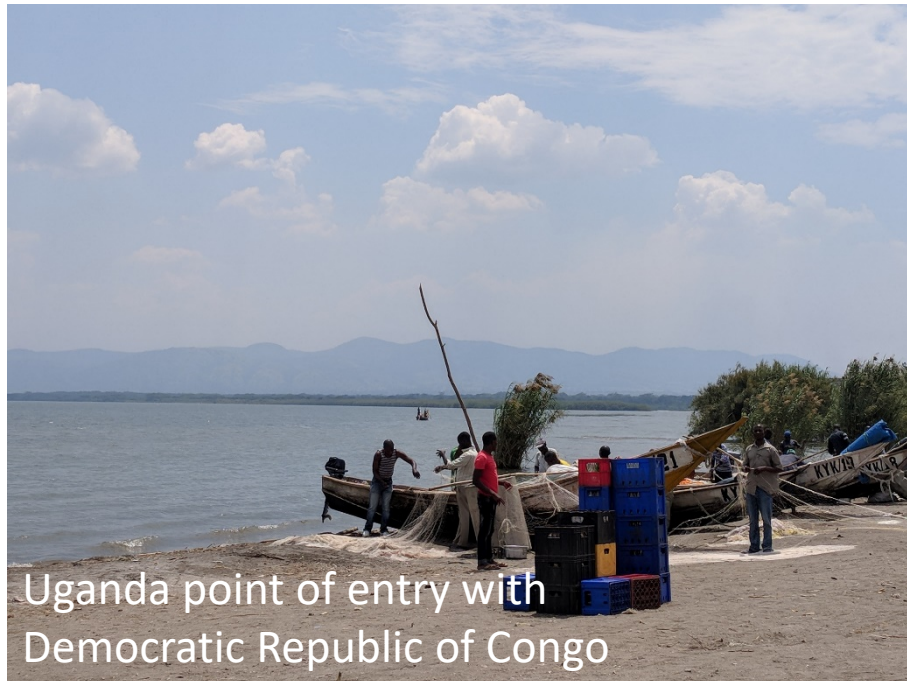


## Understanding the Links Between Inter- and Intra-Regional Migration and Health



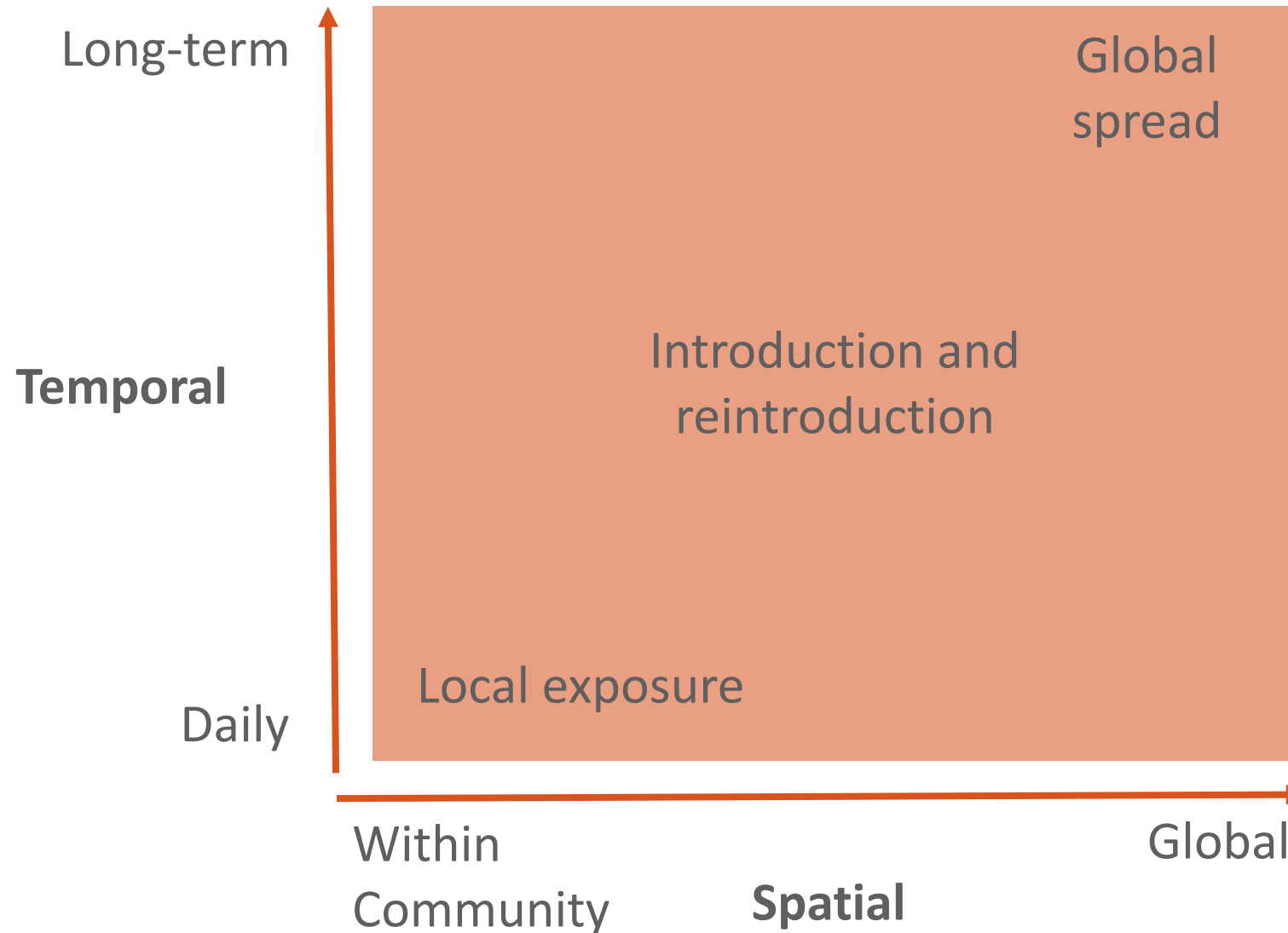
Rebecca Merrill, PhD, MHS  
Global Border Health Team  
Division of Global Migration and Quarantine  
September 5, 2018

