



**AMR** Antimicrobial Resistance  
**NAP** National Plan Action  
**GAPARM** Global Action Plan  
**RAPAMR** Regional Action Plan

**ASP** Antimicrobial Stewardship Program  
**IPC** Infection Prevention Control

 Current achievements from the country

 Urgent areas of opportunity



TRINIDAD AND TOBAGO

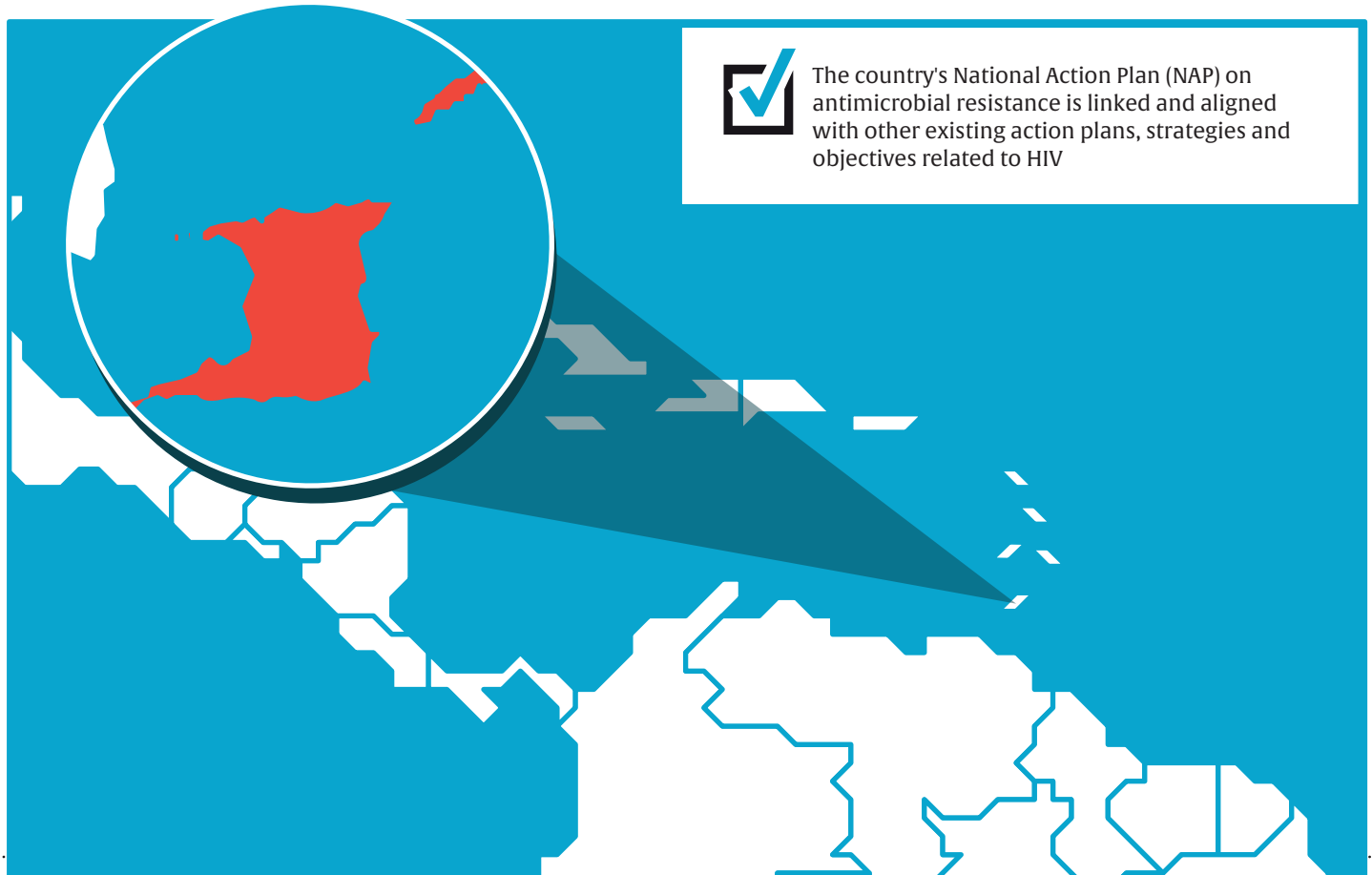
# AMR Review

## The Government and the National Action Plan

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## TRINIDAD AND TOBAGO PROGRESS WITH THE DEVELOPMENT AND IMPLEMENTATION OF A NATIONAL ACTION PLAN ON ANTIMICROBIAL RESISTANCE (AMR)

