

Caribbean Epidemiology Centre Proposed Surveillance Services

The CAREC Team



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Outline of Presentation

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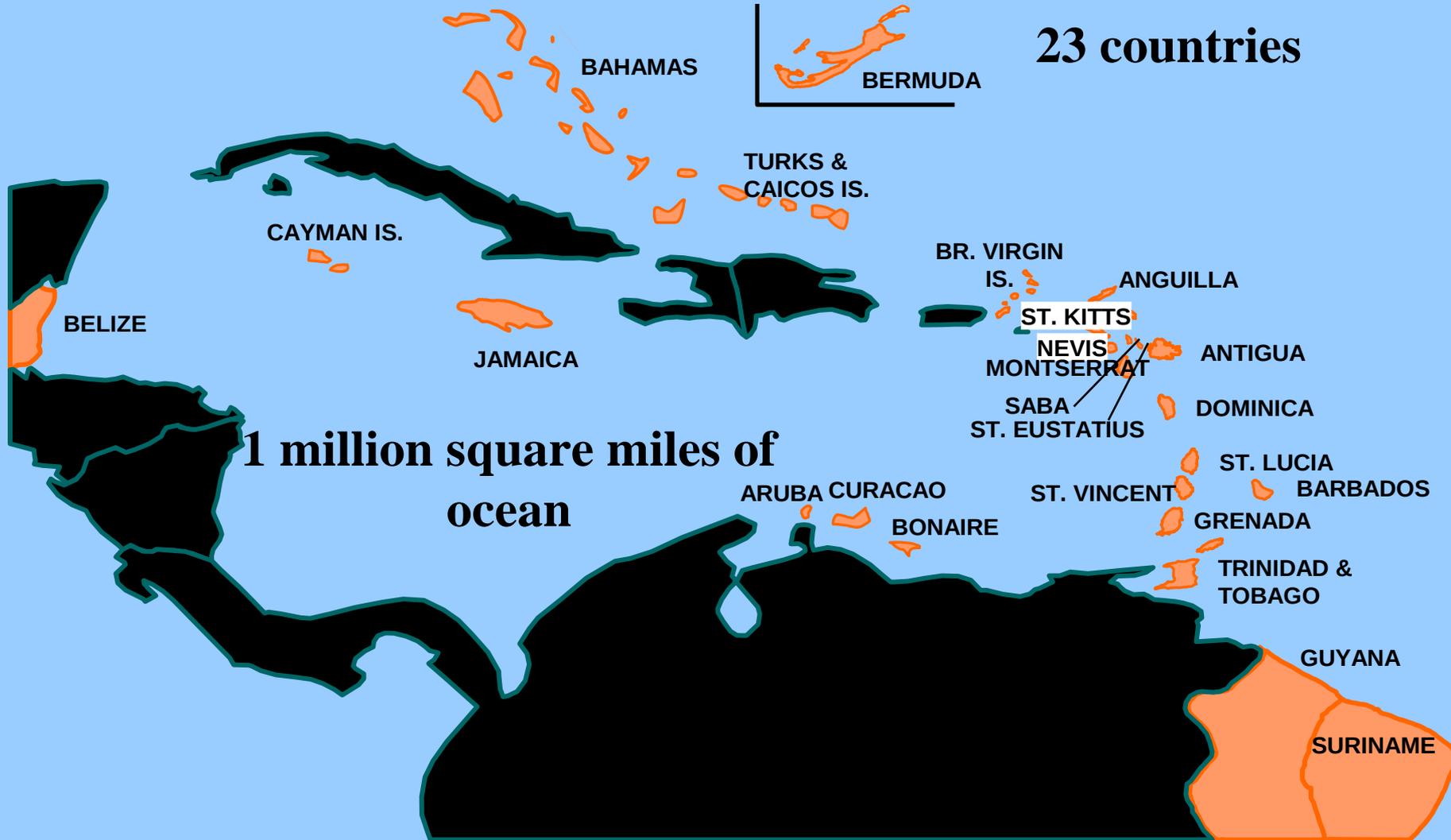
CAREC Member Countries

❖ CAREC provides epidemiological support to 23 Member Countries

- English and Dutch speaking
 - Bermuda in the North to Suriname in the South
 - Varying population sizes
 - Montserrat, 4,681 – Jamaica, 2,600,723; Total 6.9 million
 - Countries have well developed primary health care systems, secondary care services and some tertiary care services mainly in larger countries