# Population movement and connectivity

- Local, national, and regional populations are highly connected
- Inter- and intra-regional travel is common and complex
- Travel across porous borders is often without health screening
- Population movement increases the risk of geographic spread of disease

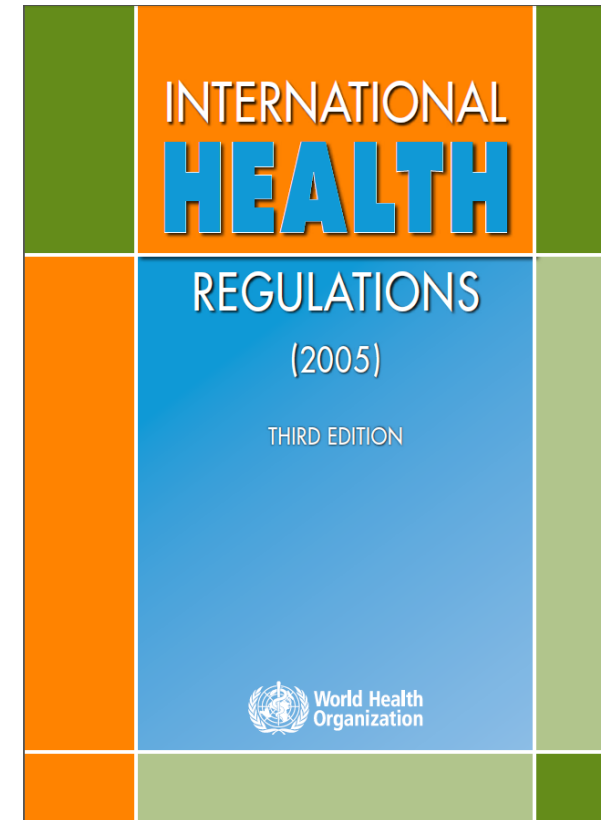


# Population movement and associated exposure along spatial and temporal spectrums



# Understanding population movement for public health

- Addresses International Health Regulations (IHR) requirements
  - Articles: 6 (Notification), 9 (Other reports), and 18 (Health measure recommendations)
  - Annexes 1A (Core Capacity Requirements) and 2 (Decision Instrument)
- Informs where and how to strengthen surveillance
- Promotes regional collaboration and coordination
- Informs how to target specific interventions, such as:
  - Reactive vaccination during cholera epidemics
  - Measles vaccination campaigns



