

# Diphtheria seroprevalence in Huaphan Province

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## Background

Diphtheria is a vaccine-preventable infectious disease caused by the bacterium *Corynebacterium diphtheriae*. The disease is spread primarily by droplets from the nose, throat and eyes and affects all ages but is more prevalent in unvaccinated individuals below the age of 15. In late 2012, there were diphtheria outbreaks in the provinces of Huaphan, Bokeo, Xayabouly, Xieng Khouang and Vientiane and in Vientiane capital.

## Activities

In collaboration with the Institut de la Francophonie pour la Medecine Tropicale in Vientiane, we aimed to assess the diphtheria immunization status of children in two districts of the province of Huaphan and to determine the reasons for non-vaccination and lack of seroconversion among vaccinated children.

Following parental informed consent, 132 blood samples were taken from children between the ages of 12 to 59 months in Kuan and Xamtai districts of Huaphan province. Antibodies to Diphtheria toxin were detected in 84 children (63.6%). We also found 49% were infected with intestinal parasites. These data indicate very low vaccine coverage and high intestinal parasite infections in Huaphan province, particularly in rural areas far from health centres.

## Prospective

These data were presented in poster format at the National Health Research Forum, Vientiane, October 2013 and have been

reported to the Lao MOH. A manuscript of these data is in preparation.

### **Partners**

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