

# ANTIMICROBIAL RESISTANCE: A GLOBAL CRISIS

Pilar Ramon-Pardo

Special Program on Antimicrobial Resistance

Department of Communicable Diseases and Environmental Determinants of Health

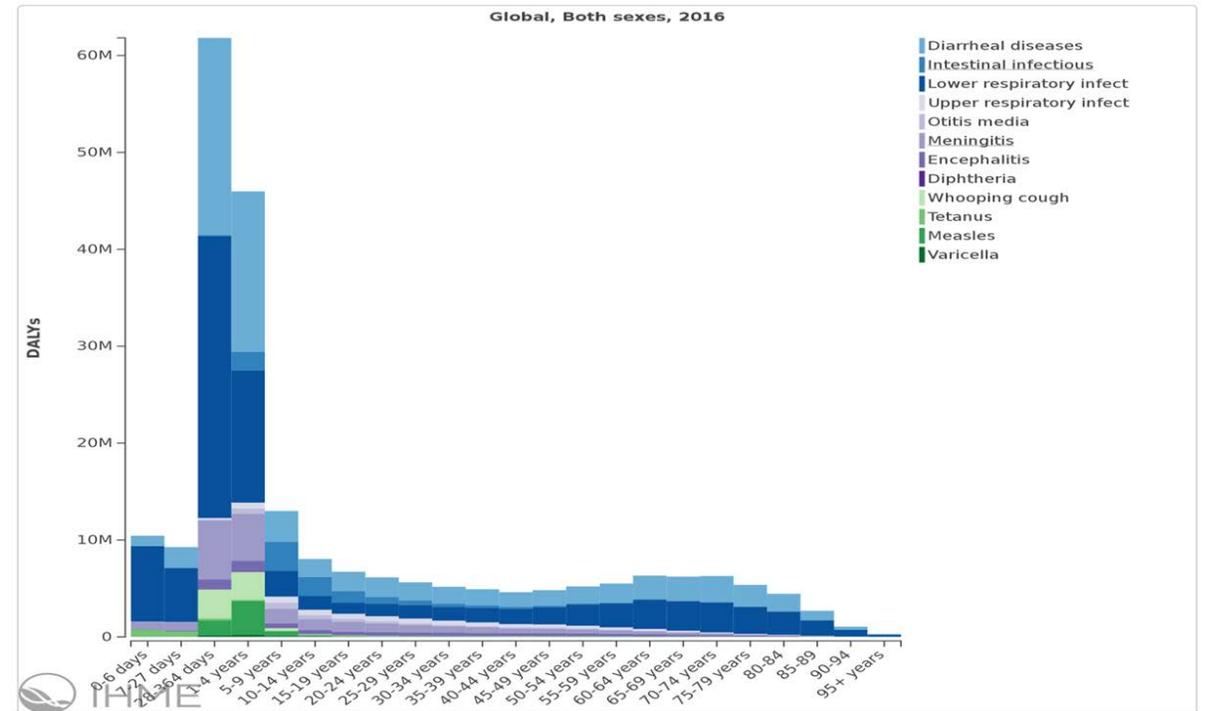
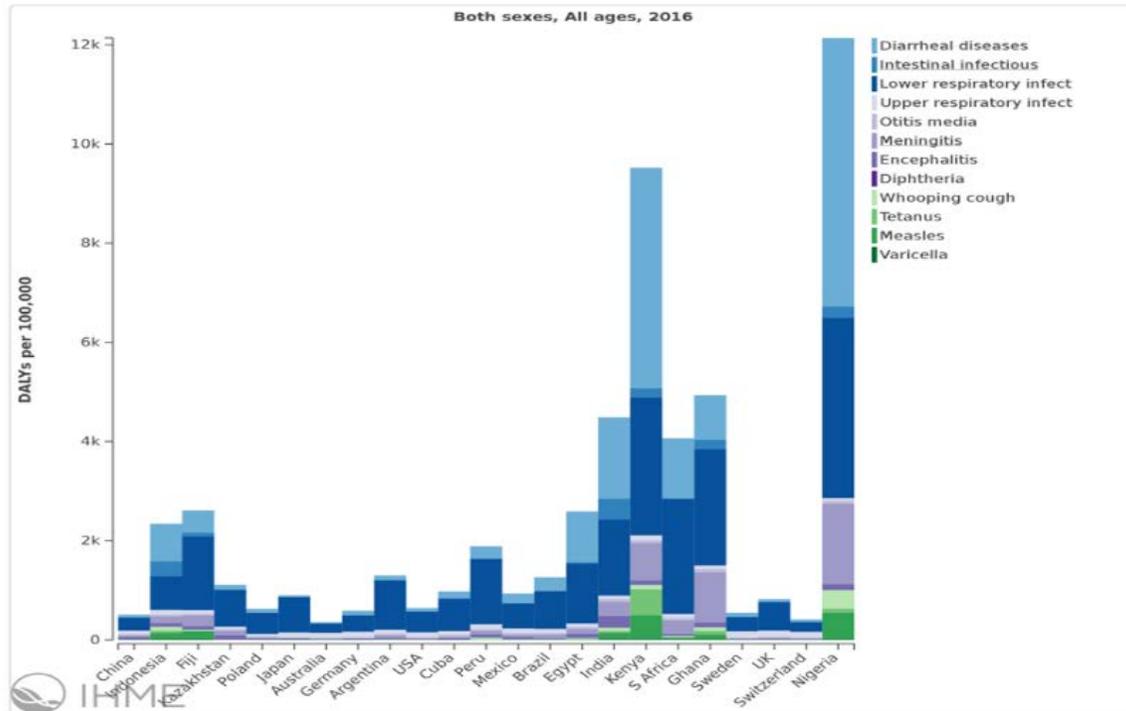


