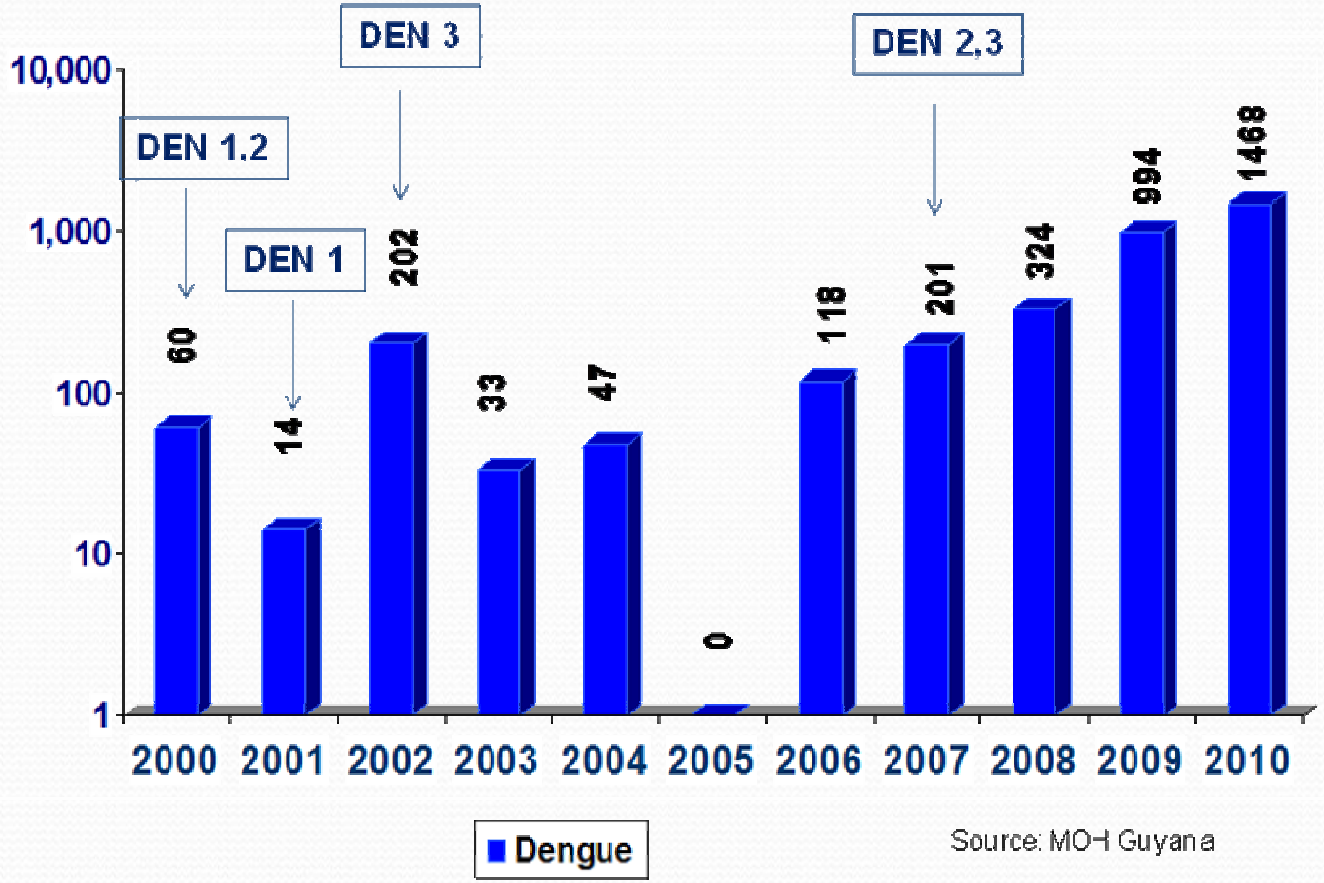
Background

- Dengue mosquito borne, Aedes aegypti, viral infection
- Annually millions of persons from tropical and sub tropical areas around the world are affected
- Over the last 35 years Dengue fever has spread throughout the Caribbean and Latin America with cyclical outbreaks.
- The last major outbreak occurred in 2010 with 1,662,296 cases reported and 1,193 deaths.