# Division of Global Migration and Quarantine US CDC

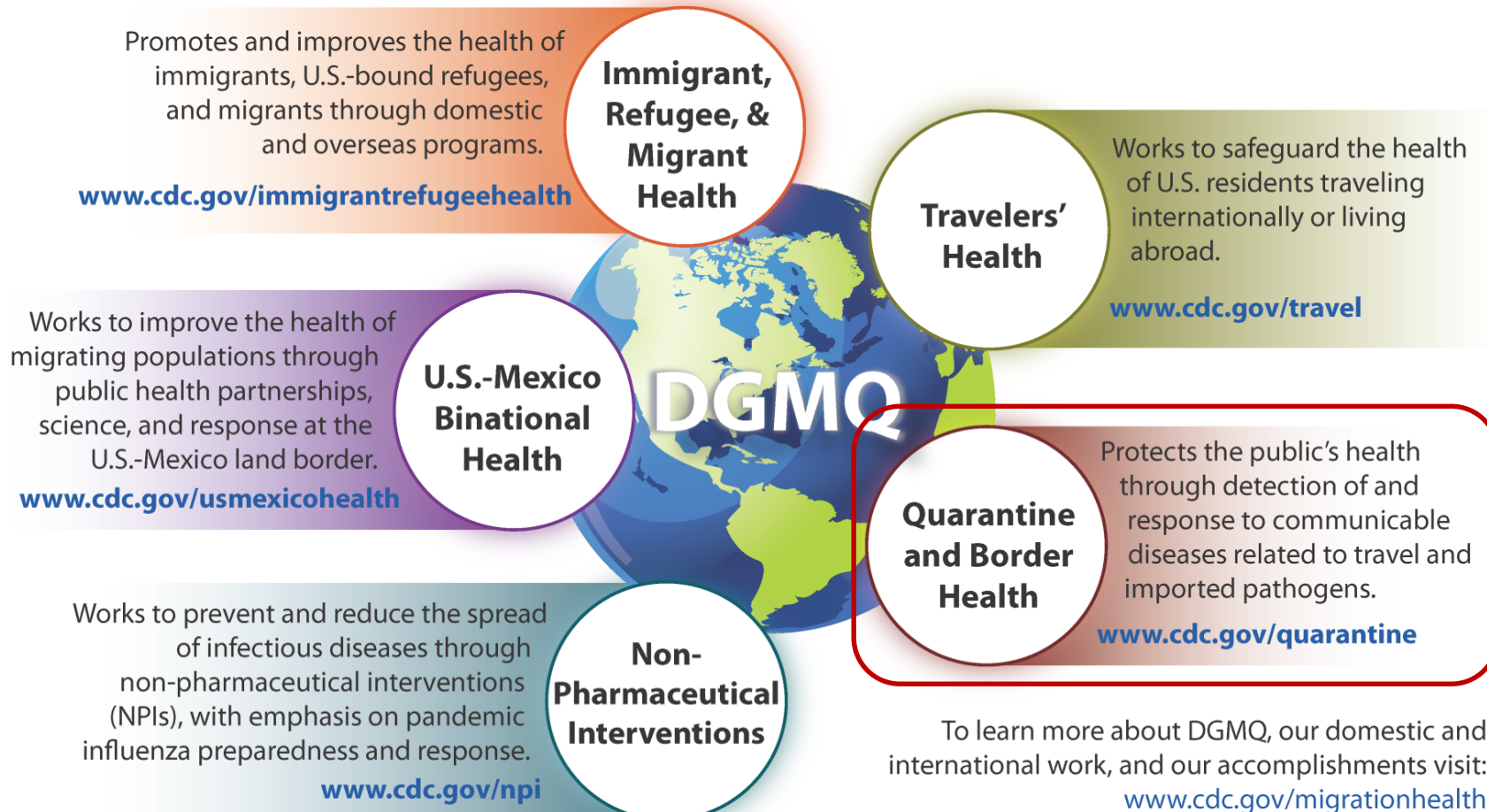
## Protecting the Health of our Communities in a Globally Mobile World



# Division of Global Migration and Quarantine

## US CDC

### Protecting the Health of our Communities in a Globally Mobile World



# Global Border Health Team

## Division of Global Migration and Quarantine, CDC

- Mission: To mitigate the international spread of infectious disease by improving capacities to detect, prevent and respond to public health events through engagement
  - at points of entry,
  - in border regions, and
  - among internationally mobile populations