Population Grouping	Country	
<100,000	Anguilla	
	Antigua and Barbuda	
	Bermuda	
	British Virgin Islands	
	Cayman Islands	
	Dominica	
	Montserrat	
	St. Kitts and Nevis	
	Turks and Caicos Islands	
	>=100,000 to <=400,000	Aruba
Bahamas		
Barbados		
Belize		
Grenada		
Netherlands Antilles (Cur, STM, BES)		
St. Lucia		
St. Vincent and the Grenadines		
>400,000		Guyana
		Jamaica
	Suriname	
	Trinidad and Tobago	

The CAREC Member Countries



The Multilateral Agreement

- ❖ States that the Centre is responsible for the overall promotion and coordination of the Caribbean regional public health surveillance systems of its member countries
- ❖ For building capacity in epidemiology, laboratory and related public health disciplines
- ❖ Involves providing technical cooperation to member countries to support and enhance their capacity in the areas of surveillance and risk assessment for communicable diseases

CAREC Mission Statement

- ❖ *‘To improve the health status of Caribbean people by advancing the capability of member countries in epidemiology, laboratory technology and related public health disciplines through Technical Cooperation, service, training, research and a well trained motivated staff.’*

Surveillance system (1)

- ❖ Effective surveillance systems should provide timely information on health events to promote disease prevention and control and will support the goals and objectives of the Caribbean Cooperation in Health (CCH)
- ❖ Surveillance is promoted as the mechanism that public health agencies should use to monitor the health of their communities

Surveillance system (2)

- ❖ Concretizing this concept includes strengthening of all aspects of surveillance: data collection, collation, validation, analysis and interpretation; adequate laboratory support for surveillance
- ❖ The production and use of timely information for planning, implementation and evaluation of public health practice

Areas of Focus for the Centre (1)

Integrated communicable disease surveillance:

A. Syndromes e.g. fever/rash, ARI, AGE

B. Specific Disease Reporting

- ❖ Airborne diseases
- ❖ Food and water borne diseases
- ❖ Sexually transmitted diseases including HIV/AIDS
- ❖ Vaccine preventable diseases
- ❖ Vector borne diseases
- ❖ Other diseases eg selected neglected diseases
- ❖ Antimicrobial resistance

Areas of Focus for the Centre (2)

- ❖ Risk assessment for communicable diseases
- ❖ Hotel-based surveillance, should be part of the national system
- ❖ Surveillance of non-communicable disease and their risk factors incl. injuries and violence
- ❖ Laboratory support for communicable disease surveillance incl. both testing and use of data
- ❖ The development of a sub-regional laboratory network to support surveillance

Areas of focus for the Centre (3)

- ❖ Strengthening national capacity for analysis and use of data for planning, public health action and decision making
- ❖ Mortality and morbidity surveillance
- ❖ Early identification, timely response to outbreaks and disasters
- ❖ Implementation of WHO International Health Regulations - include technical cooperation to conduct assessments, development of plans of actions for system and monitoring implementation of action plans

Essential Functions of the Sub-regional Laboratory

- ❖ **Specialized reference testing** with emphasis on the characterization of infectious agents of regional and international public health importance
- ❖ **Monitoring and evaluation** (ongoing) of national laboratories' current technical capacities to provide technical support through the transfer and implementation of new technologies
- ❖ **Diagnostic or primary testing*** for newly emerging, re-emerging infectious diseases

* *one strategy is the coordination of a regional laboratory network*

**Diseases/Aetiologic agents currently
under Sub-regional Surveillance**

Disease/Aetiologic Agent	Comment
<i>Campylobacter</i>	Laboratory testing in countries with competence, CAREC: responsible for testing of other countries
Chlamydia infection	CAREC to be contacted for discussion re: testing (No final decision re: testing)
Chicken pox (varicella)	CAREC to be contacted for discussion re: testing
Cholera	Initial laboratory testing in country, CAREC: referral for further testing
Ciguatera poisoning	CAREC to be contacted for discussion and decision making
Congenital rubella syndrome	CAREC for testing (EPI Laboratory)
Congenital syphilis	Laboratory testing in country CAREC: when a decision has been made based on the elimination algorithm
Diphtheria	Laboratory testing in countries with competence, CAREC: responsible for testing of other countries
Dengue fever	Laboratory testing in countries with competence, CAREC: responsible for testing of other countries
Dengue haemorrhagic fever/ shock syndrome	
<i>E. coli</i> (pathogenic)	Laboratory testing in countries with competence, CAREC: responsible for testing of other countries
Gonococcal infection	Laboratory testing: in-country CAREC: to be contacted re: testing if there are challenges (* AMR testing algorithm has not yet been decided)
HIV/AIDS	Laboratory testing: in-country or network mode CAREC: to be contacted re: testing if there are challenges
HIV (Mother to child transmission)	
Influenza	Laboratory testing in countries with competence, CAREC: responsible for testing of other countries

