

Insidious reintroduction of wild poliovirus into Israel, 2013/4

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Since 1988, there have been no poliomyelitis cases in Israel

NO cases of poliomyelitis during current event



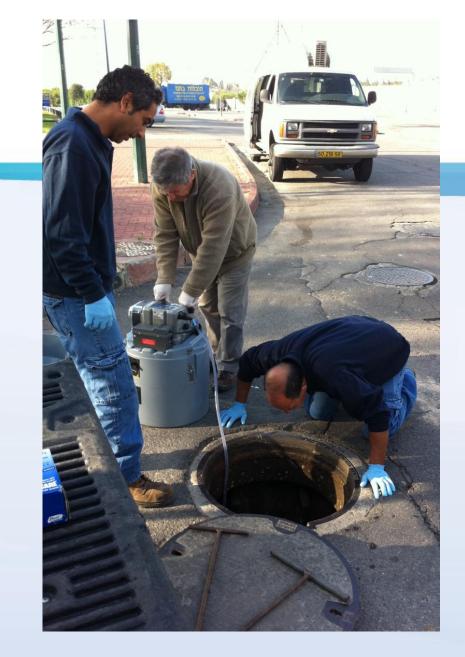
Routine IPV-only vaccination coverage (pre-event)

- Israel ~ 95%
- Southern District ~ 92%
- Arabs ~ 97%
- Bedouins in Southern district ~ 90%

Sero-prevalence study: 98.2% positive

Supplementary Environmental Surveillance

- Routine monthly surveillance
 - 8-10 sites since 1989
 - 30% 40% of entire population
 - Measure viral loads



Currently: Intensified to >20 sites, >80% population



WPV1 Re-introduction in Israel May 28, 2013

- non-Sabin type 1 poliovirus, identified by <u>environmental surveillance</u> in:
- Two sewage treatment facilities in Southern Israel
- Closest match to WPV1 SOAS from Pakistan 2012 and Egypt (Dec 2012)

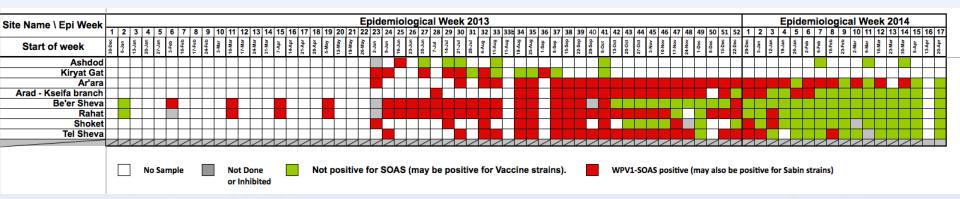


WPV circulation in Israel – current status

- Polio transmission was intense and prolonged <u>only</u> in 6 sites in <u>part of the South of Israel</u>
- <u>November 2013</u>:
 - Steep decreases in transmission by environmental surveillance
 - Traces of the virus by very sensitive molecular tests
- <u>Beginning of March 2014</u>: complete disappearance of any trace of the virus from the sewage from all sites, <u>but one</u>
- End of March 2014: the last site has become negative



WPV1 in Sewage – Southern Israel



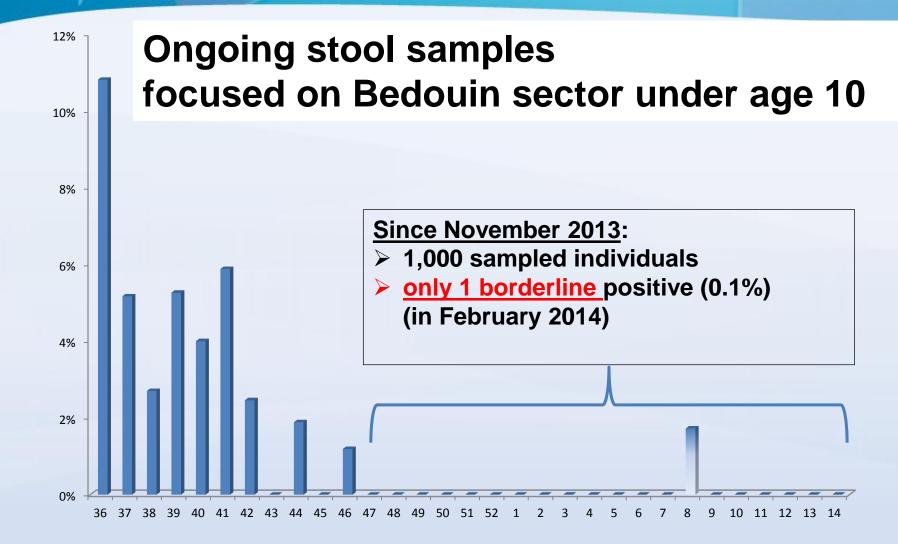
- All sites, but one, negative since mid-Feb 2014
- All sites are <u>negative</u> in last two samples



