



FOURTEENTH INTERNATIONAL

# ROTAVIRUS SYMPOSIUM

MARCH 14–16 **2023** BALI INDONESIA

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# Plan and Implementation of Rotavirus Immunization in Indonesia

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# Indonesia Context

## Demographic

- ❖ 38 provinces, 514 districts and 17,504 islands
- ❖ More than 270 million inhabitants and 10,179 primary health facilities (Health Indonesia profile 2021)
- ❖ Birth cohort more than 4.3 million
- ❖ Life expectancy at birth from 63 years in 1990 to 71.91 years in 2021

## Health system

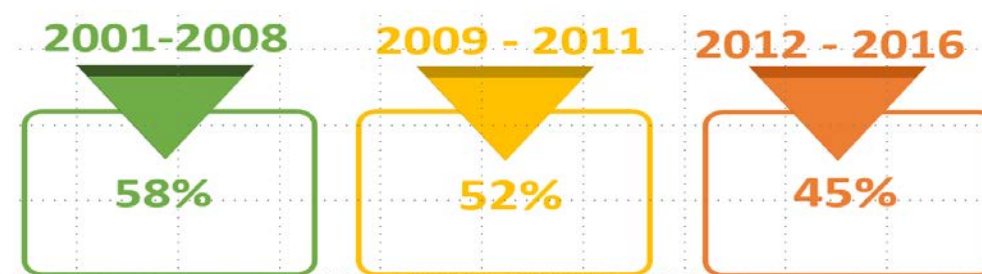
- ❖ Decentralization of the health sector to district and cities was initiated in 2001
- ❖ National Immunization Program (NIP) since 1956



Source picture : <https://www.hdindonesia.com/>

Diarrhea  
is one of the leading  
causes of death  
in infants and under  
5 y.o children  
in Indonesia

The main cause of acute diarrhea in  
hospitalized children under 5 years old



Data from *Indonesian Rotavirus Surveillance Network (IRSN)*  
(Soenarto et al, 2017)

**2006** : Reported **41%** of rotavirus cases  
Outpatient data in three hospitals  
(Hasan Sadikin, Sardjito, Mataram  
hospital).





# WHO Position Paper 2021



## WHO recommends

To include Rotavirus vaccine into national immunization program in all countries, especially countries with high mortality of Rotavirus Gastroenteritis

123  
countries

Introduced rotavirus immunization into national immunization program (NIP).



# ITAGI Recommendation, 2021

## The introduction of Rotavirus immunization in Indonesia



introduce Rotavirus(RV)  
immunization in the National  
Immunization Program



introduce using imported RV  
vaccine while waiting for local  
vaccine manufacture  
production

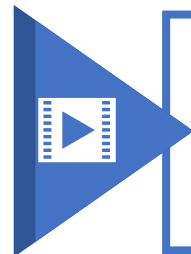


# Policy to introduce RV in Indonesia

Indonesian Health Minister's Decree No. 1139/2022 on Rotavirus Immunization

## Rotavirus immunization as routine program

Introduced and scheduled for infants aged 2, 3 and 4 month. Scale up to other geographic regions will be determined based on epidemiological study



**The National strategy Plan  
2022 – 2024**

RV as part of routine  
immunization and indicator



**The cMYP 2020 - 2024**  
RV as part in the New Vaccine  
Introduction's milestone.



# Strategy of New Vaccines Introduction in Indonesia

## Strategies



### Readiness Assessment

Digital tool to monitor and evaluation preparation of Rotavirus Vaccine (RV in 21 districts)



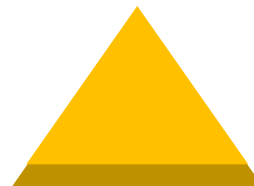
### Co-administration with other routine vaccines

**For RV introduction** : three doses with 4 week interval within each dose, and advanced RV immunization can be given up to infants until 6 month



### Collaboration cross sectors/program

Resources, infrastructures, and funding and integrated with other health program priority.



