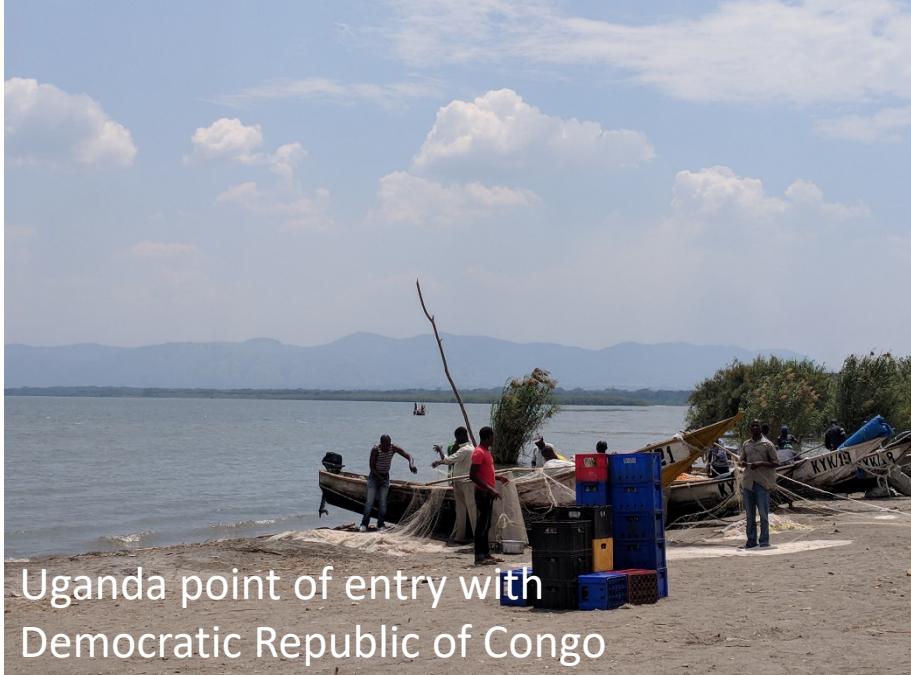


Understanding the Links Between Inter- and Intra-Regional Migration and Health



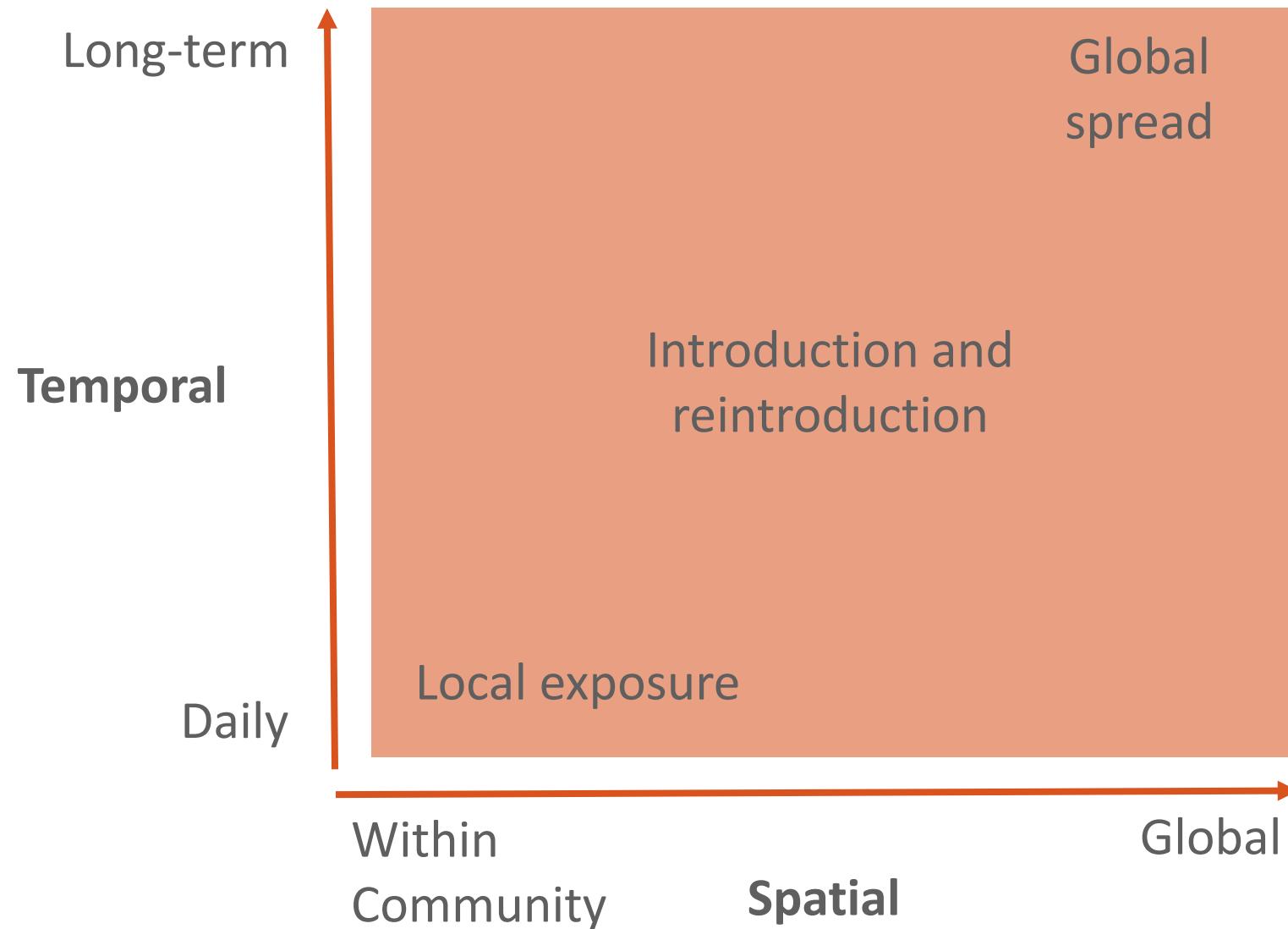
Rebecca Merrill, PhD, MHS
Global Border Health Team
Division of Global Migration and Quarantine
September 5, 2018

