

# DRINKING WATER FLUORIDE SURVEILLANCE AND FLUOROSIS MITIGATION IN THAILAND

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**SUMMARY:** The prevalence of dental fluorosis is increasing in some areas of Thailand with the major fluoride (F) source being community piped-water containing ground water with a high F content. The use of ground water has increased when the availability of surface water has decreased because of drought or pollution. In order to prevent and control dental fluorosis, in 2007 the Dental Health Bureau set up a surveillance system to monitor the F content in the public drinking water in at risk areas. The system involves the collection of water samples, their testing for F concentration, reporting the results to local officers, calling for action, implementing a plan, and making an evaluation of the outcome. The water samples are collected from community piped water, and the drinking water sources in schools and daycare centres, and the F levels measured at the Dental Health Bureau's laboratory using a F ion selective electrode method. In order to assess progress in high risk areas and to check that the water is still safe in low risk areas, the water F testing is done annually in the high risk areas and 5 yearly in the low risk areas. At present 22 provinces are included in the programme and work is being done to obtain safe drinking water in 15 provinces. We recommend this community participation approach with support from the Dental Health Bureau.

Key words: Dental fluorosis; Fluorosis mitigation; Surveillance; Thailand

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