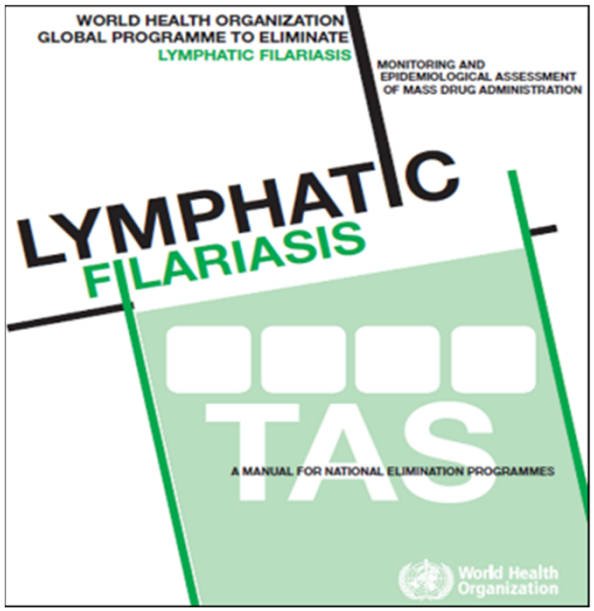
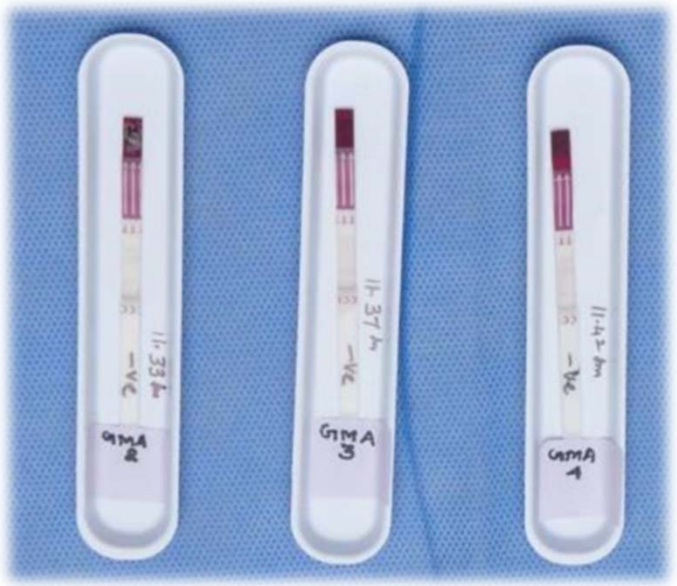
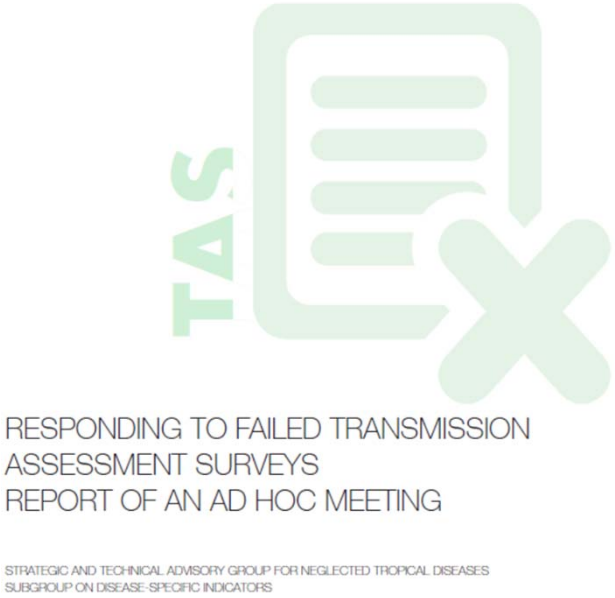
Pre-TAS