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

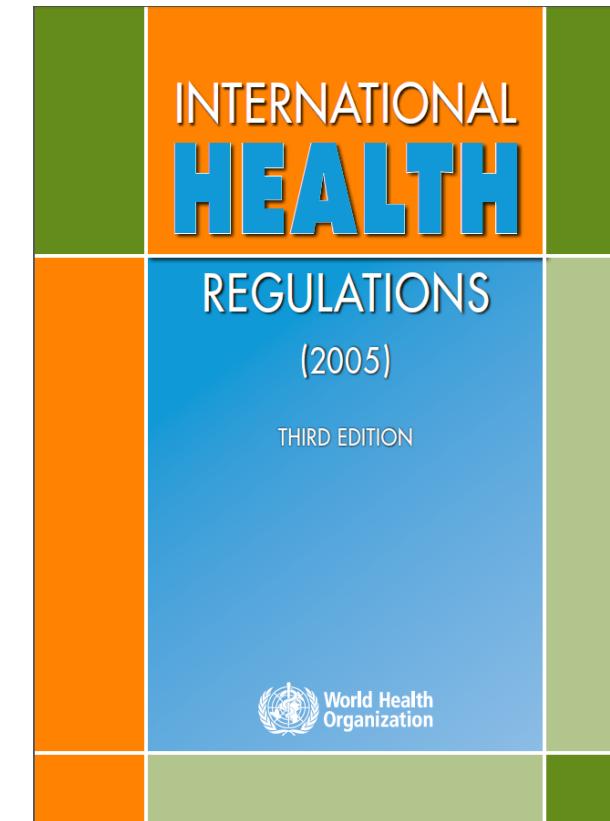


Population movement and associated exposure along spatial and temporal spectrums



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



Promotes and improves the health of immigrants, U.S.-bound refugees, and migrants through domestic and overseas programs.

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Non- Pharmaceutical Interventions

Works to safeguard the health of U.S. residents traveling internationally or living abroad.

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Travelers' Health

Protects the public's health through detection of and response to communicable diseases related to travel and imported pathogens.

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To learn more about DGMQ, our domestic and international work, and our accomplishments visit:
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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

