Regional Response to COVID-19 during 2020-2022
Considerations for better preparing for the next Pandemic ...

Sylvain Aldighieri MD MSc DTMH
Deputy Director
Health Emergencies
PAHO
Washington, DC
Lessons learned at regional level

- Epidemic Intelligence & Integrated Surveillance
- Public Health & Research Laboratories Networking
- Resilient Health Systems
- Regional Mechanisms for Vaccine Production & Delivery
- Human, Animal & Environment Interface
Epidemic Intelligence

Epidemiological dynamics
Respiratory disease surveillance
EIOS/EBS

Context evaluation
Country Information

Analysis and modeling

ACTION
PAHO Secretariat and Member States
Flexibility of Surveillance Systems for quickly including new pathogens
E.g. SARI-net Plus

4,413 SARI & 3,880 ILI sentinel sites

GISRS in the Americas

First region with installed capacities for molecular detection of SARS-CoV-2 by early March 2020

> 45 million diagnostic tests delivered to 39 countries and territories by November 2022
Same sequencing platforms

Different surveillance systems
Improving surveillance at the Human-Animal-Environment Interface

**LABORATORY**
- Viral diagnosis: Ref Lab Network
- Bacterial diagnosis: Ref Lab Network
- Epi Intel
- Spatial analysis
- Bioinformatics & Epigenetics
- Modelling
- AI/ML

**IPC & CLINICAL MANAGEMENT**
- Routine: (Hospitals, PHC etc)
- Outbreak: ex- Chaparé-like BOL

**ANALYTICS**
- Viral diagnosis: Ref Lab Network
- Bacterial diagnosis: Ref Lab Network
- Epi Intel
- Spatial analysis
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- Modelling
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**INTEGRATED SURVEILLANCE**
(Flu/SARS-CoV-2/ORV)
Through sentinel sites:
SARInet, NIC, CC...
FluID, FluNet, FluMart

Expand to universal:
Include other health facilities (public / private)

**INDICATOR HTP SURVEILLANCE**
- Viral:
  - Hemorrhagic fevers: EE, ARNV, HANV, YFV...
  - Arboviral: OROV, MAYV CHIKV, ZIKV, YFV, WNV...
- Bacterial: Plague, Lepto etc.

**GENOMIC SURVEILLANCE**
- Capacities:
  Improve monitoring genomic variations, data reporting and integration with surveillance.
- Networks
  GISAID, COVIGEN, GISRS, PulseNet.

**SPILLOVER SURVEILLANCE**
Wildlife:
- AHE integrated surveillance: YF, Influenza
- Risk assessment based on socioecological drivers’

Intensive farm productions:
- Target: pig, poultry, minks etc.
- Linking production disease data with human surveillance data

Trainings, in-country capacity building, guidelines, algorithms, collaborating centers/networks, partners, resources human and financial
Health systems and services
Critical capacity-building areas

Critical Areas:

- First level of care
- Clinical management
- Commodities, logistics, and distribution
- Rational and sustainable use of oxygen
- Infection Prevention and Control
- Surge capacity
Information Systems and Digital Health
Critical areas for success

- Telehealth at all levels of care
- Interconnected and Interoperable health records planforms
- Cybersecurity management
- Critical data management

Digital transformation
Governance

Big data analysis for behavioral changes and infodemic management

Modeling and forecasting based on AI solutions

Digital literacy
Medical surge capacity response 2020-2022
Emergency Medical Teams (EMT) and Alternative Medical Care Sites (AMCS)

- 60 Regional EMT missions
- 50,552 Inpatient beds
- 2,285 Critical care beds
- 300 EMT
- 385 AMCS

As of 23 Sep 2022
COVID-19 vaccination in the Americas

2.11b
COVID-19 vaccine doses administered in the Americas

70.9%
proportion of fully-vaccinated persons in Latin America and the Caribbean

17
countries with coverage rate >70%

As of 10 March 2023
Percent of the population fully vaccinated against SARS-CoV-2 as of 10 March 2023

Note: Data for March are available for 24 countries and territories
As of 31 Dec 2022

>US$300M to protect >40M people through PAHO’s Strategic Reserve for Emergencies

512 shipments delivered to 35 countries and territories, 249 shipments including:

- 9M gloves
- 49.7M surgical and respirator masks
- 3.3M gowns
- 4M face shields

in diagnostic tests, PPE, and medicines
Promotion of development and production initiatives

Technology Transfer and development of mRNA vaccines

- Multilateral collaboration: WHO, PAHO, Medicines Patent Pool, and other partners
- Cooperation for technology transfer and for the development of mRNA vaccines:
  - Sinergium Biotech (Argentina) (Tech Transfer)
  - Bio-Manguinhos (Brazil) (Proprietary development)
- Commitment to provide PAHO/WHO Revolving Fund for equitable distribution in cases of emergency, WHO prequalification and, to share knowledge with other partners.
PAHO Revolving Fund for access to vaccines

Solidarity • Equity • Transparency • Quality

Ensuring sustainable access to affordable and quality assured vaccines and immunization supplies for 43 years (1979-2022)

41 Vaccines products

29 Injection devices and cold chain equipment products from 38 suppliers

USD 1.7 billion in goods procured in 2021

Guaranteeing access to vaccines
PAHO Strategic Fund
Guaranteeing access to medicines, diagnostics, and other commodities

Overview 2018-2022

54 Participating entities

35 countries and territories
19 health agencies

Over 110 million people supported

US$ 785 million products procured
The way forward: Resilient health systems and services

- Emergency procedures updated based on lessons learned
- Flexible Public Health Measures
- Health Logistic networks to rapidly deploy staff and goods

Surveillance
- Integrated & Genomic surveillance
- One Health

Health systems and services based on primary health care

Expanded Immunization Programs