In line with the Regional Action Plan and the Global Action Plan



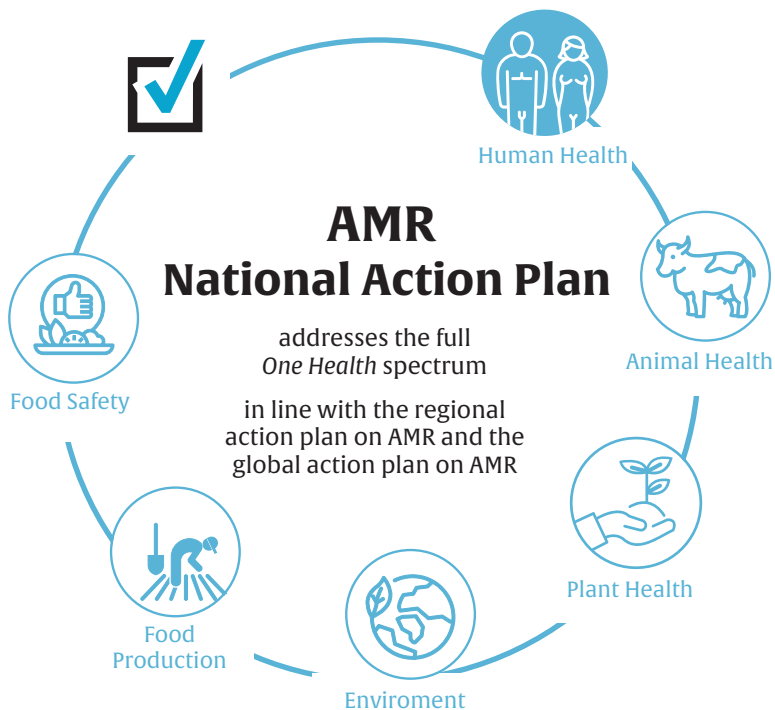
The country's National Action Plan (NAP) on antimicrobial resistance is linked and aligned with other existing action plans, strategies and objectives related to HIV


## National Action Plans & Governance



A Multi-sectoral working group on AMR is established with Government leadership.

# Health Approach, Governance and Collaboration




 The AMR National Action Plan include an operational framework for implementation. There is a multisectorial group on AMR functioning with clear terms of reference, regular meetings. Its activities have clear definitions and timeline.

Funding allocation and establishment of mechanisms for funding and accountability are recommended to ensure the the multi-sectoral




# Regulation

 Antimicrobials are prescribed by their International Nonproprietary Name (INN) in the public and private sector. Facilitating the identification of active ingredients and other pharmaceuticals.




# Awareness & Education


 Trinidad and Tobago has implemented some activities in parts of the country to raise awareness about risks in all sectors of antibiotic resistance and actions that can be taken to address it.

  **Human health Sector**

- There are Ad hoc AMR training courses in some human health related disciplines.

 **Farming Sector**

- There are tailored AMR training courses routinely available nationwide for all key stakeholders and completion of training is a formal requirement.

 **Veterinary sector**

- The core curricula for graduating veterinarians and veterinary paraprofessionals cover AMR and appropriate use of antimicrobials.

- Veterinary services are assessed and there are plans developed to improve its capacity.

## AMR Surveillance



There is a presence of national AMR surveillance system in human AMR, data is collected locally for common bacteria.

The collected data should have a standardized approach and there should be national coordination or quality management.



There are future plans towards establishing national surveillance on AMR

The country must participate in global and regional AMR surveillance in Human platforms this will help to get the main goal



## Surveillance of Antimicrobial Use/Consumption



The National legislation covers some aspects of manufacture, import, marketing authorization, control of safety, quality and efficacy and distribution of antimicrobial products.



Medicines and other health technologies are incorporated by the public sector using an official mechanism that includes HTA-based selection criteria.



There is an urgency to: Create a national surveillance system for **MONITORING ANTIMICROBIAL USE/ CONSUMPTION/SALES**, and rational use of antimicrobials in human health



## Antimicrobial Stewardship & Optimizing



It is urgent for Trinidad and Tobago to **CREATE PROGRAMS FOR OPTIMIZING ANTIMICROBIAL USE IN HUMAN HEALTH** and create **FUNDED NATIONAL ANTIMICROBIAL STEWARDSHIP PROGRAM**



There are future plans for creating the guidelines for antimicrobial use.