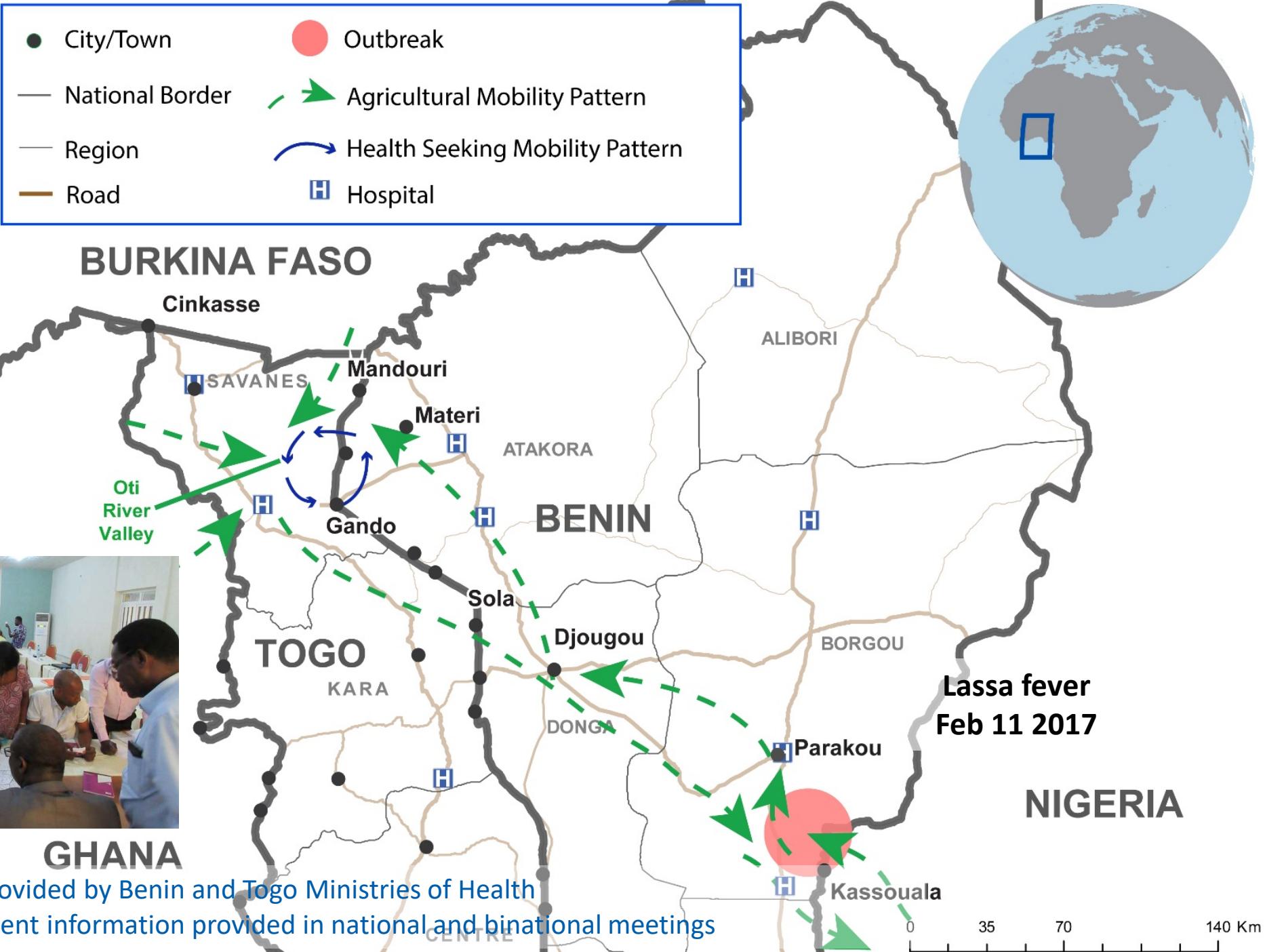


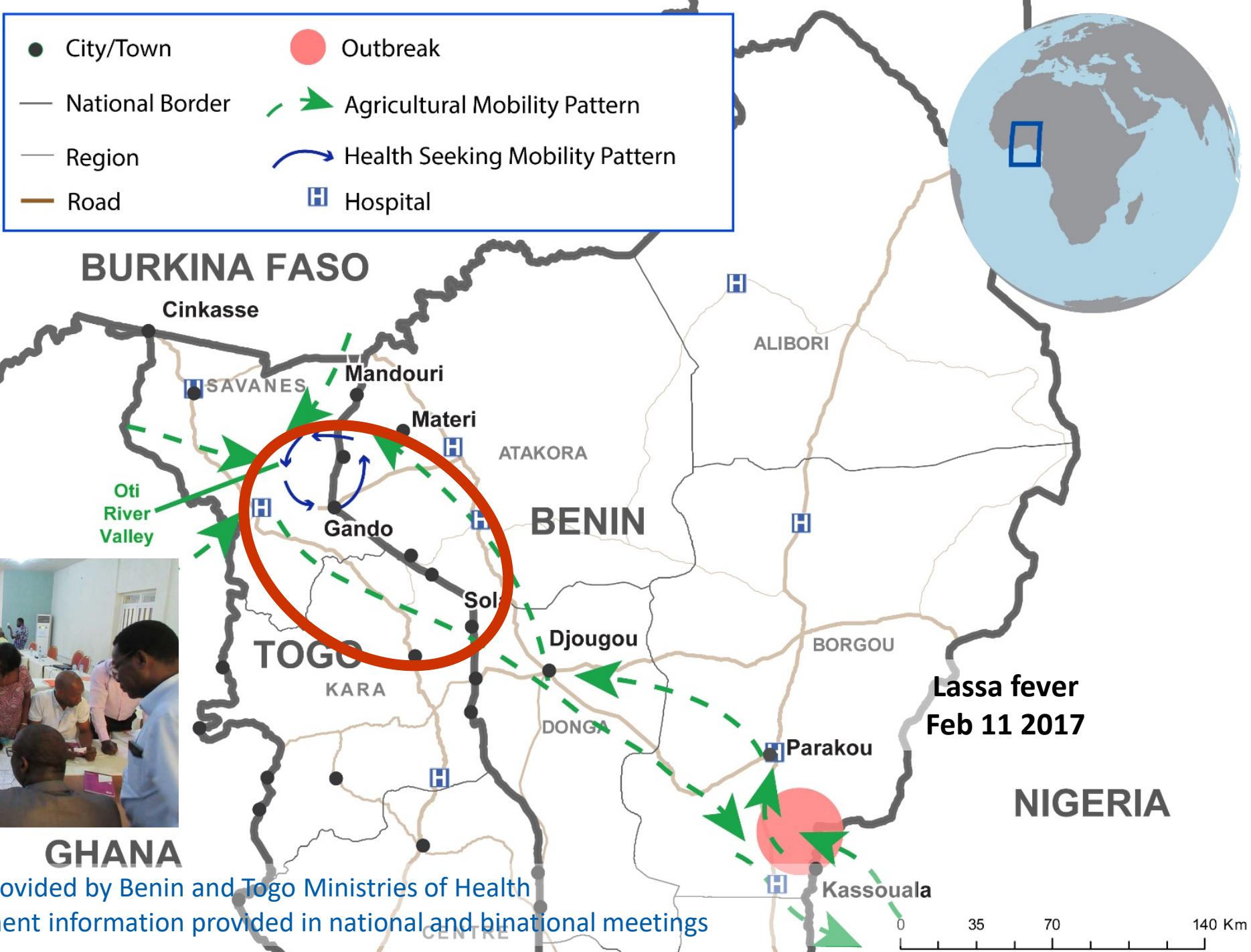


