

## Documents

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**Cryptosporidium and Giardia detection in environmental waters of southwest coastal areas of Thailand**  
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### Abstract

The aim of this study was to investigate water samples collected in coastal areas of Southern Thailand in the years of 2005 and 2008 for their contamination by the protozoan parasites *Cryptosporidium* and *Giardia*. One hundred eighteen water samples of different origin were collected from six Tsunami affected southern provinces of Thailand in early 2005, and they have been analyzed using standardized methodology. Fifteen out of 118 samples (12.7%) were positive for *Cryptosporidium* spp. and nine (7.6%) positive for *Giardia* spp. Additional 42 samples from two same areas were examined 3 years later, in the early 2008. Five out of 42 (11.9%) samples were positive for *Cryptosporidium* spp., and three out of 42 (7.1%) were positive for *Giardia* spp.. Both protozoans were found in reservoir, river/canal, and pond waters. It appears no significant differences ( $p < 0.05$ ) between *Cryptosporidium* and *Giardia* (oo)cysts levels during the two monitoring periods; however, the number of the investigated areas and samples in the second period was significantly less than in the first period. This is the first description on *Cryptosporidium* and *Giardia* (oo)cysts in water sources of Thailand, and it suggests the need for water quality control in the interest of public health safety. © 2010 Springer-Verlag.

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