
Hepatitis A epidemiology in Thailand

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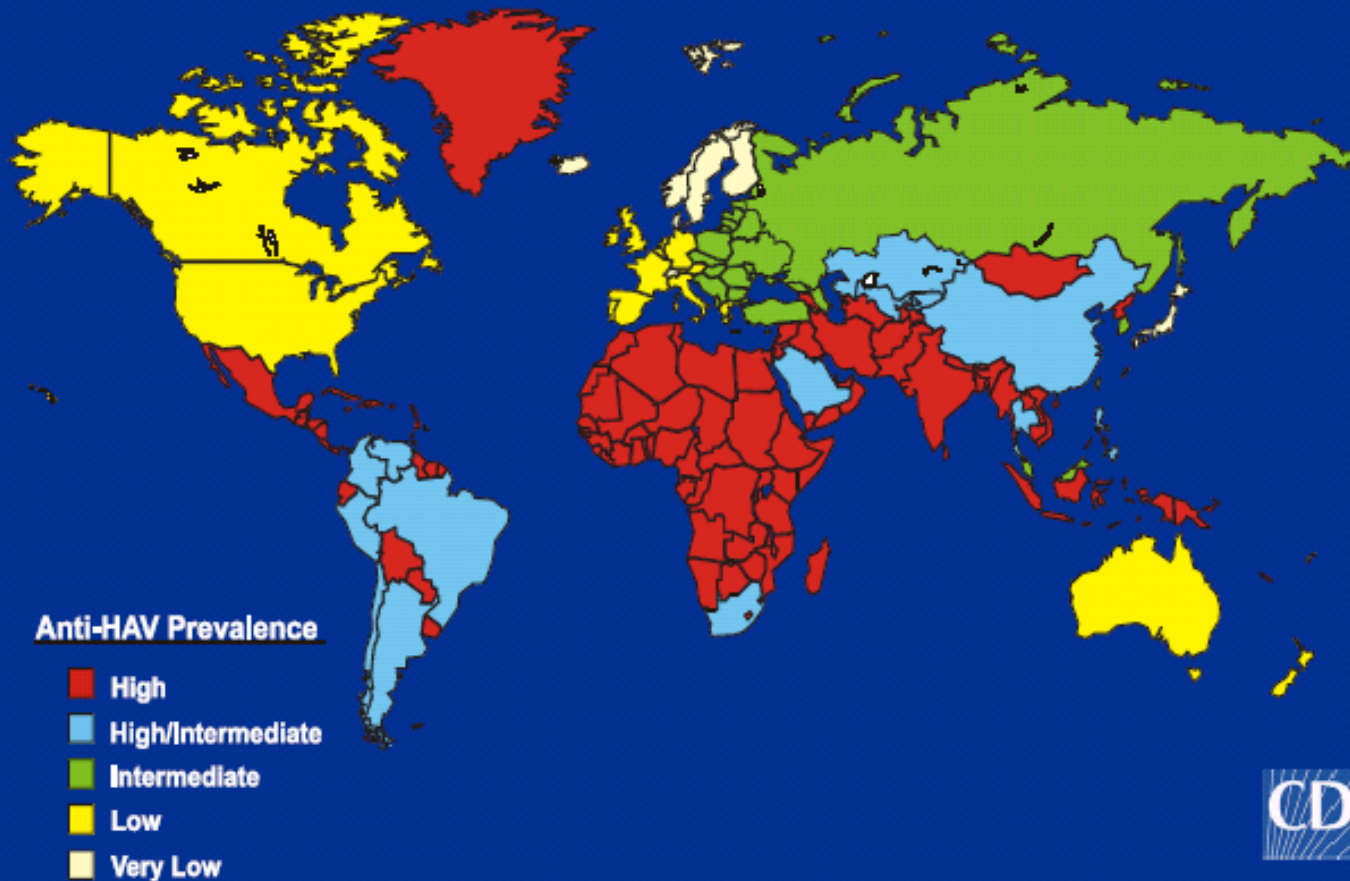
Faculty of Medicine

Chulalongkorn University

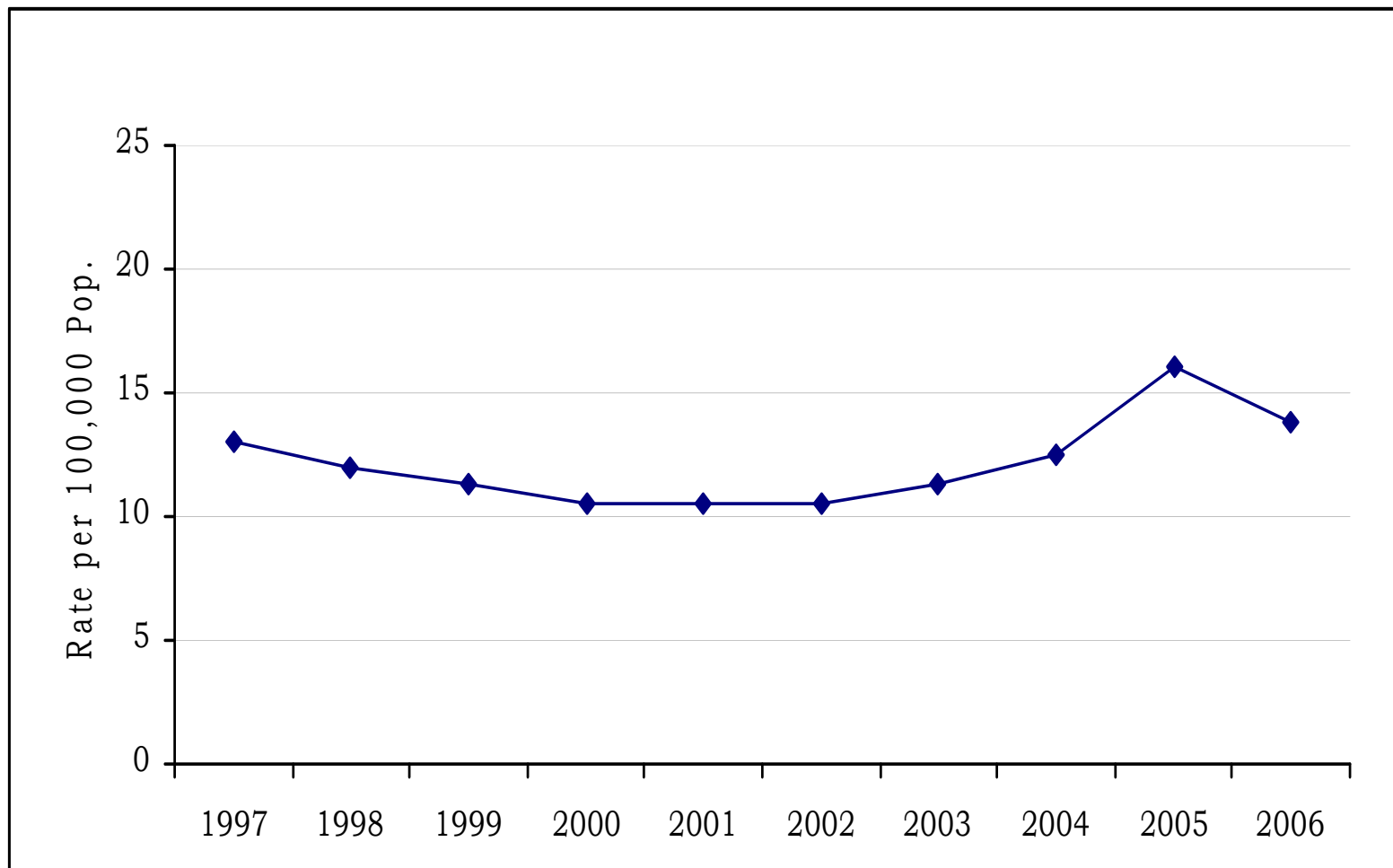