# Tools

Understanding inter- and intra-regional migration

# Population Connectivity Across Borders (PopCAB)

- Goal: To characterize population movement patterns and describe the degree of population connectivity at community and regional levels.
- Specific objectives:
  - **Identify** geographic areas with significant population movement and connectivity patterns that may increase the impact of a public health events of local or regional concern
  - **Characterize** population movement and connectivity patterns into, through, between, and out of identified areas of interest
  - **Use** population movement and connectivity patterns to guide the design and strengthening of public health capacity

# PopCAB methods overview



Lomé, Togo, Leadership level PopCAB

- Mixed methods approach
  - Qualitative
  - Quantitative
  - Geospatial
- 3 administrative levels
  - Leadership
  - Community
  - Site-specific
- Implementation timeline
  - Rapid, outbreak response – completed within days
  - Extended, preparedness – complete over more extended period of time



Migrants, Togo



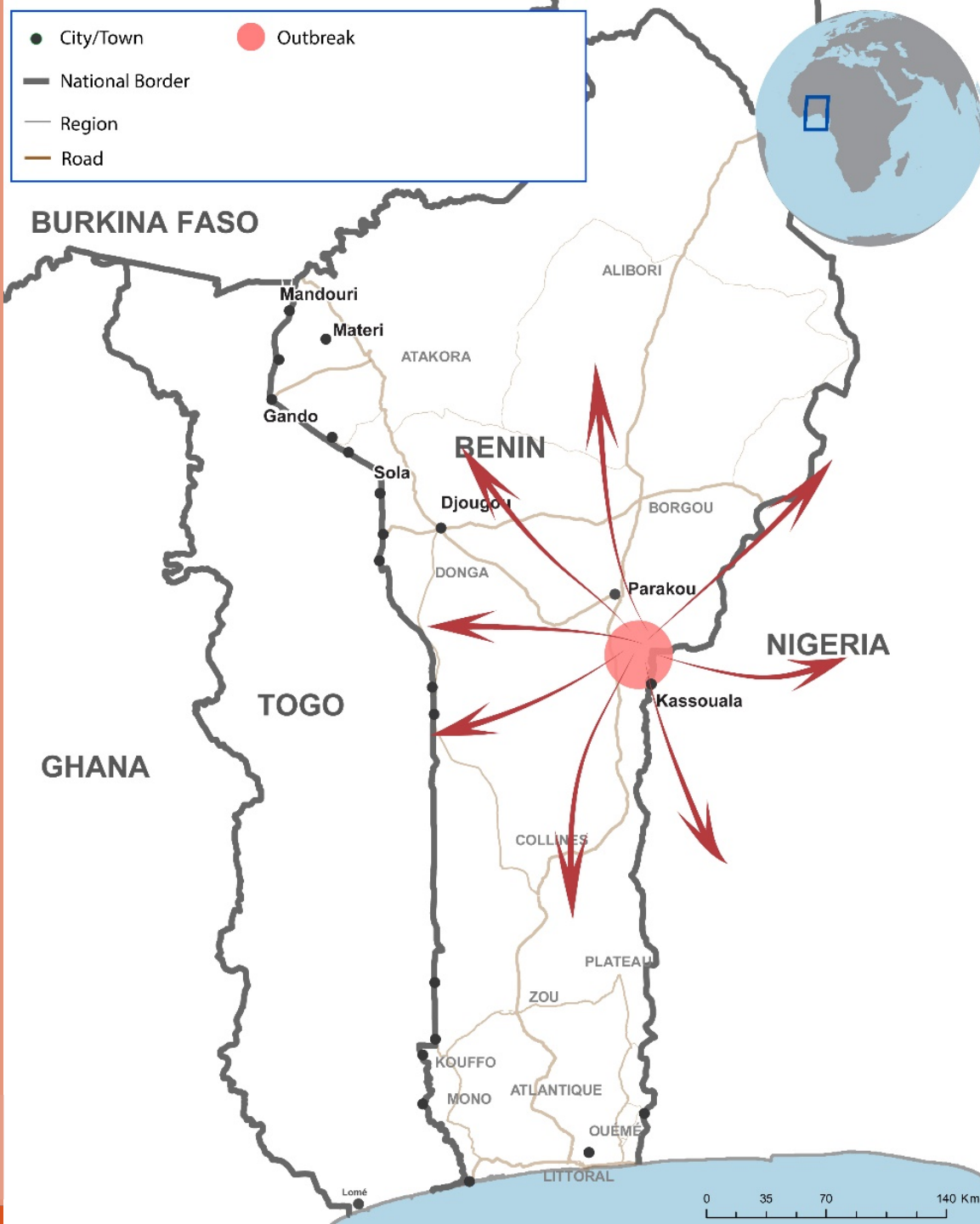
Community leaders, Benin



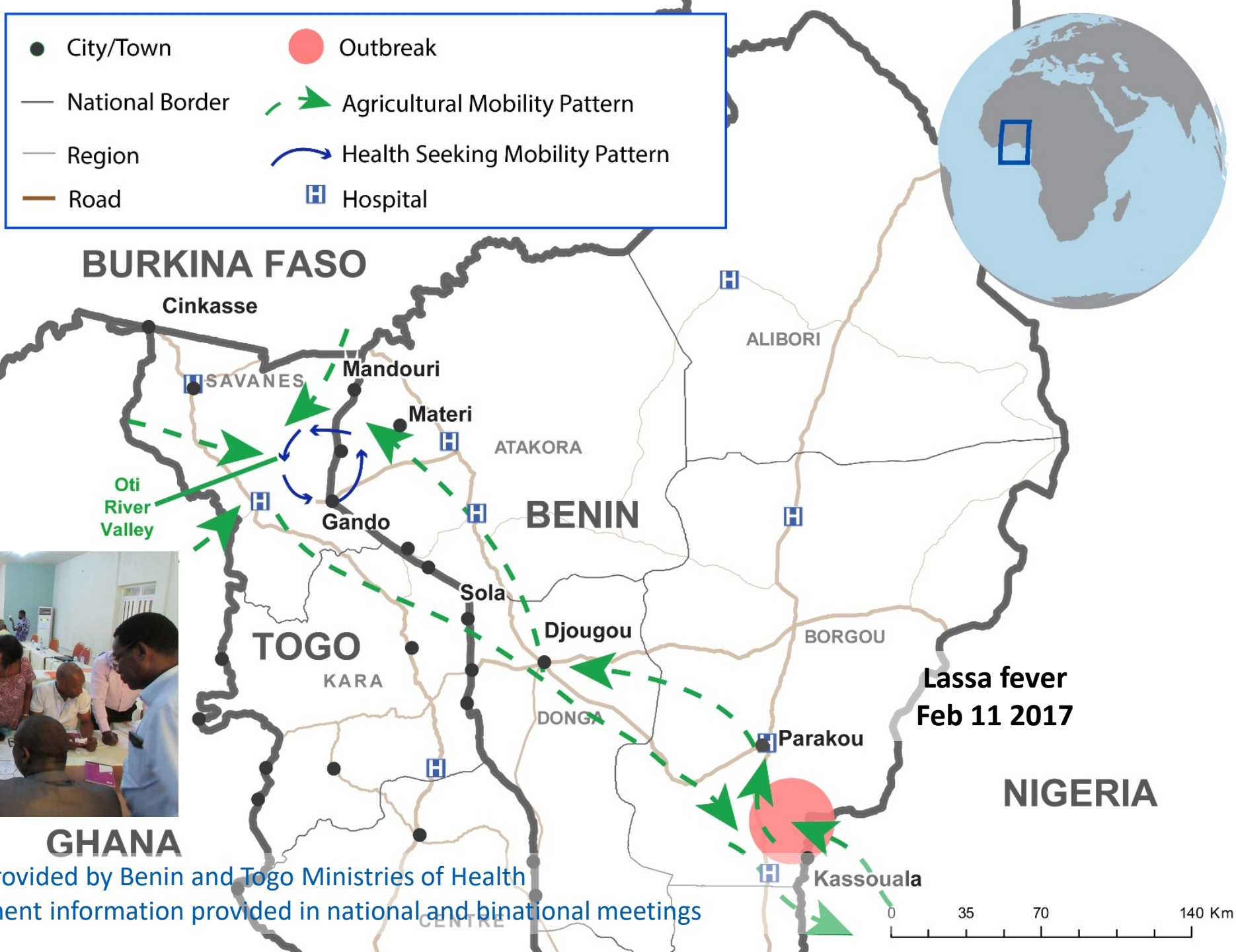
