Containment of polioviruses
Scenario

August 15: Country X reports WPV3. First case in >2 years
Minister & DG WHO informed. Emergency Plan

August 16: Order 22 million doses of OPV; delivery in 3 days

August 18: Letters to district magistrates of 45 districts

August 20: Dispatch of 75 member outbreak response team

REPORT FROM LAB OF CONTAMINATION

August 22: Campaign begins
Polio Eradication Containment Objective

To minimize the risk of reintroducing facility based wild and Sabin polioviruses to post-eradication / post OPV communities
GAPIII strategy

- **Risk elimination**: destruction of unneeded poliovirus materials

- **Risk Management**: minimize the risk and consequences of PV release through effective management and safeguards
GAPIII strategy – risk management

Reducing risk of facility associated poliovirus infection

Primary safeguards: Minimize risk through facility design, management, and oversight

- BSL requirements/Annex 4 of GAPIII
- legal frameworks
- national and international accreditation
GAPIII strategy – risk management

Reducing consequences of poliovirus reintroduction

Secondary safeguards: facilities in areas of high immunity
- WPV facilities: full national routine polio immunization policy (IPV)
- Sabin facilities: post eradication routine polio immunization policy (as per SAGE and WHO recommendations)

Tertiary safeguards: facilities in areas with low poliovirus reproductive rates ($R_0$)
- WPV facilities: high standards of hygiene/sanitation (closed sewage)
- Sabin facilities: tertiary safeguards not required
Global Action plan to minimize poliovirus risk implementation

Phases linked to achievements in global polio eradication

- **Phase I**: National facility survey and inventory (now)
- **Phase II**: Establishment of national long-term poliovirus policy & regulation (after Phase I)
- **Phase III**: Global destruction and containment of polio materials (one year after last WPV and at time of tOPV/bOPV switch)
- **Phase IV**: Global destruction and containment of OPV/Sabin materials (at time of global OPV cessation)
Countries with WPV facilities*, 2012

~550 WPV facilities identified to date in 46 countries
10 countries have 85% of the facilities globally

*Facilities may include institutions with multiple laboratories and holding either WPV infectious or potentially infectious materials

10 WPV facilities
5-10 WPV facilities
2-4 WPV facilities
1 WPV facility
Either no WPV facility or survey data not yet submitted
Next steps / remaining issues

- Continue completion of inventories in polio free countries (particularly India)
- Begin process of Sabin 2 survey and inventory
- Finalize GAPIII with governing body approval
- Begin work with Member States on national regulatory framework
- Establish expert body for evaluating profile of candidate vaccine seed strains
THANK YOU
1 year after last case of WPV

What will be in place in terms of containment?

- All countries will have completed Phase I inventory and survey
- GAP3 approved by World Health Assembly
- WHO will have worked with Member States to review / guide development of national regulatory policy for retaining poliovirus materials
- Discussions held with national authorities and facilities to determine fate of WPV materials – many unneeded WPV materials destroyed
- Discussions held with national authorities who will be overseeing risk in facilities retaining WPV
Global Polio Eradication Initiative

- All countries will have completed Phase I inventory and survey
- GAP3 approved by World Health Assembly
- All facilities with WPV2 and Sabin2 infectious or potentially infectious materials identified
- WHO will have worked with Member States to review / guide development of national regulatory policy for retaining poliovirus materials
- Discussions held with national authorities and facilities to determine fate of the type 2 materials – many unneeded materials destroyed

**tOPV / bOPV switch**

*What will be in place in terms of containment?*