Bangkok, Thailand



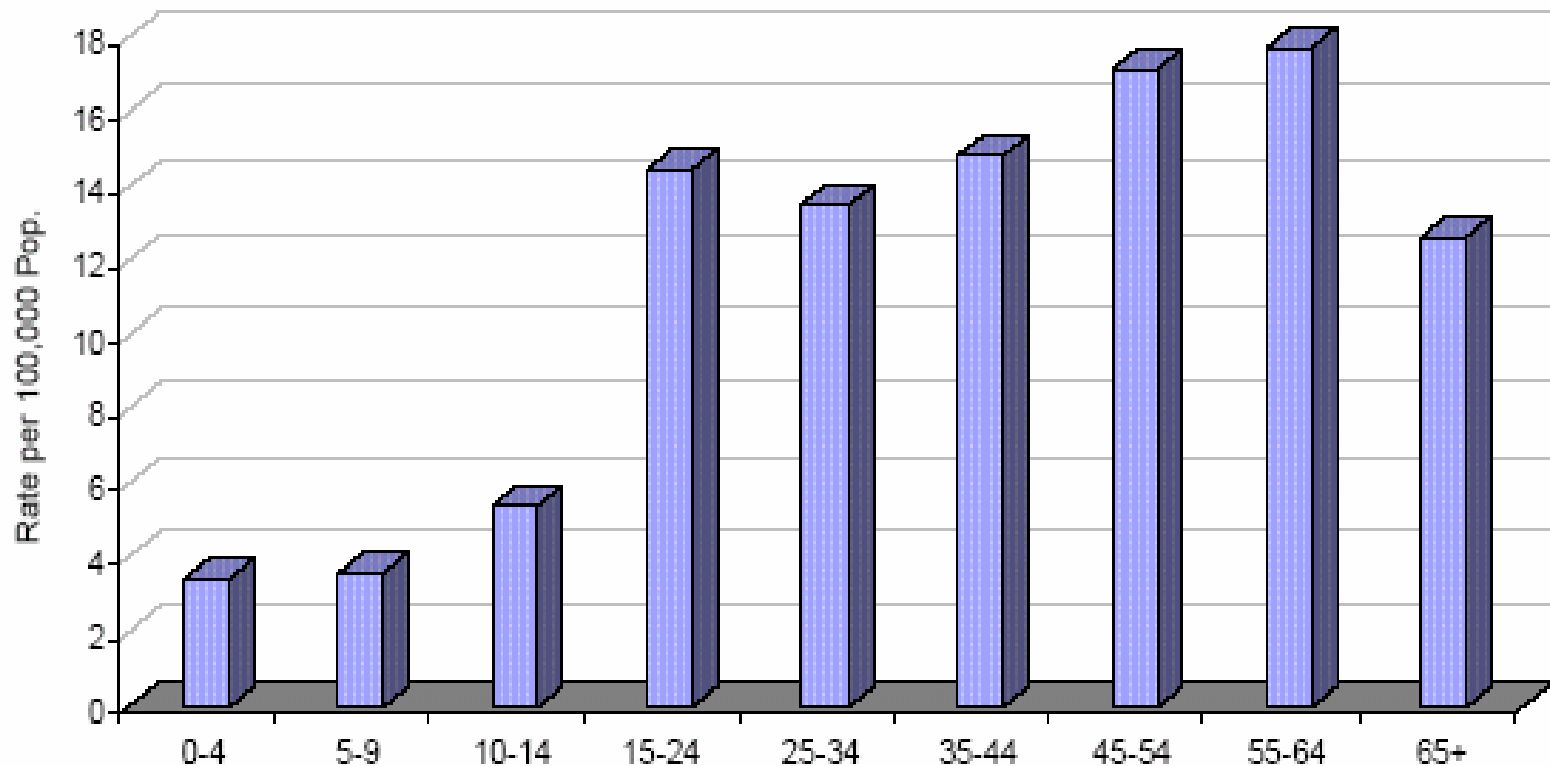
GEOGRAPHIC DISTRIBUTION OF HEPATITIS