# ROTAVIRUS SYMPOSIUM

MARCH 14-16 2023 BALI INDONESIA

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# Plan and Implementation of Rotavirus Immunization in Indonesia

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14<sup>th</sup> International Rotavirus Symposium Bali Indonesia, March 14<sup>th</sup> 2023



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# **Indonesia Context**





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

## **Demographic**

- ❖ 38 provinces,514 districts and 17,504 islands
- ❖ More than 270 million inhabitant 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**

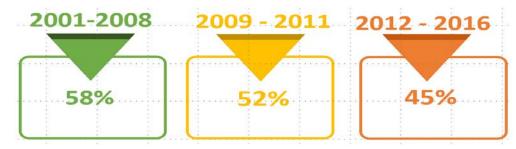
- Decentralization of the health sector to district and cities was initiated in 2001
- ❖ National Immunization Program (NIP) since 1956





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



1021, 96, ID1-IEO

No 11



### Weekly epidemiological record Relevé épidémiologique hebdomadaire

Organisation mondiale de la Santé

BUNEY 2021, 966 YEARY 16 JUNES 2021, 92 MORE

No 28, 2021, 96, 301-320

### Contents

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### Sommalin

201 Vaccins and expedient Rote of sprittens de l'0965 – Ad let 2021

### Rotavirus vaccines: WHO position paper – July 2021

In accordance with its mandate to provide guidance to Member States on health policy matters, WHO regularly issues position gapers on vaccines against discussion that here as international public health impact. These papers are encounted permarily with the use of vaccines in large-scale immunication programmes. They sammarine essential background information on discusses and vaccines and conclude with the current WHO position on the use of vaccines worldwide.

The papers are reviewed by external experts and WHO staff and are reviewed and endomed by the WHO Strategic Advisory Group of Experts (SAGE) on Immumicration (https://www.who.int/gorups/ atm togic-advisory-group-of-experts-onimmunication/). The Grading of Roommendations Assessment, Development and Evaluation (GRADE) method is used to assess the quality of the available evidence. The SAGE decision-making process is reflected in "evidence-to-necommendation" tables. The processes followed for the propagation of vaccine position papers are described at: www.who.int/immuniostion/ position\_papem/position\_paper\_process. pdf. The position papers are intended for use mainly by national public health officials and managers of immunication programmes. They may also be of interest o interactional funding agencies, vaccine advisory groups, vaccine manufacturers, health professionals, researchers, the scientific media and the general public

This position paper replaces the 2015 WHO position paper on so tevieus vaccinet; adds socient developments in the field, such as 2 additional so tevieus vaccines poqualified by WHO in 2018, as well as updated post-licensure safety and effective cases data for the 2 previously proqual-

### Vaccins antirotavirus: Note de synthèse de l'OMS – Juillet 2021

Conformionent à son mandat, qui prévoit qu'elle consoille los fints Membres se matière qu'elle consoille los fints Membres en matière de politique suntière, ("Obligation spille nigilitement des notes de synthèse sur les vaccins entre les madalises synt une incidence sur la santé publique internationale. Ces notes, qui portent principalement sur l'utilization des vaccins dans las programmes de vaccination à gande échelle, résument les informations à gande échelle, résument les informations contribules aux les modalises et les vaccins contropondants et prévent ent en conduzion le position actuelle de l'OMÉ concernant l'attibution de ces vaccins d'ordinés les modalises.

Cos notos sont examinões mar des camerte concraca et des membres da personnel de l'OMS, puis évaluées et approuvées par le Groupe strangique consultant d'experts (SAGE) sur la vaccination de l'OMS (Intest// www.who.int/groups/strategic-advisorygroup-of-experts-on-immunication/). I' évolus tion de la qualité des domées deposibles myow sur is methods GRADE (Grading of Recommendations Assessment, Development und Evaluation). Le percesses de décisies de SAGE est sellété dans les tablesex des dounées à l'appui des secommandations. La procédure suivie nour élaborer les notes de synthèse sur les vaccins est décrite dans le document In the Newway who, in this man united in all position. papen/position\_paper\_process.pdf. Les notes de synthèse s'adocssent avant to st aux responsubles nationaux de la santé publique et sux administratours des programmes de vaccins tion, mais elles peavent également présente us interit pour les organismes interactionaux de financement, les groupes consultatifs sur la vaccination, les fabricants de vaccine, les professionada de sunté, les charcheum, les médiar scientifiques et le grand public.

