WEEKLY EPIDEMIOLOGICAL REPORT

A publication of the Epidemiology Unit
Ministry of Health, Nutrition & Indigenous Medicine

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WER SRI LANKA 2016

Polio Virus type 2 withdrawal plan: tOPV-bOPV Switch

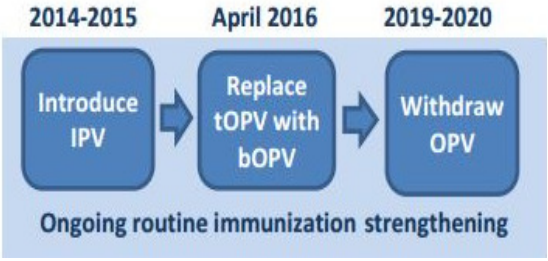
Polio Eradication and Endgame Strategic Plan 2013-2018 has four objectives. One of them is strengthen immunization systems and withdraw oral polio vaccine in the long term. This will eliminate the rare risks of vaccine-associated paralytic polio (VAPP) and circulating vaccine-derived poliovirus (cVDPV).

OPV is made with attenuated (weakened) polioviruses. On extremely rare occasions, the vaccine can cause cases of vaccine-associated paralytic polio (VAPP) and circulating vaccine-derived polioviruses (cVDPVs). To prevent cVDPVs and VAPP, OPV must be withdrawn as soon as possible after the end of wild poliovirus (WPV) transmission.

tOPV contains all three poliovirus serotypes (1, 2 and 3), and the use of this vaccine has led to the successful eradication of wild poliovirus type 2 (WPV2), with the last case occurring in 1999. Today, over 90% of cVDPV cases, and approximately 40% of VAPP cases are due to the type 2 component of tOPV.

Polio Eradication Initiative is working on the withdrawal of Polio Virus type 2 (PV 2) globally in a phasic manner and IPV single dose has been introduced already as an initial phase to maintain population level immunity to PV 2.

As the next phase, trivalent Oral Polio Vaccine (tOPV) which contains Sabin Virus (polio vaccine virus) types 1, 2 & 3 will be changed over to bivalent Oral Polio Vaccine (bOPV) which contains only Sabin virus types1 and 3. This procedure is called "Polio Switch" in the Polio Endgame Strategic plan. This should be a globally synchronized procedure and all OPV using countries will Switch over from tOPV to bOPV and each country has to select a Switch date.



Rationale for switching from trivalent OPV to bivalent OPV

Currently, the risks associated with the type 2 component of tOPV outweigh the benefits

Since 1999, type 2 wild poliovirus has not been detected

- The type 2 component of tOPV:
  - Causes more than 90% of vaccine-derived polio viruses (VDPVs)
  - Causes approx. 40% of vaccine-associated paralytic polio (VAPP) cases
  - Interferes with the immune response to poliovirus types 1 and 3 in tOPV
- IPV introduction will help to:
  - Reduce risks associated with the withdrawal of OPV type 2
  - Facilitate interruption of transmission with the use of monovalent OPV type 2 in the case of outbreaks

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- Hasten eradication by boosting immunity to poliovirus types 1 and 3

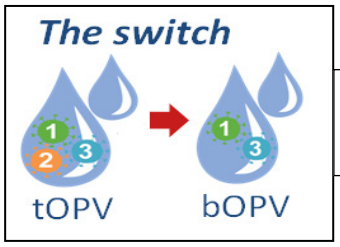
Sri Lankan Situation - Polio Switch

Introduction of injectable Inactivated Polio Vaccine (IPV) into the National EPI schedule

One dose of IPV should be given to infants from 1st of July 2015, on completion of 4 months of age, together with the 2nd dose of Pentavalent vaccine and OPV vaccine.

Replacing trivalent OPV with bivalent OPV

As the next step of polio eradication procedure, Sri Lanka will switch over from trivalent OPV (tOPV) to bivalent OPV (bOPV), removing the type 2 component (OPV2) from immunization programme. The Switch date for Sri Lanka is 30th April 2016 and in fact the country has to use only bOPV from 30thApril 2016 and any of the vaccination providing centers in the country should not use tOPV on or after 30th April 2016.