Surveillance officers, Benin



Lassa fever data provided by Benin  
IHR National Focal Point

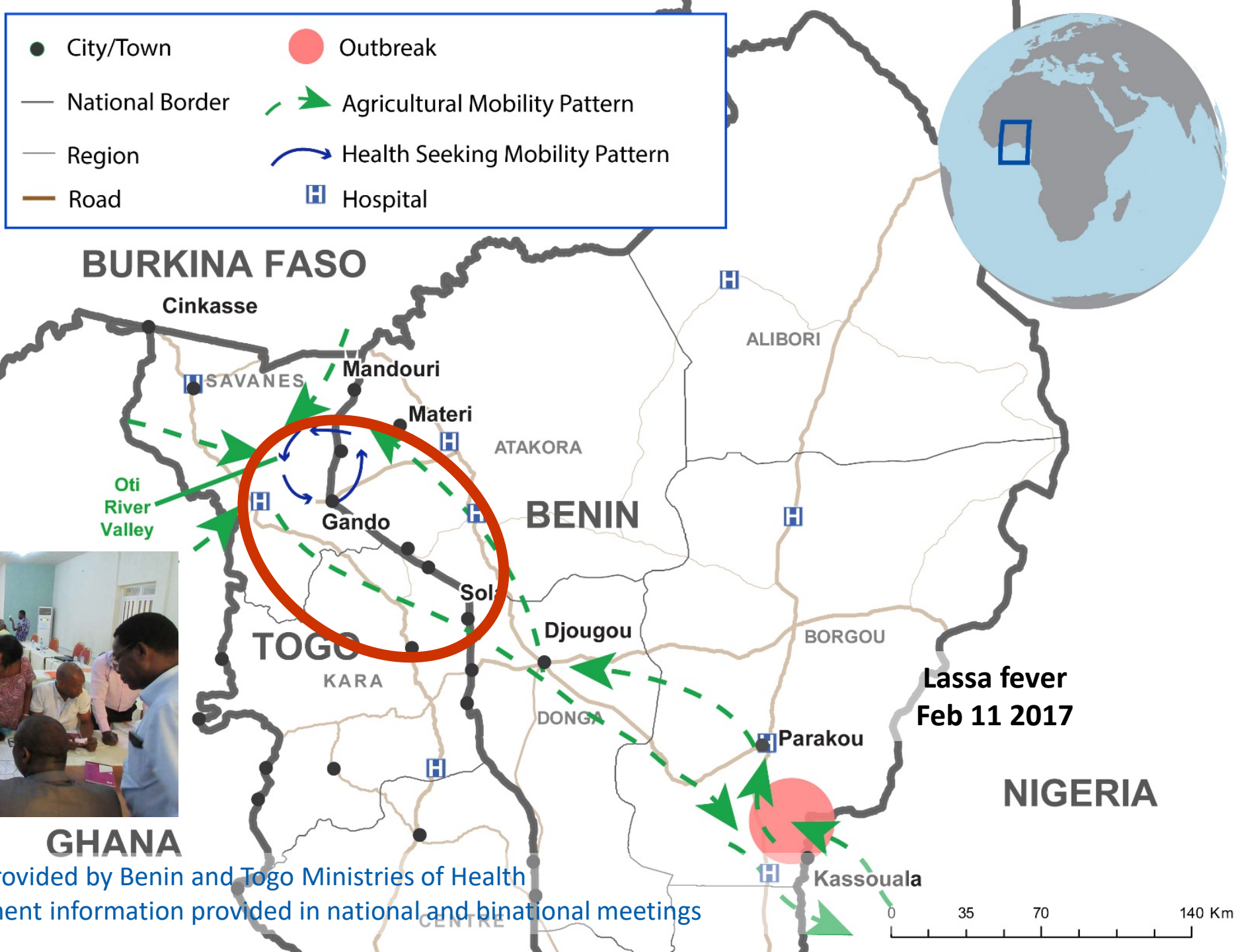


Lassa fever data provided by Benin  
IHR National Focal Point



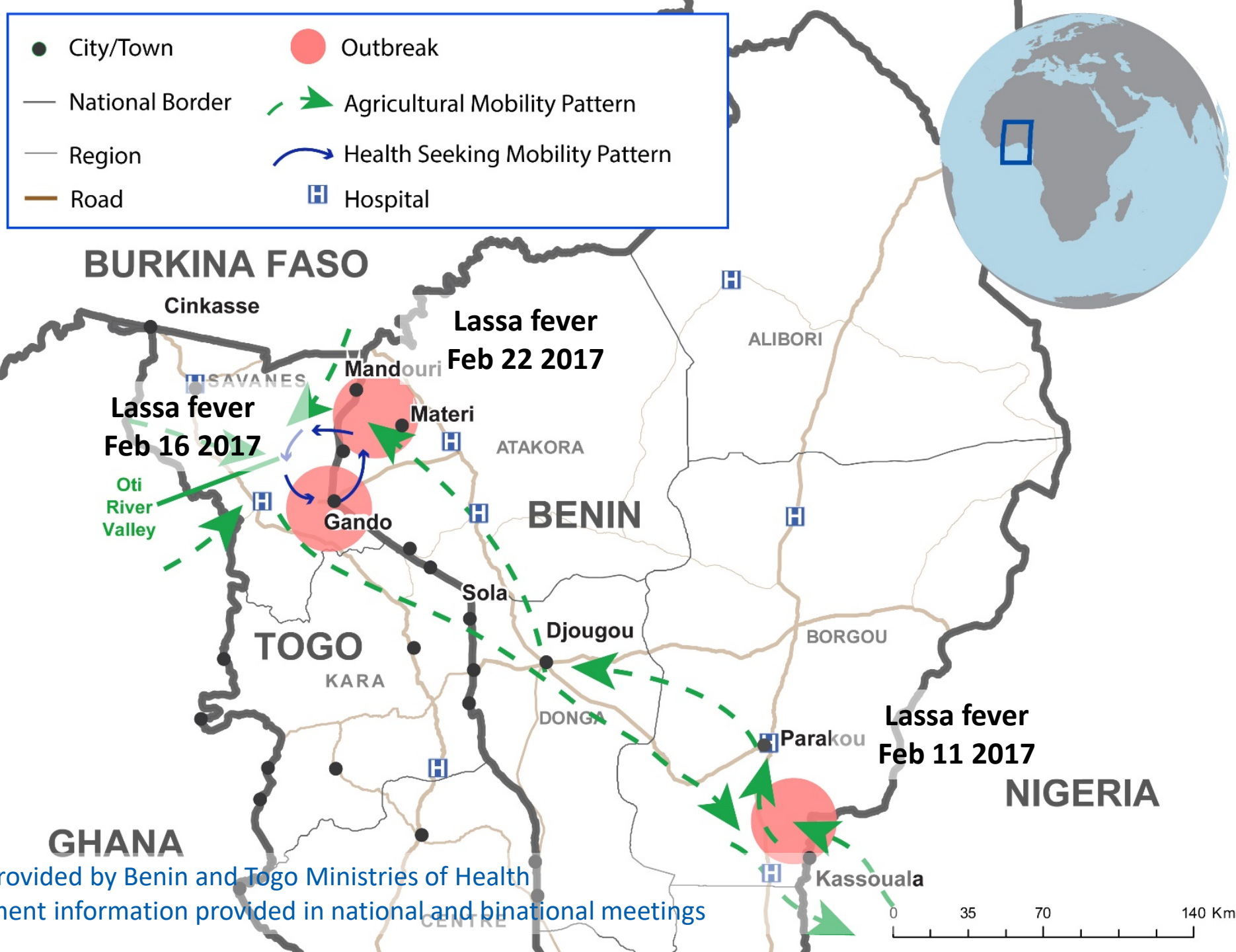
**GHANA**

Lassa fever data provided by Benin and Togo Ministries of Health  
Population movement information provided in national and binational meetings