**PAHO**

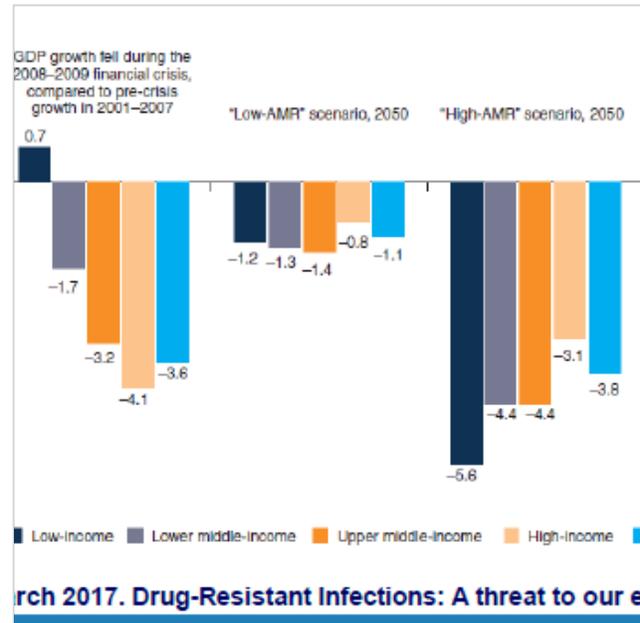
# From the laboratory to the international arena



# Huge Variation on the Burden of Infectious Diseases by country and by age group



# Antimicrobial resistance: economic impact



- The costs could be as serious as those of the 2008 financial crisis.
- It reduces GDP substantially, but, unlike the crisis, the impact may **last longer** and **affect more low-income countries**.

# AMR and SDGs



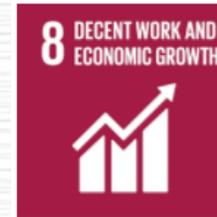
AMR strikes hardest on the poor  
→ Rate of resistance is high  
→ Lack affordable treatment



Antibiotic residues from hospitals, pharmaceutical companies and agriculture contaminate the water



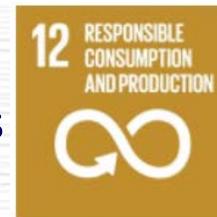
Untreatable infections in animals threaten sustainable food production for our population



\*Cumulative costs of AMR is predicted to be US \$120 trillion by 2050



Antimicrobials are fundamental components of all health systems



It is crucial to balance access, innovation and conservation of antimicrobials to contain AMR



All of which require multi-stakeholder partnerships

\*World Bank Group Report on Drug-Resistant Infections (March 2017)

