DRC Health System

District Hospital, Lodja, Sankuru District

Health Center, Tshumbe, Sankuru District
MPX case reported

Triggers Case Investigation

Patient Interview

Specimen Collection

Physical Exam

Transporting specimens

Specimens Stored at Kinshasa National Lab and sent for analysis

Results reported back to HZ
Realities of Establishing Disease Surveillance in DRC

- Health care professionals have not received salary in years
- No funds available for gas or maintenance of motorcycles and/or vehicles
- No roads/ lack of transportation
- Lack of communication
- No follow up from health authorities
- Treatment for even common illnesses not available
- Lack of feedback from Kinshasa and abroad
Realities of Disease Surveillance in DRC
Realities of Disease Surveillance in DRC
Transportation
Transportation
Realities of Data Collection in the field

- Health care professionals have not received salary in years
- No funds available for gas or maintenance of motorcycles and/or vehicles
- No roads/ lack of transportation
- Lack of communication
- No follow up from health authorities
- Treatment for even common illnesses not available
- Lack of feedback from Kinshasa and abroad
Stop being so negative.

A real optimist would have said “be positive.”
MPX Serosurvey

July – September 2007
MPX Serosurvey

**Purpose:** To determine prevalence of MPX infection and HIV infection in MPX endemic region of DRC

**Inclusion Criteria:** individuals living in Sankuru District in selected villages born between 1/1977 – 1/2006

**Exclusion Criteria:** None

**Sample size/frame:** 3600 individuals from villages in Sankuru district where MPX has previously been reported

**Assumptions:** 10 -15% prevalence MPX, 3% prevalence HIV

**Timeline:** July – September 2007
Preparation in Kinshasa
Our plan: Participants / Staff

- 30 interviewers
- 2 phlebotomists
- 2 interviewer group supervisors
- 1 phlebotomy supervisor
- 2 lab technicians
- 14 days data collection
Reality: Participants/S Staff

- 127 interviewers
- 10 phlebotomists
- 6 interviewer group supervisors
- 1 phlebotomy supervisor
- 6 lab technicians
- 6 laboratory aides
- 19 days data collection + 12 days travel = 31 days in the field!
Training in Lomela
MPX Serosurvey Field Laboratory
MPX Serosurvey Phlebotomy Station
MPX Interview Teams
Results

- Number of villages included: 12 (7 in Lomela, 5 in Kole)
- Total population censused in 12 villages > 1 year of age: 7545
- Total # screened: 6,029
- Total # eligible: 5,687
- Total # enrolled: 4,112 (72.3% of eligible)
- Total # blood samples collected: 3593 (87.4% of enrolled)
- Total # days of data collection: 19
Challenges

- Difficulty in getting supplies to field HQ and from HQ to sites due to roads and unreliable flight schedules
- Cold chain difficult without regular electrical supply
- Volume of specimen for shipping from field to Kinshasa = impossible to use cryoboxes
- Rainy season = very difficult by road = team stuck for 5 days between Lomela and Kole
- Training in the field without electricity
- Rumors spread in local populations regarding reasons for bleeding populations
- Some resistance to blood sampling
- Training a large # of staff in short period of time
- Budgetary and human resources constraints
- Ebola outbreak occurring in adjoining health zone ~100km from study sites
- Malaria
Poverty and Health

10 – 90 Gap
Millennium Development Report
NGOs and International Development
Links between Poverty and health

Indicators like health and education have been studied empirically and documented:

– Poor people have worse health
– Ill health generates poverty
– Income and education are key determinants of health