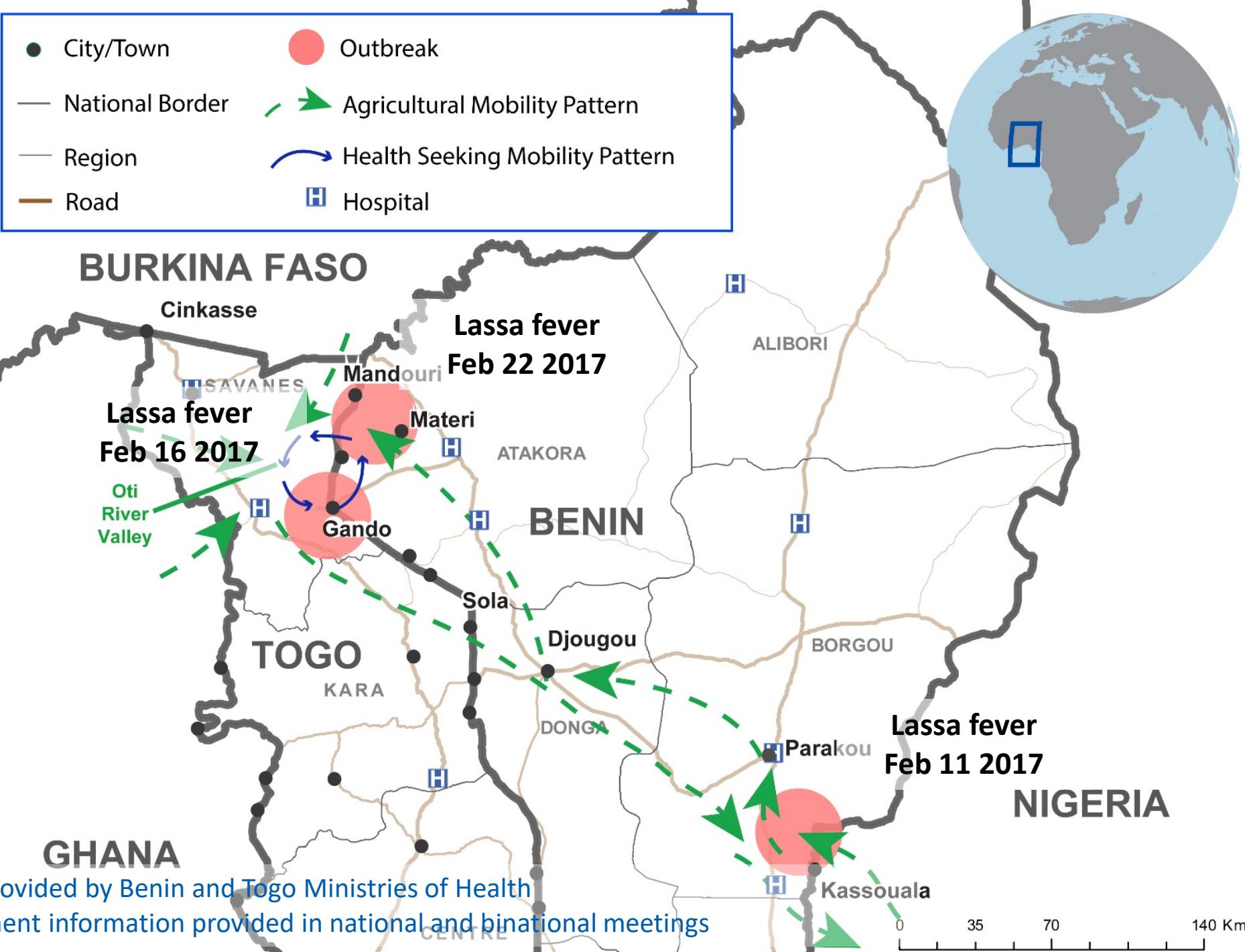
Lassa fever data provided by Benin
IHR National Focal Point