# THE ONE HEALTH COLLABORATION



Food and Agriculture  
Organization of the  
United Nations



WORLD ORGANISATION  
FOR ANIMAL HEALTH



World Health  
Organization

World leader in  
food  
& agriculture

World leader in  
animal health  
& welfare

World leader  
in  
human health

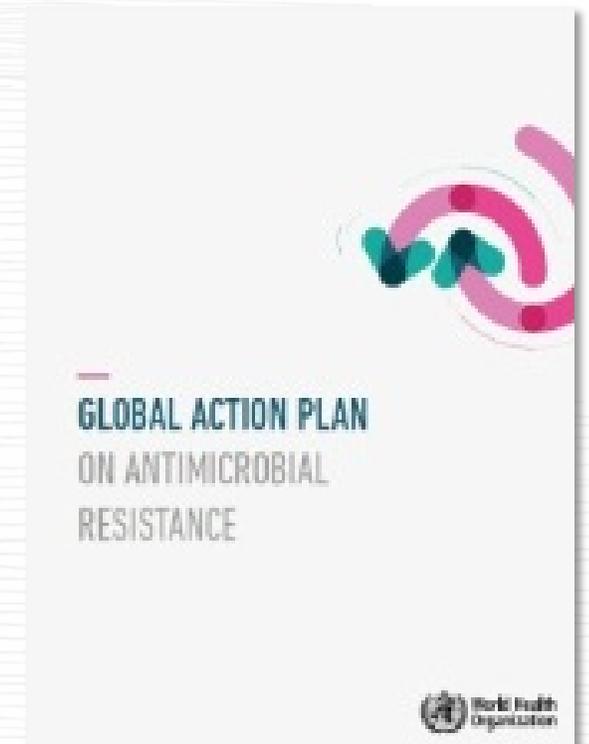
Tripartite Agreement / Collaboration  
(Common priorities including  
antimicrobial resistance)

# Global Action Plan's 5 Strategic Objectives

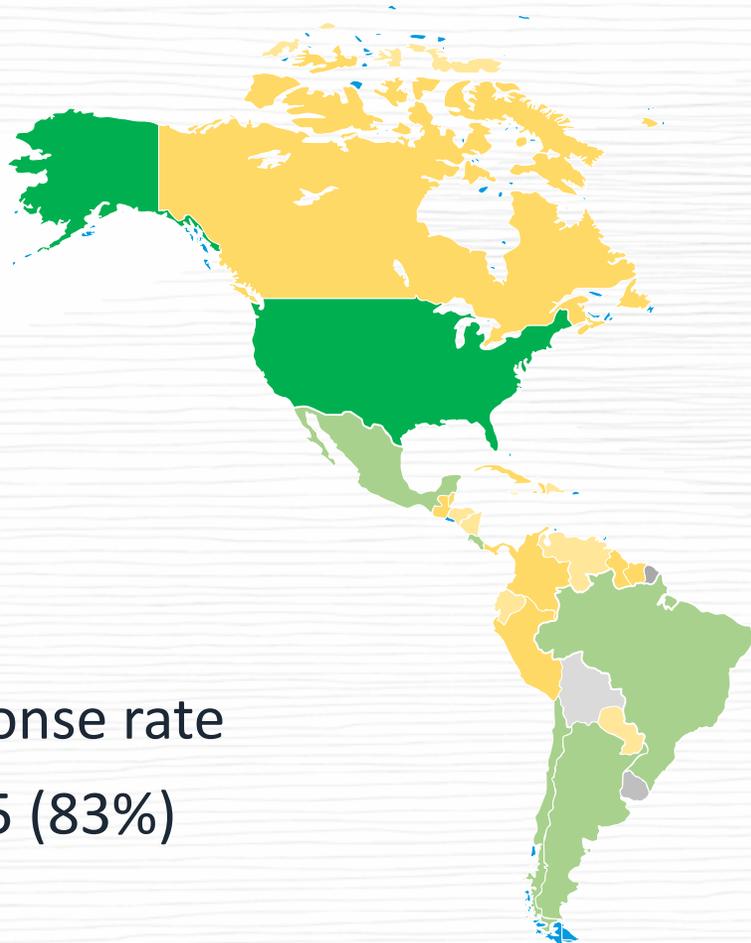
1. Improve awareness and understanding
2. Strengthen knowledge through surveillance & research
3. Reduce the incidence of infection
4. Optimize the use of antimicrobial medicines
5. Ensure sustainable investment