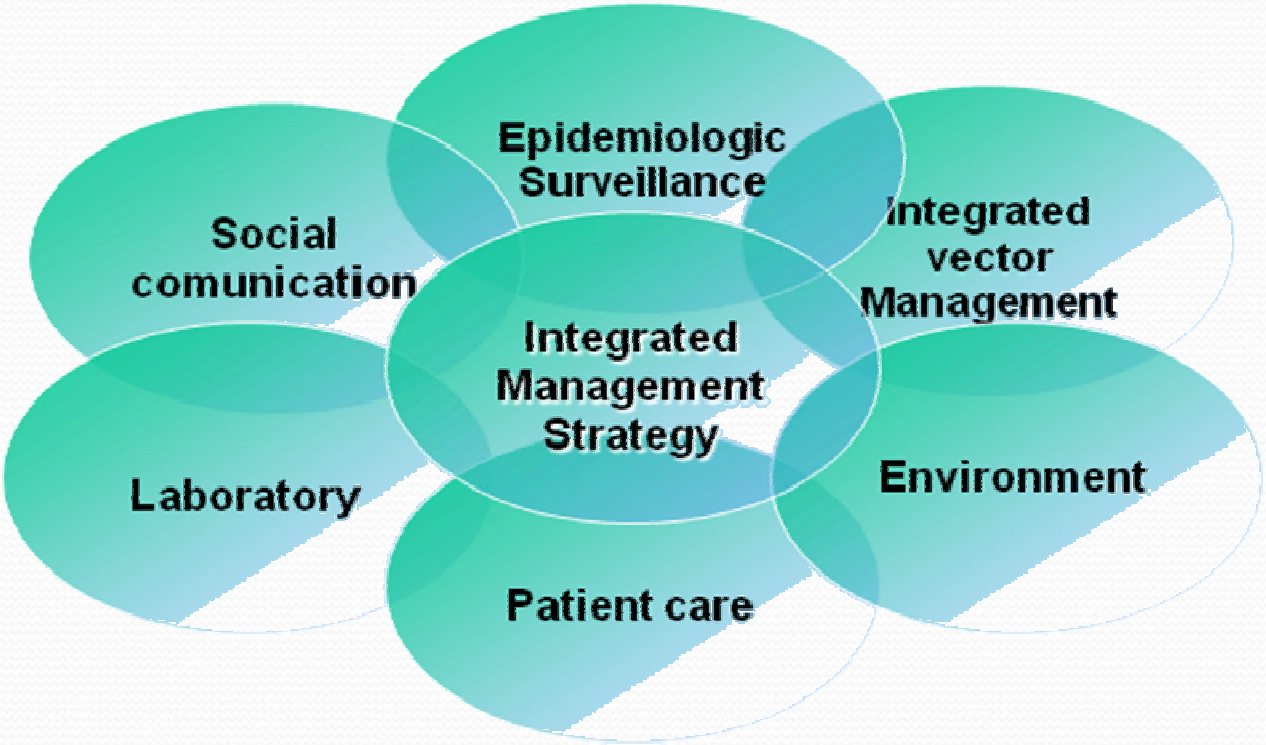
Dengue in the Americas



Dengue in Guyana, 2000 to 2010



Integrated Management Strategy



IMS-Dengue workshop in Guyana:

- Participants: government staff who work in surveillance, laboratory, environmental health, hospitals (MDs), communication experts

- Facilitators: experts from PAHO, CAREC, PANOFTOSA and other MOH staff with experience in dengue

IMS for Dengue: Procedure

- Day 1: Presentations on best practices by facilitators by area, strengths and weaknesses (SWOT) analysis in teams by area (lab, epi, communications, etc.)
- Day 2 - 3: Working group meetings by area to identify 1-4 Objectives, indicators, activities, timeline and cost for each item.
- Day 4: Each area presents their results to the group. Results compiled into 1 matrix or plan.
- Day 5: Plan presented to the entire group of attendees.