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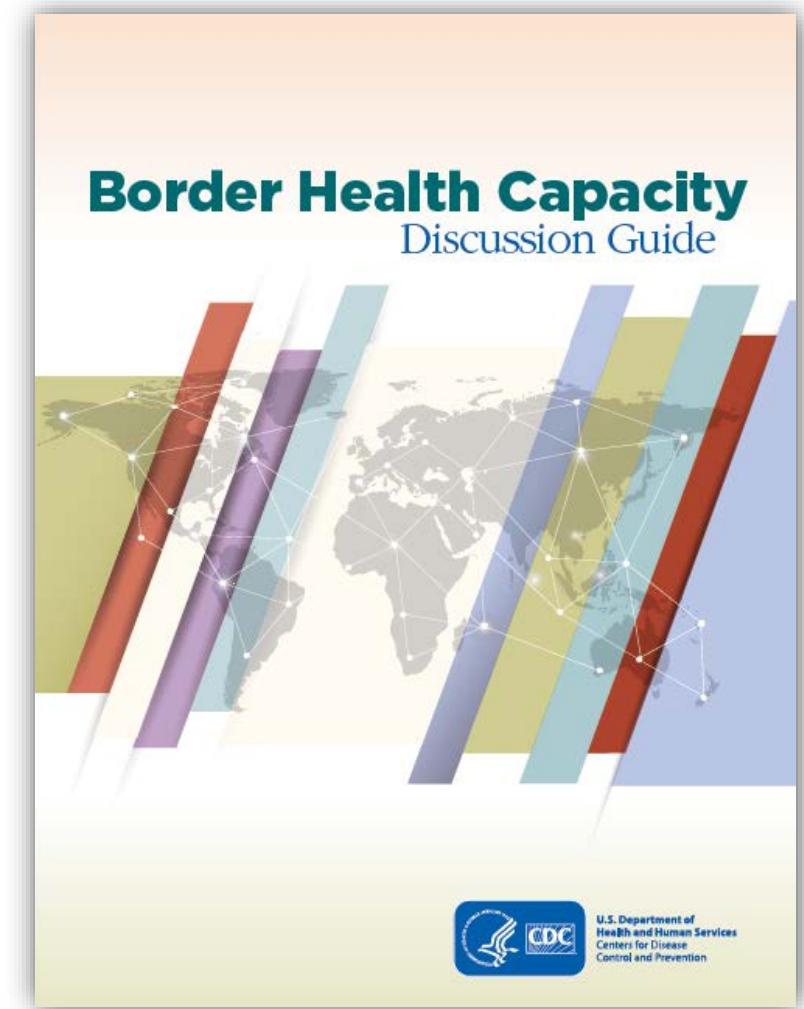


Tools

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?

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.