

## **Demonstrating cost-effective and sustainable larval control methods in an urban setting as an alternative to the use of chemical methods**

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### **Introduction:**

The goal of the study was to demonstrate cost-effective, sustainable and alternative larval control methods in an urban setting in the Islamic Republic of Iran for assessing the efficacy of different coverings (straw mat and tile covered with a thin layer of concrete) and a bacterial larvicide (*Bacillus thuringiensis*/Bti) on water cisterns.

### **Method:**

The study design was a randomized selection of three clusters. In the first cluster water cisterns were covered with straw mats. In the second cluster, the intervention included covering the reservoirs with tiles (supported with metal frames) and a thin layer of concrete while bacterial larvicide was applied in the third cluster.

### **Results:**

Seroprevalence survey: the risks of *P. falciparum* and *P. vivax* transmission in Chabahar city was very low with evidence of limited recent transmission. None of the examined blood subsets using light microscopy and nested-PCR assays were positive for *P. vivax* and/or *P. falciparum* parasites.

Ongoing activities include: assessing durability and sustainability; assessing community acceptance; conducting knowledge, attitude and practice survey following peer-to-peer education; analysing cost-effectiveness of larval source management interventions and planning for expansion of selected interventions to all Chabahar areas.