

National Immunization Program: achievements, challenges and financing

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BRAZIL

Brazil in numbers

- Population:
 - Aprox. 207 millions
 - Aprox. 3 millions births/year
 - 6th largest country of the world
- Territory:
 - 5th largest country of the world
 - 47% of South America's territory
 - 26 States and 1 Federal District



National Immunization Program

The 70s epidemiological background

Disease	N° Cases	Incidence coefficient (100 mil hab)
Polio	11.545	12,4
Smallpox	1.771	1,9
Diphtheria	10.496	11,2
Pertussis	81.014	87,0
Measles	109.125	117,3
Tuberculosis	111.945	120,3



Fonte: PNI - 30 anos, Brasília 2003

The beginning

Immunization actions were performed:

- By the Minister of Health's specific programs
 - Smallpox, tuberculosis, yellow fever
- By the State Health Secretaries
 - polio, measles, diphtheria, tetanus, pertussis

Necessity to organize the immunization actions all over the country

The Brazilian National Immunization Program

- 1973: the NIP was created
- Jurisdiction to dispose rules about the national vaccination policies
- Mission: control, eradication and elimination of preventable diseases



The Brazilian National Immunization Program

- **1977**: published the **first National Immunization Calendar** (Portaria do Ministro da Saúde nº 452/1977)
- **04 vaccines** - first year of life, protecting against 6 diseases.
 - OPV
 - DTP
 - Measles
 - BCG



The first decade

- Vaccination actions reached good vaccination coverages among children 1-4 years, 1980

Vaccine	Vaccinal coverage (%)
Polio	94,4
DTP	74,9
Measles	74,1
BCG	65,9
Complete schedule	38,3

Fonte: PNAD (Pesquisa Nacional por Amostra de Domicílios), 1981

Fortification

- **80s- Implemented the National Vaccination Days against Polio**
- Great capacity to mobilize to mass vaccination:
 - Other Ministries
 - State and municipal governments
 - Rotary and Lions Clubs
 - Medical Societies and other partners
 - **18 millions < 5 years old vaccinated**



Fortification

- **80s: International acknowledgement**
 - Capacity to extend the vaccination to every Brazilian city
 - Create mechanisms to assure the supply of immunobiologicals for free to population
 - Implement immunobiological quality control (1981-INCQS)
 - Create a Central of Storage and Distribution (1982 - CENADI)



Fortification

- **1986: “Zé Gotinha”**
 - Created the logo for the Polio Campaign with UNICEF support
 - Aim to dialogue with different audiences, specially children, bringing them closer to the Program, motivating and informing about vaccination



Fortification

- **90s: Actions implemented to enlarge and intensify vaccination**
 - 1994: Brazil and 37 other American countries received PAHO **Certification of Polio Eradication in the Americas**
 - 24^a Pan American Sanitary Conference: established the goal for **measles elimination in Americas until 2000.**



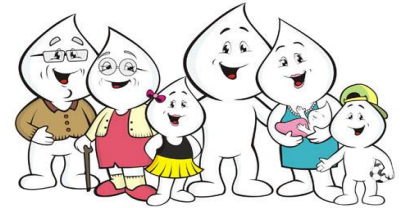
Fortification

- **90s: Actions implemented to enlarge and intensify vaccination**
 - 1999: first Influenza Campaign - seniors



Current scenario

Fortification



- **21st Century:**
 - Many vaccines were incorporated to the National Calendar in the last 12 years:
 - Rotavirus vaccine
 - 10-valent pneumococcal vaccine and meningococcal conjugated vaccine
 - Pentavalent vaccine e IPV
 - MMRV vaccine, hepatitis A vaccine, HPV vaccine, dTpa vaccine
 - Enlargement of Influenza vaccination groups
 - 60 millions dosis