Disease/Aetiologic Agent	Comment
Leprosy	Laboratory testing: in-country CAREC: to be contacted re testing if there are challenges
Leptospirosis	Laboratory testing in countries with competence, CAREC: responsible for testing of other countries
Malaria (indigenous and imported)	Laboratory testing: in-country CAREC: to be contacted for discussion if necessary
Measles	CAREC for testing (EPI Laboratory)
<i>Neisseria meningitidis</i>	Laboratory testing in countries with competence, CAREC: responsible for testing of other countries. Isolates to be submitted to CAREC for further characterization.
<i>Streptococcus pneumoniae</i>	
<i>Haemophilus influenzae</i>	
Mumps	Laboratory testing in countries with competence, CAREC and EPI Laboratory responsible for testing for other countries
Opportunistic infections (e.g. <i>cryptosporidium, CMV, toxo, pneumo,etc</i>)	Laboratory testing in countries with competence, CAREC: responsible for testing of other countries
Pertussis	Laboratory testing in countries with competence, CAREC and EPI Laboratory responsible for testing for other countries
Plague	CAREC for testing
Poliomyelitis	CAREC for testing (EPI Laboratory)
Rabies (in humans)	CAREC for testing
Rotavirus	Laboratory testing in countries with competence, CAREC: responsible for testing for other countries
Rubella (German measles)	Laboratory testing in countries with competence, CAREC: EPI Laboratory responsible for testing for other countries

Disease/Aetiologic Agent	Comment
Salmonellosis	Laboratory testing in countries with competence, CAREC: responsible for testing of other countries. Isolates to be submitted to CAREC for further characterization according to established protocol.
Shigellosis	
Severe Acute Respiratory Syndrome (SARS)	CAREC for testing
Syphilis	Laboratory testing in country as for congenital syphilis. Applicable to pregnant women as in the elimination strategy algorithm for CNS. CAREC: when a decision has been made based on the elimination algorithm
Tetanus (excluding neonatal)	In country diagnosis
Tetanus neonatorum	
Tuberculosis (Pulmonary)	Laboratory testing in countries with competence, CAREC: responsible for testing for other countries, all AMR testing
Tuberculosis (Extra-pulmonary)	
Typhoid and paratyphoid fever	Laboratory testing in countries with competence, CAREC: responsible for testing for other countries
Viral Encephalitis/Meningitis	Laboratory testing in countries with competence, CAREC: responsible for testing for other countries
Viral Hepatitis A	Laboratory testing in countries with competence, CAREC: responsible for testing for other countries
Viral Hepatitis B	Laboratory testing in countries with competence, CAREC: for discussion and assistance as necessary
Yellow fever	CAREC for testing

Discussion Points

- ❖ What is the priority and relevancy accorded to the surveillance systems that you currently have?
- ❖ Are the present national surveillance systems of each country addressing the diseases outlined in the presentation?
- ❖ What mechanism(s) should be used for making the decision(s) - nationally?



Questions for Discussion

- ❖ How is the laboratory system arranged to support surveillance?
- ❖ How do we define and 'operationalize' the concept of public health surveillance in a clinical laboratory – what are the essentials?
- ❖ How should the decision making be done?
- ❖ What should be the mechanisms and approach?
- ❖ What should be the way forward?

Questions for Discussion

- ❖ How should the issues/decision making be done re lab network-internally and externally?
- ❖ Where should the responsibility lie and or who should make the decision?
- ❖ What should be the mechanisms and approach?
- ❖ What should be the way forward?

Conclusion

- ❖ The government of the countries are committed to the provision of a timely and effective surveillance system, which is evidenced by their willingness to form partnerships that will sustain existing programmes
- ❖ *CAREC will continue to strive 'To improve the health status of Caribbean people by advancing the capability of member countries in epidemiology, laboratory technology and related public health disciplines'*

THANK YOU