# What is the Optimal Number of Doses Per Vaccine Vial?

A group of stakeholders is now convening to initiate a global discussion on the number of doses per vaccine vial including programmatic and market implications. This discussion will focus on impact of vaccine vial size on timely coverage, equity, wastage, cost, and other information. The first phase of work is just beginning. Its objective is to set the stage for a larger program of work to address gaps in knowledge on optimal numbers of doses per vial. This phase will include individual interviews and a multi-partner stakeholder meeting, through which we aim to gain consensus on what these data gaps are and how best to address them.

#### What's in a decision?

#### Understanding Trade-offs and Impact of Dose per Vial Options

- Timely coverage
- Wastage
- Safety

- Efficacy
- Equity
- Vaccine cost

- Systems costs
- Cold chain
- Human resources burden

# Methodology

- Literature review of available data and evidence
- Pre-meeting interviews with stakeholders from implementing partners, WHO HQ and regional offices, UNICEF Supply & Program Divisions, Gavi, Manufacturers, and others
- Questionnaire collected from stakeholders at ISTs in East & Southern Africa and West Africa, IAIM Annual Meeting, and TechNet
- Roundtable discussion at TechNet



## Gathering Stakeholder Opinions

#### Listening to Perspectives from the Field

- "Much as small dose vial will help in not missing children but space challenge in EPI fridges is also there." EPI Manager, lower income country
- **"The fewer the doses, the better."** —Former EPI Manager, lower middle income country
- "Single dose would have been preferred but the storage would require more space; combination with another



 Culminating in a stakeholder discussion in July to develop roadmap of activities to fill in data gaps antigen would have been good too." –EPI Manager, middle income country

### **Reconciling different perspectives**

Sample Responses on Measles Vaccine Vial Size

- On considering a 5 dose measles vial "Wastage would be lower but the program should also consider the available cold chain capacity on this 5 dose vial impact on storage." —EPI Manager
- "If there was a mixture choice of 1 dose vials and 5 dose vial this would tremendously reduce the high waste of measles vaccine which we have to open for each child especially in less busy health facilities." —EPI Manager, lower income country
- Continue using 10 dose vials because "cold chain capacity is still limited in the country & there wouldn't be sufficient storage space in the whole country." —Funding Agency, lower income country
  "The 10 dose can be used for intensified activities and big health facilities. The 5 dose vial in smaller health facilities." —EPI Manager, lower income country

# Information & Data Still Needed

- "Analysis of missed opportunities and defaulters pertaining to vial sizes and wastage." —Implementing Agency, lower income country
- "Volume of the vaccine in relation to cold chain, wastage rate of the vaccine, aseptic techniques to handle open vial." —Implementing Agency
- "How different presentations impact on available time and resources." —Implementing Agency, lower income country
- "Country experiences with missed opportunities for vaccination because of fear of wastage with 10 dose vials, to know



constraints (if any) to manufacturing 5 dose vials, policy vs practice & reasons why health workers don't follow national policy & how to address problem."

-Survey respondent, lower income country



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#### Share Your Opinion

Complete a questionnaire or email: immunization@jsi.com

Join the TechNet Roundtable on Optimal Doses per Vaccine Vial to learn more and share your opinions on this important discussion • Wednesday May 13, 13:00-14:00 (Check your schedule for location)