Brazilian National Immunization Calendar

- Brazilian Healthcare System offers all the vaccines recommended by WHO

18 vaccines to prevent 18 diseases in different combinations

- | | |
|-------------------------------------|------------------|
| 1. BCG | 10. Yellow fever |
| 2. Hepatitis B | 11. Hepatitis A |
| 3. Pentavalent | 12. MMR |
| 4. DTP | 13. MMRV |
| 5. IPV | 14. Varicela |
| 6. OPV | 15. HPV |
| 7. 10-valent pneumococcal | 16. dT |
| 8. Rotavirus | 17. dTpa |
| 9. Meningococcal conjugated vaccine | 18. Influenza |

300 millions dosis/year

Vaccination strategies

- Routine
- Campaigns (Influenza, Multivaccination, Measles)
- Outbreak control



Financing

Legal framework

Brazilian Federal Constitution – 1988

- “Article 196. Health is a right of all and a duty of the State and shall be guaranteed by means of social and economic policies aimed at reducing the risk of illness and other hazards and at the universal and equal access to actions and services for its promotion, protection and recovery.
- “Article 197. Health actions and services are of public importance, and it is incumbent upon the Government to provide, in accordance with the law, for their regulation, supervision and control, and they shall be carried out directly or by third parties and also by individuals or private legal entities.”

Legal framework

Brazilian Federal Constitution – 1988

- “Article 198. Health actions and public services integrate a regionalized and hierarchical network and constitute a single system, organized according to the following directives:
 - I – **decentralization**, with a single management in each sphere of government;
 - II – **full service**, priority being given to preventive activities, without prejudice to assistance services;
 - III – **participation of the community**
- Paragraph 1. The unified health system shall be financed, as set forth in article 195, with funds from the social welfare budget of the Union, the states, the Federal District and the municipalities, as well as from other sources.”