Cette nate de synthése sur les vaccins antivotorieux neuplace celle de 20.1½, els intégre les demières avancies dans ce demains, no tenment les 2 vaccins antirotovirus applimennieres priqualifiés par l'OMS en 2018, sonis que des données schadioles sur la récurió et la performance post-comiercialisation des

# 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

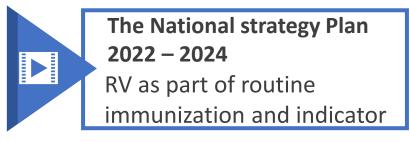


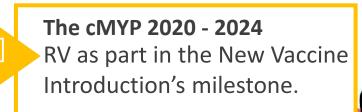
Indonesian Health Minister's Decree No. 1139/2022 on Rotavirus Immunization

# 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











# Strategy of New Vaccines Introduction in Indonesia



### **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

2023
Nationwide: 514 districts
in 38 provinces

Total target of 17.6 thousand infants

Launched in Nov 2022

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	
Туре	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> <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**



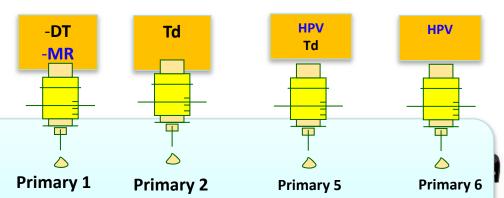
# Immunizations schedule for Infants and children under two years

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

<sup>\*</sup> 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
Т3	6 weeks after T2	5 years
T4	1 year after T3	10 years
T5	1 year after T4	>25 years

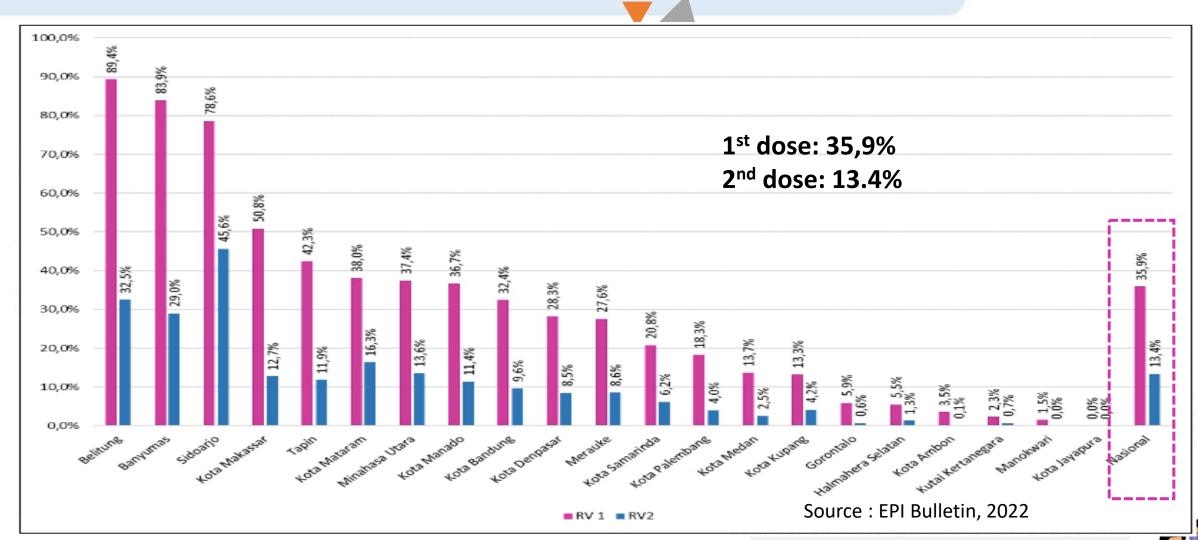


BIAS

**School's Immunization Month Programme** 

# **Rotavirus Immunization Coverage 21 Districts - 2022**





Introduction of rotavirus immunization has been rolled out since November 2022



## Challenges

## **Way Forward**

Delay of vaccines availability - import

Adequate vaccine forecasting and collaboration with Pharmaceutical Unit MoH

3 districts started in November and 18 districts in December 2022 Advocacy and socialization to high level and others stakeholders

Low vaccine usage index

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

RV Reporting and recording is weak

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

- 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











