

# A COMMUNITY-BASED INTERVENTION TO FIGHT AGAINST DENGUE IN BURKINA FASO

## IMPLEMENTED ACTIVITIES AND EXPECTED EFFECTS

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### CONTEXT

The epidemiological profile of Burkina Faso is dominated by infectious diseases. Malaria is the leading cause of consultation, hospitalization and mortality (INSD, 2016). It is the most well-known febrile illness and in practice any fever is diagnosed as malaria and treated as such. Despite the presence of a rapid diagnostic test, the risk of misdiagnosing malaria still exists (Zongo, Carabali, & Ridde, 2016).

Another febrile illness called DENGUE is a growing concern for public health since the 2013 outbreak in Ouagadougou. The mosquito *Aedes aegypti* is the main vector of dengue. The symptoms are similar to those of malaria, and dengue is often underdiagnosed and treated as a case of malaria. These wrong diagnoses can lead to complications that can be fatal for patients

### PROBLEM

The lack of specific care and the high costs caused by this disease mean that prevention is the only way of fighting for the moment. However, the prevention of vector-borne diseases remains very limited in Burkina Faso and consists mainly in the distribution of long-lasting impregnated bednets and some intra-domestic spraying initiatives in some endemic areas (De Allegri et al., 2013).

Although community-based interventions have proven their effectiveness in controlling dengue around the world (Mitchell-Foster et al., 2015, M. Toledo et al., 2007), no such initiatives exist in Burkina Faso

### COMMUNITY INTERVENTION

A pilot intervention in Ouagadougou was implemented to fight dengue, this neglected tropical disease. The project aims to assess the feasibility and effectiveness of this approach. It the first time such an intervention focused on dengue is implemented in an urban setting in Burkina Faso and in the subregion.

The intervention was carried out in Tampouy from July to December 2016. The intervention zone covers a circular surface within a radius of 1 km around the health care center (ex sector 22). It is estimated that there are approximately 4,264 houses in the area.

## DESCRIPTION OF THE INTERVENTION

It was a participatory intervention approach, from operational planning to evaluation. Thus, all activities were carried out by trained community health workers and association members from the area. The follow-up activities was entrusted to the community representatives (customary chiefs, religious leaders and associations' leaders).

Several activities have been carried out to strengthen the community's knowledge of dengue and to adopt an anti-vectorial approach at households and neighborhood levels:

- DOOR-TO-DOOR SENSIBILISATION
- EDUCATIONAL TALKS
- A THEATER-FORUM
- COMMUNITY ACTIVITIES
- A DRAWING CONTEST

- The educational talks were used to animate groups of people. A box of images illustrating the dengue transmission, symptomatic manifestations, treatment, breeding sites and means of prevention was used.
- The door-to-door was made to sensitize every household and the facilitators help them identify and destroy the breeding sites.
- The forum theater, which involved actors, was a interactive strategy. At the end, there was a question-and-answer session.
- The community activities brought together individuals around an activity of common interest (eg. weeding, school clean-ups).
- The drawing contest was held with schoolchildren in the intervention zone to illustrate dengue prevention practices.

## INTERVENTION EXPECTED IMPACTS

### 1 A STRONG COMMITMENT BY COMMUNITY LEADERS TO DEVELOP & EVALUATE ACTIONS TO FIGHT AGAINST DENGUE



- Key leaders and influential people are informed about the dengue situation in the area, the population's perceptions of the disease, community strategies and actions to be taken to fight against dengue

- A mechanism is created by community to organize, implement and evaluate health promotion activities in the intervention zone

### 2 IMPROVING KNOWLEDGE OF THE AREA'S POPULATION ON DENGUE AND MEANS TO FIGHT AGAINST ITS PROPAGATION



- Research-based knowledge and communication tools on dengue and other febrile diseases, their transmission and the means to fight against are available

- The populations have access to credible and quality information on dengue and other febrile diseases, transmission vectors and the means to fight against dengue

### 3 INCREASING POPULATION'S INDIVIDUAL AND COLLECTIVE PRACTICES AGAINST DENGUE TRANSMISSION VECTORS



- The different households' members are very observant and use the individual protection measures against mosquitoes bites as well as the destruction of their gites

- The neighborhood in which the intervention was carried out is less favorable to the development of vectors of transmission (mosquitoes) of dengue and other febrile disease