Strategic Plan - IMS for Dengue for Guyana

- Overall goal:
  - To reduce the social, economic and health impacts caused by dengue in Guyana

- Objectives, activities, task, timeline and responsible post for the focus areas:
  - Management
  - Epi/Surveillance
  - Vector Control (Integrated Vector Management)
  - Communication & Health Promotion
  - Case Management
  - Laboratory

Epidemiological Surveillance

- Objective 1: Establish epidemiological surveillance for timely alert and opportune response to outbreaks in Guyana

- Objective 2: Standardize common criteria for risk stratification in Guyana

Themes

Vector Control

- Objective: Integrated vector management for dengue prevention and control implemented to reduce vector populations

Communication and Health Promotion and Education

- Objective: A communications plan that takes into consideration social cultural factors and is based on epidemiological and entomological indicators

Themes

Case Management

- Objective: Reduce morbidity from severe dengue by 50% and maintain mortality from severe dengue at < 1% in Guyana

Management

- Objective: Reduce morbidity from severe dengue by 50% and maintain mortality from severe dengue at < 1% in Guyana.

Laboratory services

Laboratory

Results/Objective	Indicators	Verification Sources	Assumptions / risks
R6. To ensure that Laboratory capacity is strengthened to support surveillance and outbreak investigations for timely public health actions.	100% of regional laboratories, diagnostic centers and at least 5 district hospital laboratories report Dengue serological testing results monthly or more frequently according to the epidemiological situation, to the national laboratory. The National Laboratory performs 100% of confirmatory serological test. Two acute samples obtained from patients with undifferentiated fever will be analyzed weekly at the National Referral Laboratory for dengue identification. Quarterly reporting of the circulating serotype(s) in Guyana at CAREC- PAHO.	National guidelines for Dengue diagnosis and testing algorithm in Guyana. Laboratory reports through supervisory visits nationally on a quarterly basis	Human and financial resources Available. Changes in priorities. All monitoring sites should notify the central level if there is an increase in frequency of testing of undifferentiated fever.

Results / objective	Activities
R6.To ensure that Laboratory capacity is strengthened to support surveillance and outbreak investigations for timely public health actions.	R6A1 Development of national guidelines for dengue testing R6A2. Development of a national QA monitoring program for dengue testing R6A3. Establish a national courier system for transportation of specimens R6A4. Implement a standardized laboratory recording and reporting system

Activities	Task	Execution period*			Responsible	Cost ** US$	Comments
		S	M	L			
R6A1. Development of national guidelines for dengue testing	1. Review the WHO guidelines for dengue diagnosis	2nd Q 2011			Laboratory Manager and Director		
	2. Draft and share the guidelines within the country's laboratory network.	3rd Q 2011			Laboratory Network		
	3. Incorporate comments and recommendations, pilot and finalize	3rd & 4th Q 2011			Laboratory Manager and Director		
	4. Disseminate and train in the new laboratory guidelines.	To be completed by 1st Q 2012			Laboratory Manager and supporting staff	3,000	
	5. Procure reagents and consumables to target sites	3rd Q 2011			MOH/NPHRL	10,000	Ongoing effort
	6. Implementation of guidelines, monitoring and evaluation of diagnostic system	1st and 2nd Q 2012			Laboratory Network		

7. Training and implementation of dengue typing by RT-PCR at National laboratory	3rd and 4th Q 2011			National Laboratory – PAHO/CDC	6,000	Will need international training, either in Puerto Rico (CDC) or organize Sub-regional training in Guyana
8. Standardize and evaluate the use of dry blood spots for dengue typing by real time RT-PCR		1st Q 2012		Molecular Biology Lab-CDC	10,000	Ongoing across 2012

Questions?

Thank you!