### Sufficient budget

Vaccines and logistics by state budget and operational cost by local budget





# Roadmap of Rotavirus Vaccine Introduction

- ☐ Microplanning, develop technical guideline and IEC material
- ☐ Advocacy and socialization mobilization
- ☐ Readiness assessment
- ☐ Training for HWs
- ☐ Vaccine procurement and distribution
- ☐ Monitoring evaluation

**2022**  
**21 districts**  
**in 18 provinces**

1

**Total target of 17.6  
thousand infants**

**Launched in Nov 2022**

**2023**  
**Nationwide : 514 districts**  
**in 38 provinces**

2

**Total target  
2.3 million infants**

**Mid of year 2023**

**Vaccination is the only way to prevent the severe episodes of rotavirus infection**



# Rotavirus Vaccine Used in the Introduction 2022

Vaccine	Rotavac
Type	ORV116E
Serotype	G9P[11]
Doses	3 doses (@ 0,5 ml)
Administration	Oral (drop)
Administration Schedule	2 month, 3 month, 4 month
Packaging	Multi doses (5 doses per vial)
Form	Liquid, Frozen
Storage	<ul style="list-style-type: none"><li>Provincial/Subnational level= - 20°C</li><li>Service Facility/Primary Health Centre= 2 – 8°C for 6 months</li></ul>

## Considerations for selecting Rotavac:

- Vaccine in liquid, and frozen form; no **reconstitution** required
- Similar storage with OPV
- Lower **number of drops** given (0,5 ml per dose)
- Multi dose vial -> more efficient in terms of storage in VR
- WHO PQ requirement



# The National Immunization Program Schedule

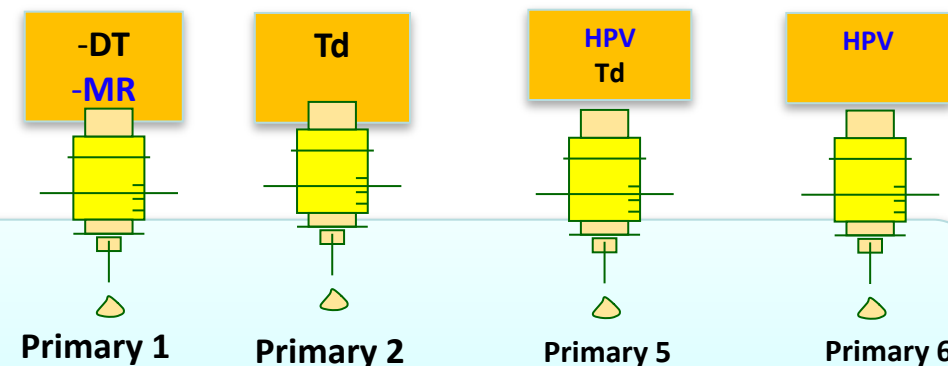
## Immunizations schedule for Infants and children under two years

Age (month)	Immunization
0	Hepatitis B
1	BCG, OPV1
2	DPT/HepB/Hib1, OPV2, PCV1, <b>RV1</b>
3	DPT/HepB/Hib2, OPV3, PCV2, <b>RV2</b>
4	DPT/HepB/Hib3, OPV4, IPV, <b>RV3</b>
9	MR, IPV2
10	JE*
12	PCV3
18	DPT/HepB/Hib4, MR2