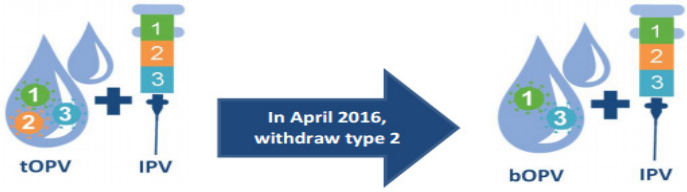
30th April

Polio vaccine Switch procedure: Sri Lanka

1. Polio vaccine switch procedure should be planned at district level to change over from tOPV to bOPV and the responsible district level officers should be considered as the **District Switch Coordination Committee.** Provincial level officers also should assist the District Switch Coordination Committee.
2. Epidemiology Unit will take measures to distribute bOPV stocks at earliest on receiving orders and bOPV distribution should be done based on exchange procedure for the remaining tOPV stocks at each institution (MOH office / Hospital).
3. Distribution/ handing over of bOPV stocks required and collection of remaining tOPV stocks should be done within a short time period -**during the dates of 28th – 29th April 2016** with minimum disturbance to routine Immunization clinics and without causing stock-outs and without leaving out children from OPV vaccination.
4. Remaining tOPV should be collected on the same day when bOPV is handed over and collected tOPV should be labeled as **"Remaining tOPV to be returned to Epidemiology Unit"** and to the Epidemiology Unit immediately before 7th May 2016.
5. After the Switch date, from 1st May 2016, a validation procedure on certifying that tOPV is no more used in the country will be started. Each district and provincial validation teams should visit all main vaccine storage cold rooms in districts and randomly selected vaccine storage centres (MOH offices and hospitals) from 1st – 14th May 2016 and should assure that only bOPV is used in the country and tOPV will not be stored in any of the vaccine storage institutions or in immunization service providing centres including private health sector institutions.
6. Provincial and district validation reports should be sent to the Epidemiology Unit latest by 14th May 2016 and National Validation should be finalized on 16th May 2016.

Key points to remember

- The tOPV-bOPV switch is a globally synchronized event. Every country using OPV must work together to protect the world's children against polio.
- bOPV simply replaces tOPV. bOPV is exactly the same as tOPV, but does not contain the type 2 component. bOPV follows the same immunization schedule and route of administration as tOPV.
- Adding IPV to routine schedules will further protect infants against paralytic polio from all 3 types.
- All health facilities in every country must stop using tOPV on one day within the 2-week switch period from 18 April to 1 May. Any remaining tOPV stock must be collected and destroyed according to national guidelines.



Sources

1. Polio Eradication: Polio Virus type 2 withdrawal plan: tOPV-bOPV Switch, available at *http://epid.gov.lk/web/images/pdf/Polio/polio_switch_guidelines.pdf*

2. PV introduction, OPV withdrawal and routing immunization strengthening, available at http://www.who.int/immunization/diseases/poliomyelitis/endgame_objective2/en/

Compiled by Dr. T. N. Yapa of the Epidemiology Unit

Table 1: Selected notifiable diseases reported by Medical Officers of Health 26th – 01st April 2016 (14th Week)

RDHS Division	Dengue Fever		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Chickenpox		Meningitis		Leishmaniasis		WRCD	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	T*	C**
Colombo	20	4848	6	43	0	0	0	18	0	8	6	63	0	3	0	13	0	0	8	147	3	15	0	0	**88**	**94**
Gampaha	39	1699	0	22	0	4	0	11	0	2	1	90	0	5	0	14	0	0	7	152	0	18	0	3	**60**	**87**
Kalutara	23	819	1	25	0	2	0	12	0	7	4	168	0	4	1	11	0	0	1	81	1	24	0	0	**50**	**86**
Kandy	18	631	4	35	0	9	0	9	0	17	1	58	1	27	0	26	0	0	6	44	2	15	0	6	**65**	**78**
Matale	4	127	0	10	0	1	0	5	0	2	0	41	0	10	0	11	0	0	1	14	1	36	0	12	**54**	**77**
NuwaraEliya	7	92	8	23	0	1	0	16	0	8	0	14	4	21	1	9	0	0	1	45	5	15	0	0	**85**	**92**
Galle	27	548	1	19	0	3	0	1	0	2	7	107	1	33	0	4	0	0	4	91	0	19	0	1	**90**	**95**
Hambantota	11	230	1	13	0	1	0	0	0	35	2	53	2	31	0	12	0	0	3	83	0	4	2	123	**92**	**92**
Matara	7	281	1	22	0	2	0	4	0	30	13	65	0	19	1	12	0	0	2	69	0	5	2	89	**100**	**100**
Jaffna	25	1099	6	79	1	2	1	39	5	22	0	7	7	480	0	4	0	0	5	90	3	14	0	1	**100**	**100**
Kilinochchi	2	35	0	15	0	0	0	15	0	2	0	7	1	17	0	0	0	0	0	2	0	4	0	0	**75**	**75**
Mannar	2	64	2	5	0	4	0	10	0	1	0	8	0	33	0	0	0	0	0	7	0	1	0	0	**80**	**80**
Vavuniya	6	116	1	4	0	0	0	7	1	10	0	10	0	6	0	3	0	0	0	15	0	1	0	2	**75**	**75**
Mullaitivu	4	66	2	8	0	0	0	11	0	4	0	16	0	4	0	0	0	0	0	1	0	3	0	4	**80**	**80**
Batticaloa	6	226	5	92	0	0	1	8	0	83	1	18	0	4	0	4	0	0	3	26	1	4	0	1	**79**	**100**
Ampara	5	70	1	8	0	0	0	0	0	13	0	16	0	0	0	4	0	0	4	30	0	0	1	4	**43**	**57**
Trincomalee	9	206	0	16	0	0	0	7	0	8	0	3	1	8	0	24	0	1	2	65	0	5	0	1	**75**	**92**
Kurunegala	21	523	5	62	0	6	0	1	0	5	7	59	1	7	0	14	0	1	7	96	0	18	1	33	**79**	**90**
Puttalam	4	427	0	17	0	1	0	3	0	0	0	23	0	51	0	0	0	0	0	29	0	11	0	0	**46**	**46**
Anuradhapura	8	202	1	25	0	1	0	2	0	20	2	133	1	13	0	10	0	0	1	71	2	15	4	65	**58**	**68**
Polonnaruwa	4	130	1	12	0	2	0	8	0	5	0	46	0	1	0	2	0	0	0	30	0	5	0	47	**71**	**86**
Badulla	2	179	1	28	0	7	0	2	0	3	2	45	0	27	6	51	0	0	0	54	4	70	0	0	**41**	**71**
Monaragala	8	118	0	14	0	1	0	2	0	0	4	111	1	39	5	63	0	1	2	21	0	12	0	10	**91**	**91**
Ratnapura	38	537	7	76	0	12	0	12	0	14	9	113	3	12	1	56	0	0	5	61	0	39	0	0	**72**	**89**
Kegalle	5	414	0	15	1	9	0	14	1	11	2	67	0	6	0	9	0	0	3	121	0	16	0	0	**64**	**82**
Kalmune	0	290	0	22	0	3	0	3	1	8	0	8	0	0	0	1	0	4	1	28	0	8	0	0	**69**	**100**
SRILANKA	**489**	**13977**	**54**	**710**	**2**	**71**	**2**	**220**	**8**	**320**	**61**	**1349**	**23**	**861**	**15**	**357**	**0**	**7**	**66**	**1473**	**22**	**377**	**10**	**402**	**72**	**85**

