Challenges in Identifying and Reaching High Risk Populations

• Persistent transmission in high risk populations (HRPs), such as forest goers and mobile and migrant populations (MMPs), must be addressed to achieve elimination

• Need nuanced and up to date knowledge on HRPs that can be used to target surveillance and response

• Limited systematic approaches to integrating HRP surveillance and response into program activities
MEI High Risk Population (HRP) Surveillance and Response Toolkit

- Provides an adaptable guide to the development and evaluation of surveillance and response strategies to identify and target HRPs

- Four modules
  - Formative assessment
  - Case-control (MERFAT)
  - Venue-based and peer referral sampling approaches
  - Adaptive reactive case detection

- Designed to be used by national malaria programs, partners, and researchers in countries with low malaria transmission
Module 1: Planning targeted HRP surveillance and response

- Formative assessments aim to review, update, and analyze current knowledge on case data, HRP characteristics, and malaria risk behaviors to inform evidence-based and targeted surveillance and response strategies

- **Component 1:** Review of existing data

- **Component 2:** Qualitative data collection – focus groups and key informant interviews to identify MMPs and characterize their occupations, seasonality of work, migratory patterns, health-seeking behaviors, social networks, congregation sites, and willingness to participate in targeted malaria interventions

- **Component 3:** HRP venue mapping and enumeration
Module 2: Identifying risk factors using case control studies

- The Malaria Elimination Risk Factor Assessment Tool helps to identify specific risk factors associated with malaria infection and gaps in interventions
- Uses a case-control methodology and can be nested within the existing surveillance system
- Includes guidelines, example protocols, and questionnaires to help programs and partners design, implement, and interpret the results of the case-control study
Module 3: Monitoring malaria transmission and intervention coverage

- Guidance on implementing time-location sampling (TLS) to access and survey people at specific venues and times where HRPs are more likely to be present (i.e. forest worksites or border crossing points)

- Can be used with quantitative surveys to assess prevalence of malaria infection, risk behaviors, and access to interventions and health care among HRPs

- Other methods, such as household surveys, tend to miss HRPs due to work and travel away from home
Module 4: Adapting reactive case detection

• Socio-behavioral reactive case detection (SB-RACD) provides an approach for targeted screening of HRPs through peer networks or specific locations (“venues”) where they congregate as part of routine surveillance.

• Useful in contexts where transmission occurs away from home (e.g. forests, worksites, or travel destinations) and where household reactive case detection is likely to be low yield.

• Includes procedures for eligibility screening, case interviews, forms for data collection.
HRP surveillance and response toolkit pilot studies

- Toolkit has been piloted in Lao PDR, Namibia, Nepal, and Indonesia
- Additional implementation sites planned:
  - RAI2E: Lao PDR, Cambodia and Vietnam
  - Zambezi and Ohangwena, Namibia: requested by MoHSS to improve targeted screening and treatment for HRPs
  - Thailand: MEI working closely with BVBD to conduct reactive case detection in HRPs in outbreak-prone areas
  - Guatemala: TBD
- Web-launch of the toolkit planned for October 2018
Thank you!

The UCSF Global Health Group’s Malaria Elimination Initiative (MEI) accelerates progress towards malaria elimination in countries and regions that are paving the way for global malaria eradication.

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