Intensified Surveillance

- AFP surveillance
 - extended to all age groups
 - -> 1/100,000 expected
 - 100% surveillance index in 2014
- Aseptic Meningitis surveillance (2013)
- Stool Surveys ongoing
- Enhanced Environmental Surveillance ongoing







Public Health Response



Polio Vaccinations

- Jun-Jul 2013: Nationwide IPV catch-up (>98% coverage) + local booster IPV (all ages)
- Aug-Sep 2013: national bOPV SIA (ages 0-10) Round 1
- Oct 2013: bOPV SIA (ages 0-10) Round 2 in areas with persistently positive sewage samples (South district)
- Jan 2014: bOPV included in routine vaccination schedule (2 doses at the ages of 6 and 18 months) as part of the continuing emergency response



Israeli President, Mr. Shimon Peres - committed to OPV vaccination campaign



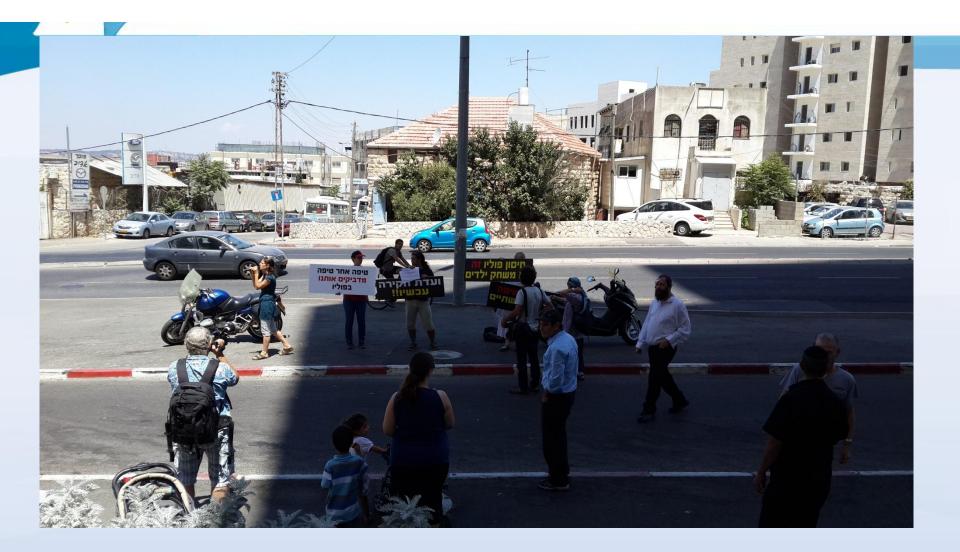
Launching OPV campaign in a press conference headed by the Minister of Health



Minister of Health and DG meeting with community leaders



Protest demonstration against OPV campaign



The response of the Ministry of Health





Action plan in response to renewed transmission

- Routine <u>intensified</u> environmental surveillance, covering all the regions of the country and most of the Israeli population
- <u>Quality control</u>: identification of Sabine 1 and 3 in sewage
- <u>Contingency plan</u>: immediate SIA with bOPV

In conclusion:

- Environmental/ laboratory- sensitive outbreak that lasted 10 month
- Full transparency with WHO, the health sector and the public
- Pro-active consensus creation on the PH measures among the health sector
- Highest level of political commitment
- Intensified monitoring and tailored response
- Return back to the IPV+OPV program
- A new chapter in the epidemiology of polio?