Source: Weekly Returns of Communicable Diseases (WRCD).

*T=Timeliness refers to returns received on or before 01st April, 2016 Total number of reporting units 339 Number of reporting units data provided for the current week: 293 C**-Completeness

A = Cases reported during the current week. **B** = Cumulative cases for the year.

Table 2: Vaccine-Preventable Diseases & AFP

26th – 01st April 2016 (14th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2016	Number of cases during same week in 2015	Total number of cases to date in 2016	Total number of cases to date in 2015	Difference between the number of cases to date in 20156& 2015
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	00	00	00	00	00	00	00	00	00	00	00	16	20	-20%
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Mumps	02	01	00	03	00	02	00	00	00	08	08	119	103	+15.5%
Measles	03	00	00	00	00	02	00	00	00	05	37	210	350	-40%
Rubella	00	00	00	00	00	00	00	00	00	00	00	05	04	+25%
CRS**	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Tetanus	00	00	00	00	00	00	00	00	00	00	01	02	04	-50%
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0%
Japanese Encephalitis	00	00	00	00	00	00	00	00	00	00	00	00	06	-100%
Whooping Cough	00	00	00	00	00	00	00	00	00	00	01	22	27	-18.5%
Tuberculosis	74	09	19	00	05	04	00	01	02	114	164	2388	2591	-8.1%

Key to Table 1 & 2

Provinces: **W**: Western, **C**: Central, **S**: Southern, **N**: North, **E**: East, **NC**: North Central, **NW**: North Western, **U**: Uva, **Sab**: Sabaragamuwa.

RDHS Divisions: **CB**: Colombo, **GM**: Gampaha, **KL**: Kalutara, **KD**: Kandy, **ML**: Matale, **NE**: Nuwara Eliya, **GL**: Galle, **HB**: Hambantota, **MT**: Matara, **JF**: Jaffna, **KN**: Killinochchi, **MN**: Mannar, **VA**: Vavuniya, **MU**: Mullaitivu, **BT**: Batticaloa, **AM**: Ampara, **TR**: Trincomalee, **KM**: Kalmunai, **KR**: Kurunegala, **PU**: Puttalam, **AP**: Anuradhapura, **PO**: Polonnaruwa, **BD**: Badulla, **MO**: Moneragala, **RP**: Ratnapura, **KG**: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,

Special Surveillance: AFP* (Acute Flaccid Paralysis), Japanese Encephalitis

CRS =**Congenital Rubella Syndrome

AFP and all clinically confirmed Vaccine Preventable Diseases except Tuberculosis and Mumps should be investigated by the MOH

Dengue Prevention and Control Health Messages

Look for plants such as bamboo, bohemia, rampe and banana in your surroundings and maintain them

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Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to **chepid@sltnet.lk. Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication**

ON STATE SERVICE

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