## INTRODUCING IPV THE EXPERIENCE IN YOGYAKARTA, INDONESIA

 Planning and collaborations resulted in successful introduction of Inactivated Poliovirus Vaccine (IPV) in September 2007.
Multiple injections were well accepted by providers and parents as a result of appropriate education and training.
Stakeholders and partners provided technical, financial and program support.

### YOGYAKARTA'S SWITCH TO IPV

In 2007, Yogyakarta switched from oral poliovirus vaccine (OPV) to routine use of inactivated poliovirus vaccine (IPV). Yogyakarta's health system **successfully transitioned to four doses of stand-alone IPV** in the routine immunization schedule (2, 3, 4, and 9 months), including achieving health care and parent acceptance of additional injections at routine immunization visits. Prior to the switch to IPV, Yogyakarta had:

- High Routine Immunization coverage
- Good health care system
- Receptive local health authorities

### IPV INTRODUCTION – FIVE REASONS FOR SUCCESS

- 1. **Education and effective training** of immunization providers and public health programs managers on IPV use, administration and safety.
- Education and materials that addressed health care provider and parent questions about two injections during the same visit versus one injection (DTP) being administered prior to IPV introduction.
- 3. Engagement of many partners, including vaccine manufacturer, the Indonesian Government at multiple levels, the World Health Organization, the U.S. Centers for Disease Control and Prevention, and a local university. Stakeholders provided technical support, program evaluation, assistance with vaccination coverage assessment, and financial support.
- High vaccine coverage (>95% for OPV4 in all districts before switch and >95% for IPV4 in all districts after switch).
- Low cost for IPV vaccine in Yogyakarta, Sanofi-Pasteur provided IPV free of charge for five years, from 2007-2012.



Yogyakarta is a municipality with four districts, and is the capital of Yogyakarta Special Region in Java, Indonesia. It has a population of around 3 million people, with around 50,000 children born each year. The region has a tropical climate.

### VACCINE-DERIVED POLIOVIRUSES DISAPPEARED AFTER IPV INTRODUCTION AND OPV CESSATION

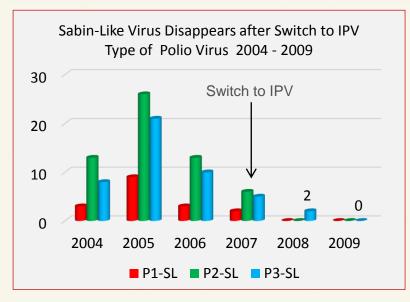
- Before September of 2007, Sabin vaccine virus was being found in >60% of all samples from the sewage plant collection site
- Environmental surveys were conducted to measure virus in the district sewage
- Within three weeks of OPV cessation, vaccine polioviruses disappeared from the environment. Since switching to IPV, there have been no wild or vaccine-derived polioviruses in Yogyakarta. There were two importations of Sabin vaccine polioviruses in 2008.

### For more resources, visit:

http://www.who.int/immunization/diseases/poliomyelitis/inactivated\_polio\_vaccine/en/

# INTRODUCING IPV IN YOGYAKARTA

◆ Sustained coverage >95% for IPV4 attained for 5 years after the introduction of vaccine, illustrating a successful introduction. ◆ No wild or circulating vaccine-derived polio virus circulation detected after OPV cessation.



### **LESSONS LEARNED**

**Multiple injections and safety:** Trainings and materials were developed to address provider and parent questions about the need for two injections during the same visit and the tolerability of these injections without adverse consequences.

**Education and training:** Early on, potential health care provider and parents' questions and concerns related to IPV vaccine were identified, including those related to two or more injections during same visit. The workforce was trained to anticipate and address these and other concerns.

**Vaccine wastage**: Because stand-alone IPV was used under WHO's Multidose Vial Policy, all open vials of IPV had to be discarded at the end of the session or within 6 hours after opening. This led to wastage rates of ~50%. However, with appropriate stock management and close monitoring of doses administered and vial utilization, health facilities in Yogyakarta were able to accurately predict vaccine demand and avoid stock-outs.

#### SUCCESSES IN YOGYAKARTA

- No major operational problems were found with the switch to IPV or with the use of IPV
- No adverse events were reported after the switch to IPV
- No delays were found in children receiving recommended vaccinations during 2010 vaccination coverage survey
- IPV vaccination was well accepted by Health Staff, the public, and parents indicating effective training and education
- IPV vaccine coverage was sustained at a high level (>95%) in all districts
- Collaboration and engagement of many partners, resulting in financial and technical assistance

### **CONSIDERATIONS**

- Challenges may be different in areas with weaker health systems and lower routine immunization coverage
- Stakeholder engagement will be key in adapting an IPV introduction program appropriate for specific country needs



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