Legal framework

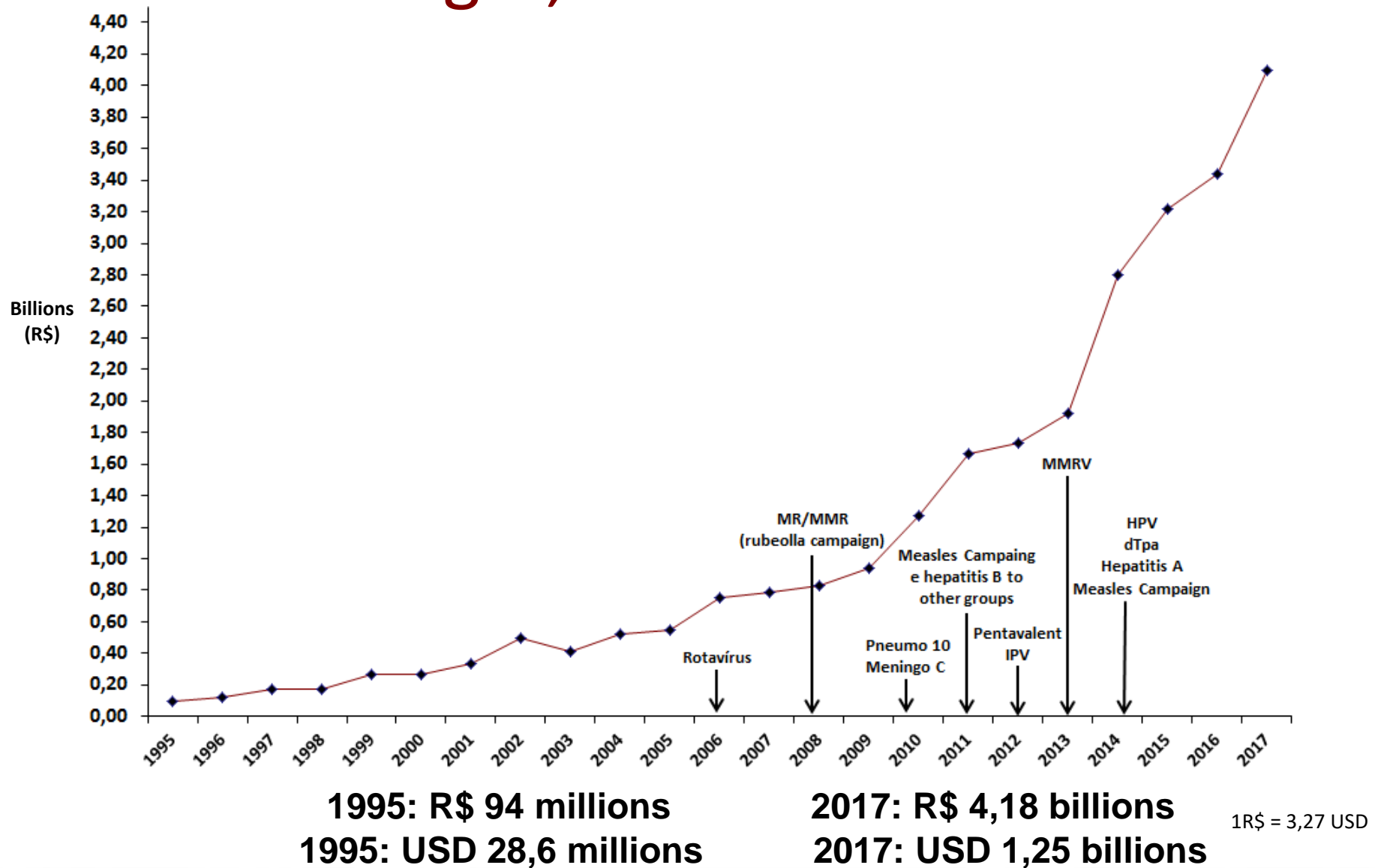
- Ministry of Health Ordinance

Responsibilities for implementation and financing of health surveillance actions

- Federal: the **provision of immunobiological** defined by the NIP
- State: the **management of state stocks** including **storage and supply** to counties
- Municipal: **management of the municipal stock** including the **storage** and **transportation** to their **places of use**

- Acquisition of immunobiologics is considered a mandatory action within the Ministry of Health budget for which the financial resource may not be decreased

NIP Budget, Brasil - 1995 to 2017



Successes and Challenges

Successes

Preventable diseases: status (impacts)

- **Eliminated**
 - Polio
 - Measles
 - Rubella/CRS (Congenital Rubella Syndrome)
 - Neonatal Tetanus

Successes

Preventable diseases: status (impacts)

- Downward trend
 - Accidental tetanus
 - Diphtheria
 - Pertussis
 - Meningitis
 - *Haemophilus influenzae* type B
 - *Streptococcus pneumoniae*
 - Diarrheal Diseases - Rotavirus

Successes

Preventable diseases: status (impacts)

- **Controlled transmission levels**
 - Meningococcal Diseases
 - Urban Yellow Fever

Challenges

- Improve the NIP management
 - Encourage the enlargement of vaccines production capacity
 - Set strategic stocks
 - Reduce technical and physical losses



Challenges

- Improve the NIP management
 - Permanent improvements in the Cold Chain
 - Provide professional qualification to the health workers
 - Improve NIP information systems

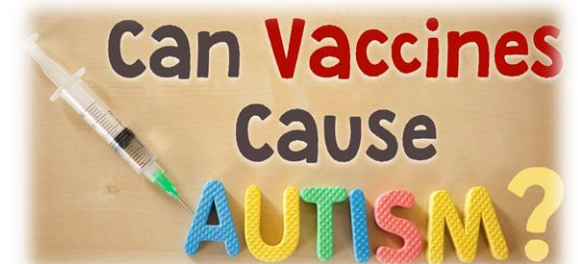


Challenges

- Maintain strengthened relations with scientific and class societies, advisory committees, managers forums and civil society
- Extend the homogeneity of vaccination coverage
 - Multivaccination Campaign
 - Surveillance of immunization coverage
 - Reduce dropout rates

Challenges

- Facing new risk situations caused by migratory flows and changes in epidemiological patterns
- Facing anti-vaccination groups and fake news



Challenges

- Establish new strategies to ensure the target population adherence
 - Adequate information available to the population (adverse events)
 - Vaccination services opening hours
 - Active search in rural/distant regions
 - Vaccination at schools (teenagers)



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