

# **APPLYING GEOGRAPHIC INFORMATION SYSTEMS (GIS) TO VIEW HIV PREVALENCE IN ROYAL THAI ARMY CONSCRIPTS OVER 10 YEARS**

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Since 1989, the Royal Thai Army conducted HIV pre-induction screening for all conscripts entering its service. Demographic information has been collected among these men at enrollment since 1991. Between 60,000 and 70,000 aged 21 year old males throughout Thailand conscripted by a lottery system each year represent a cross-sectional survey of HIV prevalence in that population that has been reported in the literature and at major medical conferences around the world due to its epidemiological value. This past year, AFRIMS was able to apply GIS technology to that database to provide a vivid pictorial view of the rates of HIV. Presented here will be the GIS maps depicting the numbers and rates of HIV prevalence for Thailand and its progression and regression over the past decade and how GIS technology offers the advantage of remarkable visualization as compared to traditional methods of reporting levels of disease.

**Discussion:** We believe that this surveillance system can provide early detection of disease outbreaks such as influenza and possibly intentional acts. Early detection should enable officials to quickly focus limited public health resources, decrease subsequent mortality, and improve risk communication. The system is simple, flexible, and, perhaps most critical, acceptable to providers in that it puts no additional requirements on them.

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