National legislation covers some aspects of national manufacture, import, marketing authorization, control of safety, quality and efficacy and distribution of antimicrobial products.

## Infection Prevention and Control



A **national IPC program and operational plan** are available and national guidelines for health care IPC is available and disseminated.



**Infection Prevention and Control Policies and Guidelines for Health Care**  
Established in June 2011.  
<http://www.bvsde.paho.org/gripeAH1N1/ManualIPC.pdf>









Trinidad and Tobago needs to generate programs to promote best health, management and hygiene practices targeting **THE REDUCTION OF USE OF ANTIMICROBIALS IN ANIMAL AND PLANT PRODUCTION AND AMR TRANSMISSION IN FOOD PRODUCTION**

# PRIORITY SPECIMENS AND PATHOGENS FOR SURVEILLANCE OF AMR\*


\*In line with Global Antimicrobial Resistance Surveillance System (GLASS)

PAHO protocol recommends to start with blood infections for the following pathogens

|   |   |  |
|---|---|--|
| <h2>Blood</h2>  | <h3>Laboratory case definition</h3>  <p>Isolation of pathogen from blood</p> | <h3>Surveillance type and sampling setting</h3>    <p>Selected sites or national coverage</p> <p>Continuous</p> <p>Patients in hospital and in the community</p> |
|---|---|--|






### Priority pathogens for surveillance



# 1

- *Acinetobacter baumannii*
- *Escherichia coli*
- *Klebsiella pneumoniae*
- *Enterobacteriaceae (other)\*\**
- *Pseudomonas aeruginosa\*\**

Once you have attended blood infections PAHO recommends to follow with:

|   | Laboratory case definition  | Surveillance type and sampling setting   | Priority pathogens for surveillance  |
|---|---|--|--|
| <b>Urine</b><br>                         | Significant growth in urine specimen                                    | <ul style="list-style-type: none"> <li>• Selected sites or national coverage</li> <li>• Continuous</li> <li>• Patients in hospital and in the community</li> </ul> | <ul style="list-style-type: none"> <li>• <i>E. coli</i></li> <li>• <i>K. pneumoniae</i></li> </ul>         |
| <b>Faeces</b><br>                        | Isolation of <i>Salmonella spp.</i> or <i>Shigella spp.</i> from stools |  | <ul style="list-style-type: none"> <li>• <i>Salmonella spp.</i></li> <li>• <i>Shigella spp.</i></li> </ul> |
| <b>Urethral and cervical swabs</b><br> | Isolation of <i>N. gonorrhoeae</i>                                      |  | <ul style="list-style-type: none"> <li>• <i>N. gonorrhoeae</i></li> </ul>                                  |

Any pathogen isolated from a blood culture may be significant for surveillance locally and nationally; only the prioritized pathogens for global surveillance are listed here. Pure culture according to local laboratory practice. Catheter samples should be excluded if possible. Diarrhoeal surveillance is for non-typhoid salmonella species; for local clinical purposes, typhoid and paratyphoid should be included.

# 2

- *Enterococcus spp.\*\**
- *Salmonella species (spp.)*
- *Staphylococcus spp.*

# 3

- *Streptococcus pneumoniae*


- *Enterobacter cloacae*<sup>1</sup>

\*\*This pathogens are not included in GLASS but are part of PAHO recommendations


1 Not defined as a WHO priority pathogen

PAHO recommends to start as soon as possible the creation of a National Coordination Center (NCC) and a National Reference Laboratory


## HOW TO CREATE AN AMR SURVEILLANCE NATIONAL COORDINATION CENTER (NCC)?




Coordinate surveillance network




Coordinate and support data collection




Data quality assurance and feedback




Develop national surveillance protocol




Maintain national AMR surveillance database




Data analysis and reporting




Infectious disease specialist




Data manager



AMR surveillance coordinator

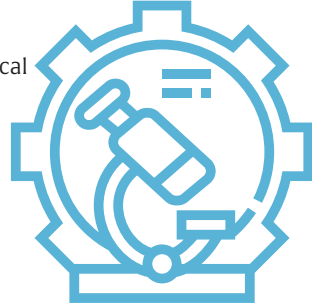



Epidemiologist




Medical microbiologist

## WHAT SHOULD A NATIONAL AMR REFERENCE LABORATORY DO?







Provide second-line AST




Develop methodological standards




Provide training




Support capacity building



Molecular testing



Confirmatory testing



Support quality assurance

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