

# Acceptance and cost effectiveness of insecticide treated curtains in areas with low *Aedes* infestation levels

**Submission date**  
08/03/2011

**Recruitment status**  
No longer recruiting

☐ Prospectively registered

☐ Protocol

**Registration date**  
04/05/2011

**Overall study status**  
Completed

☐ Statistical analysis plan

☒ Results

**Last Edited**  
21/01/2019

**Condition category**  
Infections and Infestations

☐ Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Prof Patrick Van der Stuyft

### Contact details

Nationale Straat 155  
Antwerp  
Belgium  
2000

## Additional identifiers

### Protocol serial number

EC UZA 8/36/196

## Study information

### Scientific Title

Acceptance and cost effectiveness of insecticide treated curtains in areas with low *Aedes* infestation levels: a single-centre, cluster, randomised controlled trial

### Study objectives

Acceptance, effectiveness and cost effectiveness of a dengue control intervention implementing insecticide treated curtains, as a single Aedes control strategy will be different than when implementation of curtains is combined with community based environmental management.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Ethical committee of University Hospital Antwerp, 15/09/2008

**Study design**

Single-centre cluster randomised controlled trial

**Primary study design**

Interventional

**Study type(s)**

Prevention

**Health condition(s) or problem(s) studied**

Effect of intervention on Aedes aegypti infestation levels (vector of dengue fever)

**Interventions**

1. Insecticide treated curtains: made from long-lasting, insecticide treated (pyrethroid deltamethrin is applied during manufacture) polyester netting that requires no re-impregnation, materials are special ultraviolet (UV) protected and retain their insecticidal properties and efficacy for about 2 years (information from producer).
2. The material has been approved by World Health Organisation Pesticide Evaluation Scheme (WHOPES) for use as bednets.
3. Community based environmental management approach: dengue control activities were identified, designed, planned and executed by the community itself, with the support of newly set up local 'community working groups'
4. Control: routine aedes control programme (entomological surveillance, source reduction, selective adulticiding and health education)

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome(s)**

1. Aedes infestation levels are the primary outcomes
  - 1.1. House Indices (HI) - number of houses positive for at least one container with Aedes aegypti immature stages/100 inspected houses
  - 1.2. Breteau Indices (BI) number of containers positive for Aedes. aegypti immature stages/100 inspected houses
  - 1.3. Pupal Indices (PI) number of Aedes. aegypti pupae/inhabitant

2. In cycles of 11 days, the National Vector Control programme conduct routine entomological surveys in all dwellings of the municipality. This will provide the entomological information for all clusters for the period of study.

**Key secondary outcome(s)**

1. Uptake, use and acceptance of Insecticide treated curtains
2. Financial cost of the two interventions in comparison to the control
3. The percentage of blocks repeatedly positive for larvae
4. Level of community participation based on Rifkin criteria

**Completion date**

01/04/2012

## **Eligibility**

**Key inclusion criteria**

1. No patients, but communities were included
2. Circumscriptions (neighborhoods) of urban Guantanamo after obtaining community approval

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Not Specified

**Sex**

All

**Key exclusion criteria**

Circumscriptions without community approval

**Date of first enrolment**

30/09/2008

**Date of final enrolment**

01/04/2012

## **Locations**

**Countries of recruitment**

Belgium

Cuba

**Study participating centre**

Nationale Straat 155  
Antwerp  
Belgium  
2000

## Sponsor information

### Organisation

Institute of Tropical Medicine (Belgium)

### ROR

<https://ror.org/03xq4x896>

## Funder(s)

### Funder type

Government

### Funder Name

Directorate General for Development Cooperation (DGDC) (Belgium) (project ref: 95900)  
(framework agreement between the Institute of Tropical Medicine of Belgium and of Cuba)

### Funder Name

Ministry of Health (MINSAP) (Cuba)

## Results and Publications

### Individual participant data (IPD) sharing plan

The datasets generated and analysed during the current study are available upon request from Toledo Maria Eugenia ([mariaeugenia@ipk.sld.cu](mailto:mariaeugenia@ipk.sld.cu)), Institute of Tropical Medicine "Pedro Kourí", Habana, Cuba. Data sharing may be conditional on approval of the purported use by the Cuban Ministry of Health.

### IPD sharing plan summary

Available on request

### Study outputs

| Output type                     | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|---------------------------------|---------|--------------|------------|----------------|-----------------|
| <a href="#">Results article</a> | results | 20/03/2015   | 17/01/2019 | Yes            | No              |