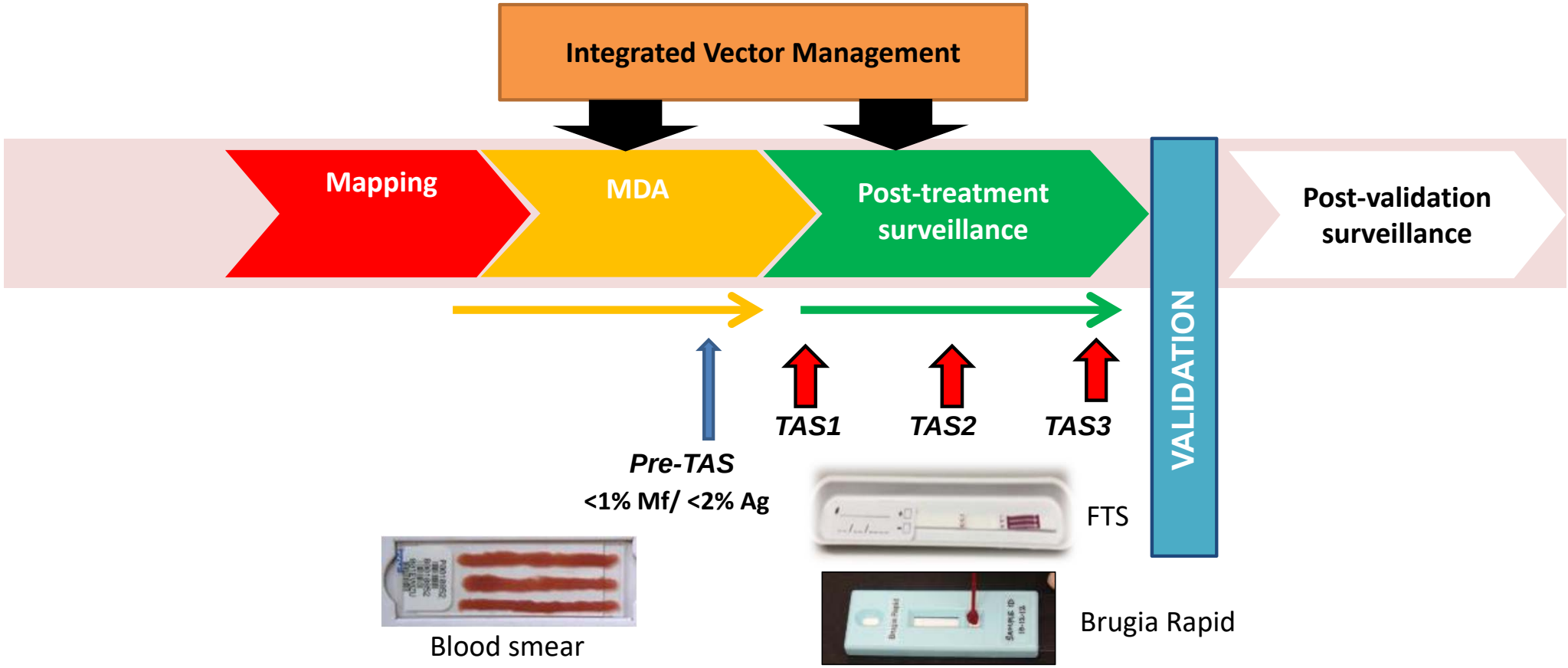






World Health Organization

GPELF Strategic Framework



WHO pre-TAS guidance

- **2011 M&E TAS manual**

Monitoring and epidemiological assessment of mass drug administration for eliminating lymphatic filariasis: a manual for national elimination programmes.

http://apps.who.int/iris/handle/10665/44580

- **TAS Facilitator's Guide and TAS ppt modules**

http://www.who.int/lymphatic_filariasis/resources/TAS_training_materials/en/

Eligibility criterion for pre-TAS

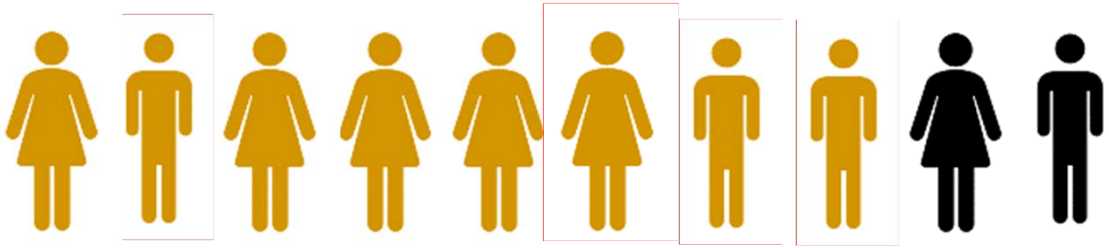
Achieve at least 65%
epidemiological coverage

- For pre-TAS, after:
  - ≥5 rounds of 2-drug MDA
  - ≥2 rounds of IDA
- Conduct 6 months after latest MDA round

Epidemiological coverage

- **Epidemiological coverage** is defined as "*the proportion of individuals in an IU who actually ingested the medicines*"

$$= \frac{\text{No. people recorded to have ingested the medicines}}{\text{Total population in IU}} \text{ X } 100$$



$$\frac{8}{10} \text{ x } 100 = 80\%$$

What is a ‘pre-TAS’?