**Develop National Action Plan**

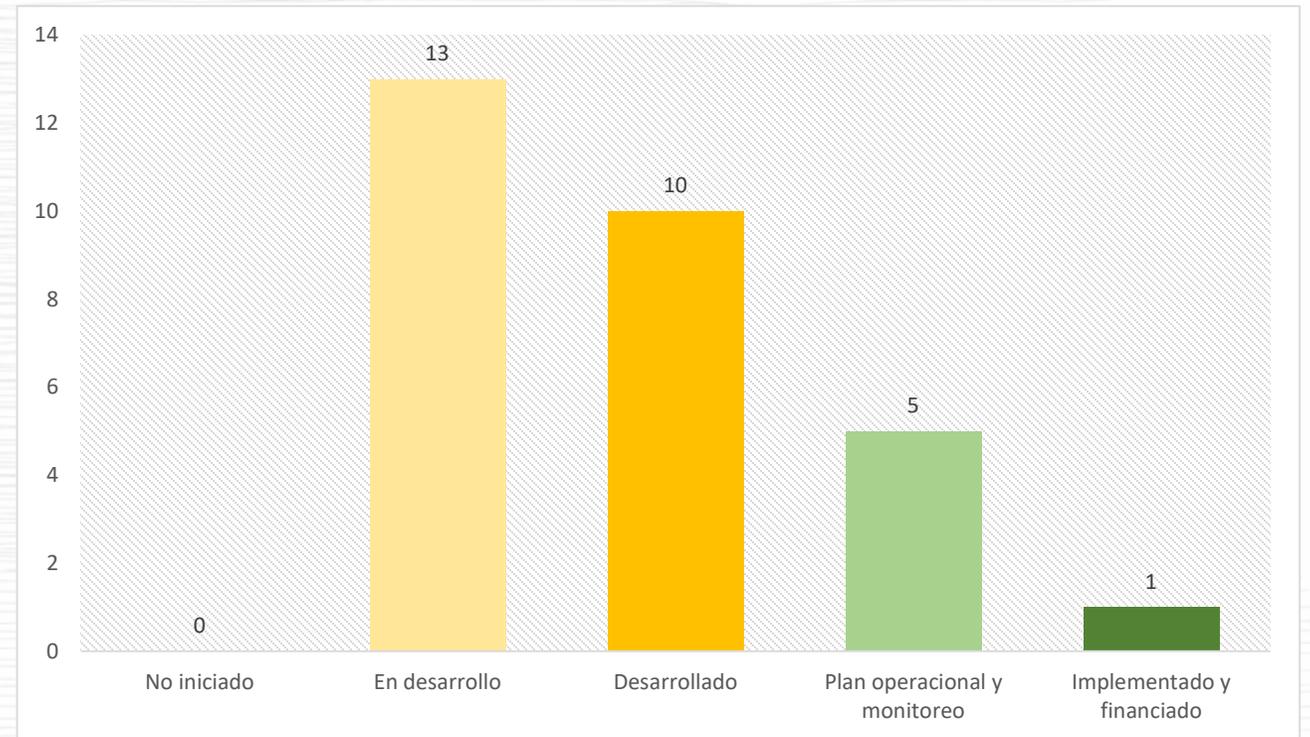
**Bring AMR to the UNGA**



# MONITORING OF COUNTRY PROGRESS ON AMR (2018)



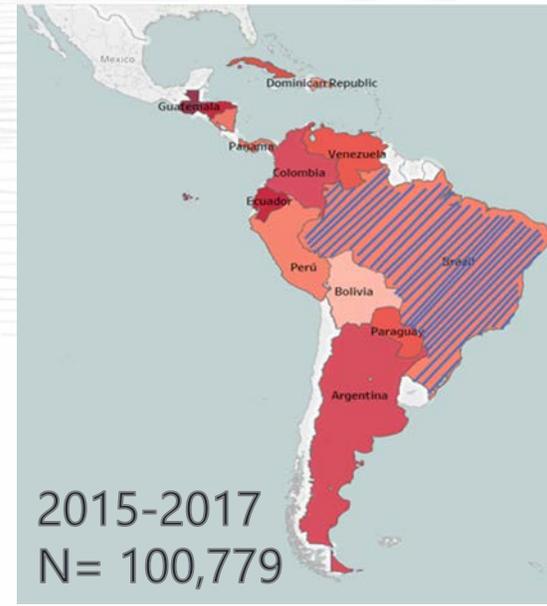
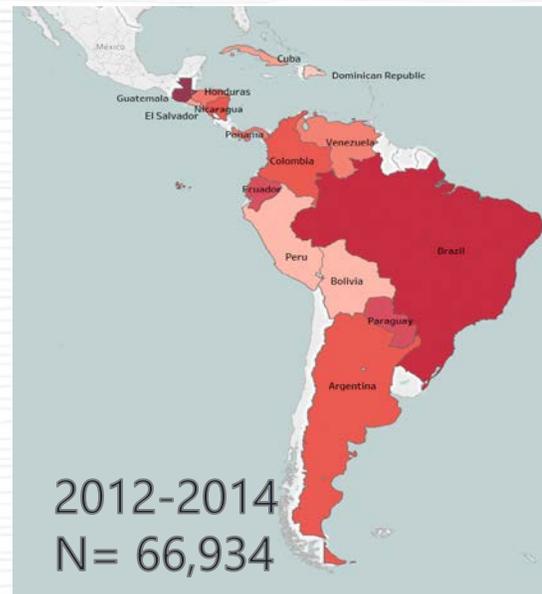
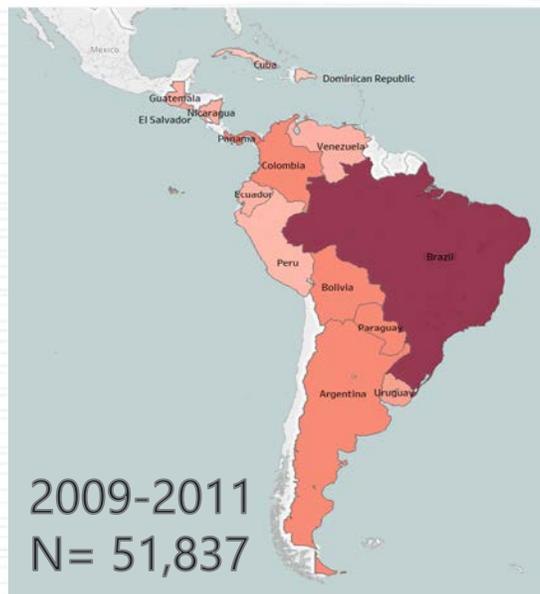
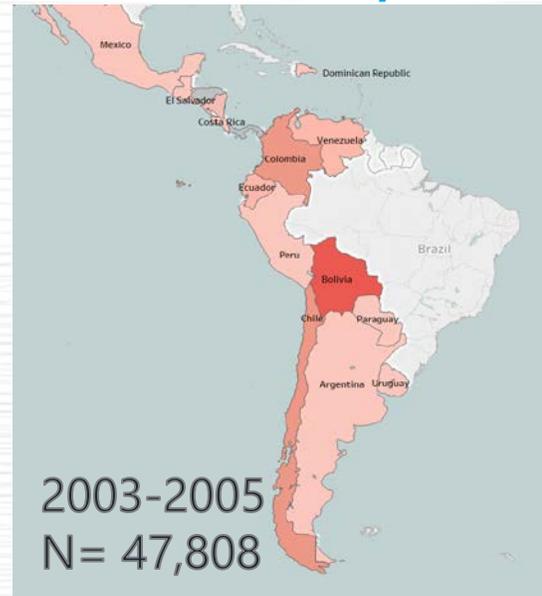
Response rate  
29/35 (83%)



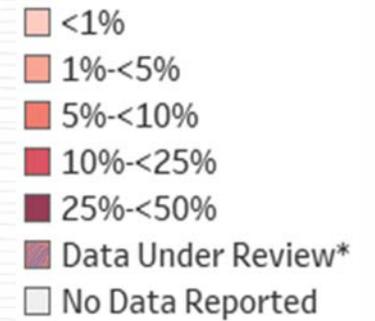
Source: <http://www.who.int/antimicrobial-resistance/global-action-plan/database/en/>

# CARBAPENEM NON-SUSCEPTIBLE KLEBSIELLA PNEUMONIAE

## Latin America, 2000-2017



Average % non-susceptibility





Our time with  
**ANTIBIOTICS**  
is running out.

*Antibiotics are in danger of losing their effectiveness due to misuse and overuse, and in many cases they aren't even needed.*

*Always seek the advice of a healthcare professional before taking antibiotics.*



## CONCLUSION: MULTI-SECTORAL APPROACH NEEDED

---

- Raise awareness economic and societal costs: investments needed
- Political engagement and high-level coordination of multi-sectoral activities against AMR needed
- Ensure public & private investment in new medicines, diagnostic tools & vaccines while ensuring access to these measures is equitable and affordable
- Encourage the engagement of stakeholders from their countries, including civil society, academic and research institutions, the public and policy makers

## Acknowledgements

WHO AMR Secretariat  
Regional AMR Team  
ReLAVRA

Misuse of **ANTIBIOTICS**  
puts us all at risk.

Taking antibiotics when you don't need them speeds up antibiotic resistance. Antibiotic resistant infections are more complex and harder to treat. They can affect anyone, of any age, in any country.

**Always seek the advice of a healthcare professional before taking antibiotics.**



World Health  
Organization

# PAN AMERICAN JOURNAL OF PUBLIC HEALTH

CALL FOR PAPERS  
on

## ANTIMICROBIAL RESISTANCE

Deadline: September 30, 2019

More info: [www.paho.org/journal](http://www.paho.org/journal)



# PAHO