Antimicrobial Resistance Surveillance in the Americas

World Health Day
7 April 2011

RED LATINOAMERICANA DE VIGILANCIA DE LA RESISTENCIA A LOS ANTIMICROBIANOS RELAVRA

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Ministerio de Salud
Presidencia de la Nación
República Argentina
APPROBATION OF NEW SYSTEMIC ANTIMICROBIAL AGENTS BY FDA BETWEEN 1980-2004

Regional Network for AMR Surveillance

WHONET

Information System

Data submission to the National Reference Laboratory

National Reference Laboratory

Sentinel laboratory sites

National Microbiology Laboratory for Enteric Pathogens in Canada

Instituto Nacional de Enfermedades Infecciosas, C. Malbrán, ANLIS, Argentina

Data entry

Culture and susceptibility tests

140 000
Mission of Latin-American Network for Antimicrobial Resistance Surveillance

“To obtain reliable, appropriate and reproducible microbiologic data, to be used for the improvement of patient care and the strengthening of the surveillance program through the implementation of sustainable quality guaranty programs”
PREVENTION OF THE SPREAD OF AMR DISSEMINATION

Why Surveillance of community and hospital species?

>80% of the treatments are empirical: for rational use of antibiotics is needed to know what circulates and its profile of resistance.

Strategy

Routine use of information provided by the laboratory (standardization and quality assurance) in sentinel units.
Prevention of the spread of AMR dissemination

**WHAT antimicrobial surveillance does?**

- **Recognize involved species**
- **Establish prevalence and resistant profiles (extent of the problem)**
- **Suggest treatment options**
- **Design of control strategies**
- **Determine efficacy of control actions**

Excellent opportunity to know the quality of the labs and improve it
Surveillance of:
Community and Nosocomial Pathogens

1996-2011

Diarrhea and food borne diseases
Respiratory tract infections
Sexual transmitted infections
Urinary Infections
Meningitis
Nosocomial Infections

Standardized protocols
CLSI Standards in Spanish
ACTIVITIES IN AMR 1996-2007

Evolution in number of susceptibility test

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Laboratory Strengthening

1. Quality assurance
   1. Internal quality control
   2. Regional and national external quality assurance programs
   3. Quality management of labs with a view towards accreditation
   4. Site visits: PAHO - 70 visits en 13 countries; National visits

2. Training
   1. Identification
   2. Antimicrobial susceptibility testing
   3. Antiserum production
   4. IATA regulations for sample shipment
   5. Biosafety
   6. WHO.NET for data analysis

3. Provision of guidelines and reagents
AMERICAN SURVEILLANCE NETWORKS
ANTIMICROBIAL RESISTANCE

- RELAVRA
- SIREVA
- GFN
- PULSENET

Each with its own EQAS
**EVOLUTION**

**Yesterday**
- Lack of standardization
- Poor test Quality
- No national Networks
- Lack of EQAS programs
- Missing or poor quality data about AMR

**Today**
- CLSI standardization
- Better test Quality
- All the countries have Nat Networks
- Each country have Nat EQAS
- 3 Regional EQAS Programs
- Data about AMR available

**Tomorrow**
- Development of surveillance System of Nosocomial infection
- Strengthening and integration of RELAVRA, GFN, PULSENET, SIREVA and NISS
- Data for action: AMR data integrated
- Improved Treatment
- Prevention and Control
Many thanks to

All the National Reference Laboratories
Malbran Institute, Argentina
National Microbiology Laboratory, Canada
WHO Collaborating Center in Boston, Massachusetts, USA
USAID

Annual Meeting, Lima, Peru, Dec 4-5, 2009