- **Survey design:** **Measures level of infection in two areas considered highest-risk in the IU**
  - Cut off: prevalence of Mf < 1% or prevalence of Ag < 2% *in each site*
- **Survey sites:** **Sentinel and spot-check sites**
- **Survey population:** **All ages > 5 years; at least 300 samples**
- **Diagnostic tools:** **Rapid diagnostic tests using fingerprick blood**
  - *W. bancrofti* areas: Filariasis Test Strip (FTS) for filarial antigen

Survey area for a pre-TAS

- **Implementation unit (IU)**: The administrative unit in a country used for MDA

- If IU can be divided into sections of differing risk, consider splitting IU into 2 or more evaluation units (**EUs**)
  - Peri-urban vs urban areas
  - Mountains vs plain

Sentinel and spot-check sites

- **At least 1 each per 1 million population**
- **Sentinel sites** are used to establish the baseline infection level and to monitor the impact of MDA on infection prevalence periodically.
  - Once a sentinel site is selected, it should continue to serve as the sentinel site throughout the programme.
- **Spot-check sites** should be sites biased toward finding infection.
  - At least one spot-check site is selected for each sentinel site.
  - If no sentinel site exists in the IU, two spot-check sites are selected.

Characteristics of sentinel and spot-check sites

- The population should be **at least 500 people** (to collect samples from at least 300 people aged > 5 years)

- Should be in an area of **high transmission**: high disease or parasite prevalence or vector abundance
  - or an area where difficulty in achieving high drug coverage is anticipated

- Migrant populations are eligible for pre-TAS
  - People testing positive should be treated and assessed for length of residency.
  - **Exclude persons** who have lived in the community/EU for **less than 1 year** in analysis.

What to do if pre-TAS fails?

- If either the sentinel **or** spot-check site is ≥1% mf or ≥2% Ag, implement two more MDA rounds with ≥ 65% coverage regardless of regimen
- Repeat pre-TAS (e.g. re-pre-TAS)
  - Re-survey sites that did not meet the criteria
  - Select a new spot-check site to replace a site that met criteria
  - Consider asking people if they were tested and treated in earlier pre-TAS

Slide 10

EM1 third subpoint under point 2. It will be helpful to indicate course of action/decison to take based on response to the the question.
Ernest Mensah, 1/3/2020

mw1 Will leave comment for Didier to see... what is happening in SEARO and in PAHO is that this data is being collected and then reported as part of results to RPRG for a decision. In SEARO thus far, it was shown to not impact results, e.g. surveys failed regardless of whether the few people tested earlier who were still positive were included or excluded.
molly work, 1/6/2020

EM2 Secondly, if individual tested positive in earlier test and was treated but history shows individual is perisitent non-compliant; perhaps this is only the first or second treatment even though is a resident of the community.
Ernest Mensah, 1/3/2020

mw2 Treatment here refers to treatment after being found positive in last pre-TAS and not during MDA. So your point is true.
molly work, 1/6/2020

What to do if TAS fails?

- If TAS fails, implement two more rounds with ≥ 65% coverage regardless of regimen
- Implement a new pre-TAS (e.g., pre-re-TAS)
  - Select two new spot-check sites of expected highest risk
  - To determine risk, can use sites with most positives in TAS

Summary: How to chose sites in pre-TAS?

Survey type	Site 1	Site 2
Pre-TAS	Sentinel site (established at baseline)	Spot-check site (area of highest risk)
After pre-TAS failure (re-pre-TAS)	Site that did not meet criterion in pre-TAS, e.g. ≥2% Ag	New spot-check site (area of high risk) to replace site that met criterion
After pre-TAS passes, but TAS fails (pre-re-TAS)	New spot-check site (area of highest risk)	New spot-check site (area of highest risk)

How to ensure a quality pre-TAS?

- Implement refresher training before every planned survey
  - Limit technicians to only those who demonstrate efficiency in blood collection and test function
  - Develop a team of TAS trainers to build capacity in TAS implementation; supervise correct methodology and test operation in the field
- Implement diagnostic tests according to job aid – reduce number of invalids
- Read diagnostic tests at correct time
- Be respectful of community members
- Adapt TAS preparation and supervision checklists for pre-TAS

Lessons learned

- If a chosen site can't be accessed due to insecurity or logistics, x y z.
- Be prepared to go door to door if sample size won't be met by convenience sampling
- Have enough supplies to test more than the target sample size

World Health Organization