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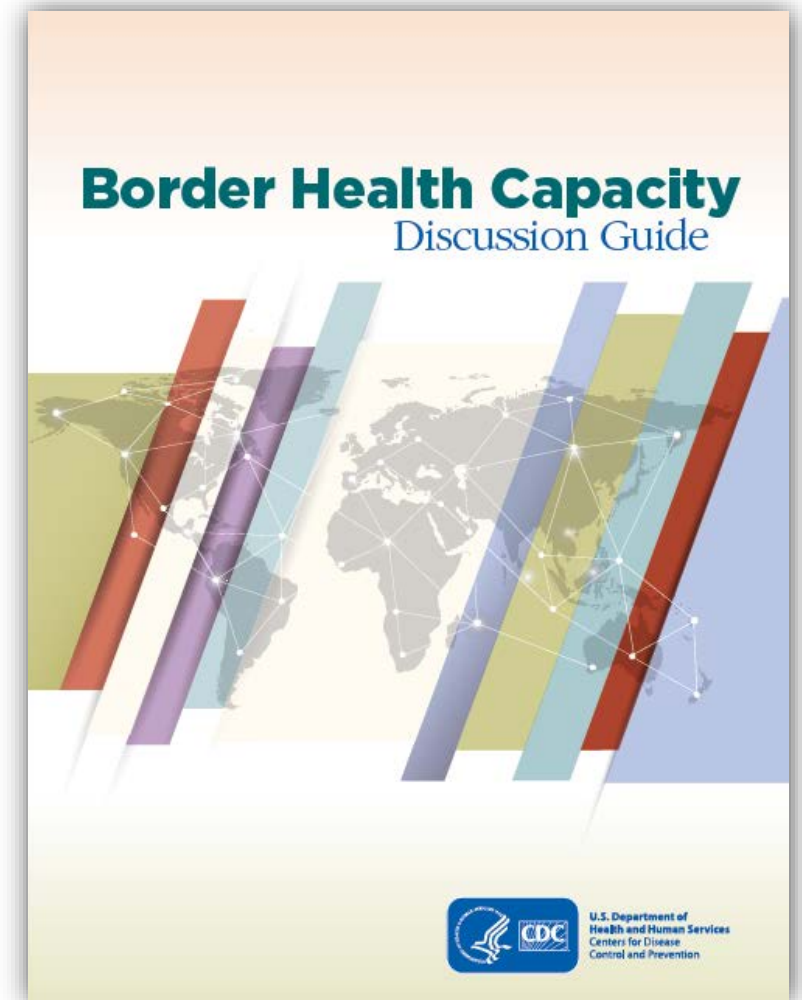
Lassa fever data provided by Benin and Togo Ministries of Health  
Population movement information provided in national and binational meetings

# Tools

Border Health Capacity Discussion Guide

# CDC Border Health Capacity Discussion Guide (BHCDG)

- Complements IHR POE assessment tool by covering similar capacities
- Appropriate for ground crossings and border regions
- Outcome is a narrative summary of qualitative data



# BHCDG discussion topics

- Border characteristics
  - Unofficial points of entry, travel volume and purpose, etc.
- Medical and public health services
  - Available at or near the points of entry
  - Coordination with nearby or referral health facilities
- Response plans and training
  - Describe how to prepare for and respond to public health events at the ground crossing
- Surveillance systems
  - Incorporate health assessments conducted at point of entry
  - Incorporate responses to public health event identified at point of entry

## BHCDG discussion topics cont.

- Communication systems
  - Identified points of contact for reporting and receiving notifications
- Social mobilization
  - Communicating health-related information to travellers and neighbouring community
- Binational and regional information sharing
  - Public health information
    - Outbreaks, case investigations, etc.
  - Cross-border counterparts

# Tools

POE preparedness and response plans and standard operating procedures

# Public health planning on points of entry (POE)

- Allows for early detection of unusual health events
- Provides guidance for containing an event through adequate public health interventions
  - Without interfering with international travel or trade
- Guides implementation of public health interventions through a coordinated approach
- Template Public Health Emergency Response Plans
- Template Standard Operating Procedures

# POE public health standard operating procedures

- Detection of a Suspected Ill Person at the POE
- Notification to health authorities of a Suspected Ill Person at the POE
- Assessment for Suspected Illness of a Person at the POE
- Referral of a Suspect Ill Person to a Healthcare Facility

**Areas for collaboration**

# Integrating inter- and intra-regional migration: A prospective approach to risk assessment

- **Low-burden methods**
  - Less than 1 hour to gather multi-sectoral information about
    - where, why, and how populations are migrating
    - border health capacities in priority areas
- **Inform preparedness and response**
  - Rapidly guide public health resource allocation
  - Tailor long-term strategies
- **Community engagement**
  - Learn directly from prioritized stakeholders, established communities, and populations on the move

# Topics for follow-up and collaboration

- Discuss contexts to integrate method to characterize inter- and intra-regional migration patterns
- Identify priority geographic areas to adapt and facilitate the Border Health Capacity Discussion Guide
- Prioritize POE for emergency response plan and SOP development
- Other ideas?

# Acknowledgements

- Global Border Health Team, DGMQ, US CDC
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- Global Health Security Agenda

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