\* In selected areas

## Expanded Td immunizations for Women in Childbearing Age → [With Screening]

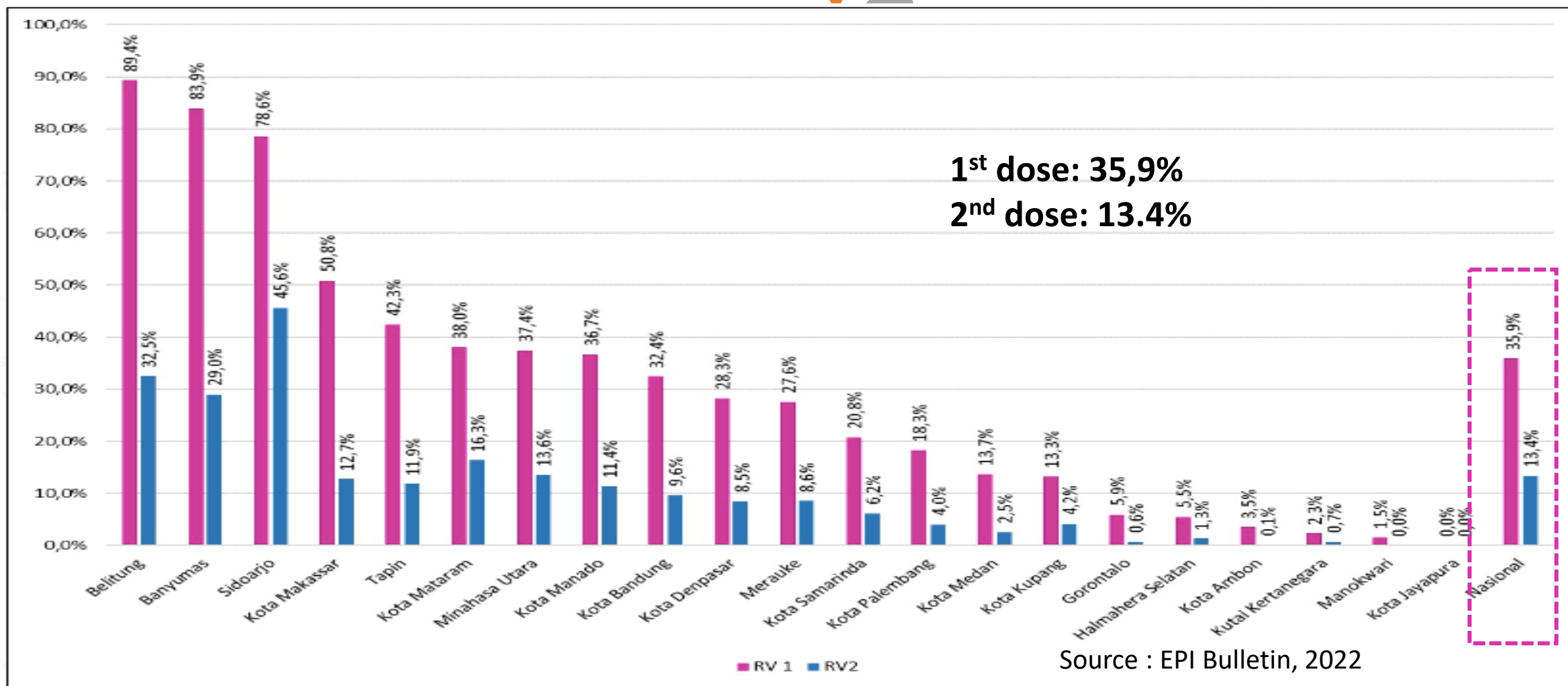
Immunization	Minimum interval of administration	Protection Period
T1	-	-
T2	4 weeks after T1	3 years
T3	6 weeks after T2	5 years
T4	1 year after T3	10 years
T5	1 year after T4	>25 years



# BIAS

School's Immunization Month Programme

# Rotavirus Immunization Coverage 21 Districts - 2022



Source : EPI Bulletin, 2022

Introduction of rotavirus immunization has been rolled out since November 2022



## Challenges

Delay of vaccines  
availability - import

3 districts started in  
November and 18 districts  
in December 2022

Low vaccine  
usage index

RV Reporting and  
recording is weak

## Way Forward

Adequate vaccine forecasting  
and collaboration with  
Pharmaceutical Unit MoH

Advocacy and socialization  
to high level and others  
stakeholders

Mobilization community,  
strengthening Posyandu (out  
reach service) simultaneously  
in some locations.

Introduction of digital “  
Indonesia SehatKu  
application” (ASIK)

# Challenges and Way Forward of Rotavirus Vaccine Introduction in 2022

**Post introduction Evaluation (PIE)  
will be conducted after one year  
introduced**





# Summary

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1. Ministry of Health is committed to reduce morbidity and mortality from diarrhea by integrating RV immunization into diarrhea control strategy.
2. RV immunization implementation is delivered in phases, starting in 2022 in 21 districts in 18 provinces, and is planned to expand nation-wide in July 2023.
3. New vaccines (PCV and RV) are critical components of the MoH's Strategic Plan 2022 – 2024
4. Support from all key stakeholders is needed for the successful introduction of new vaccines into the national immunization program





# THANK YOU

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