A VIRUS INFECTION



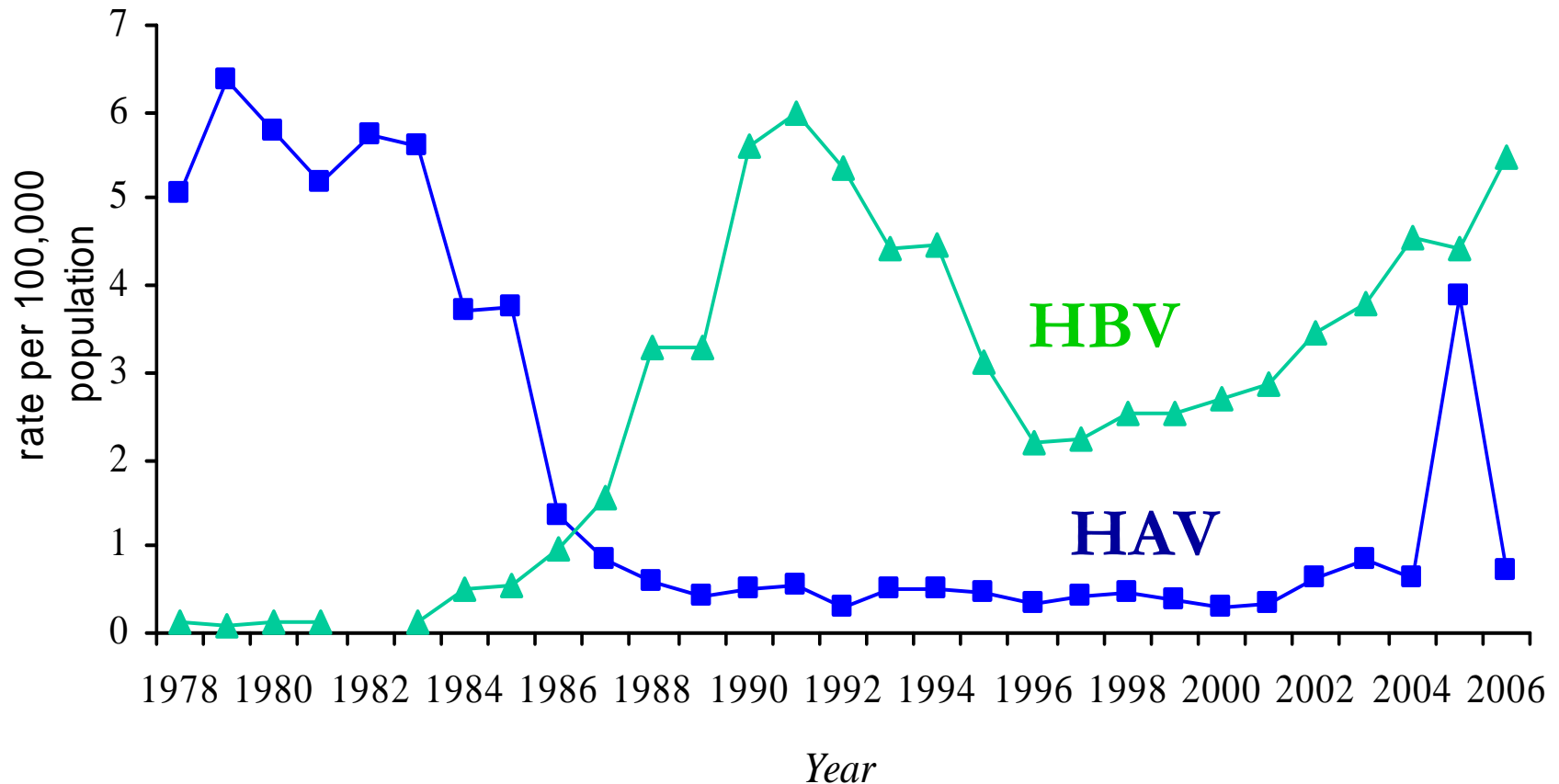
Reported cases of hepatitis in Thailand



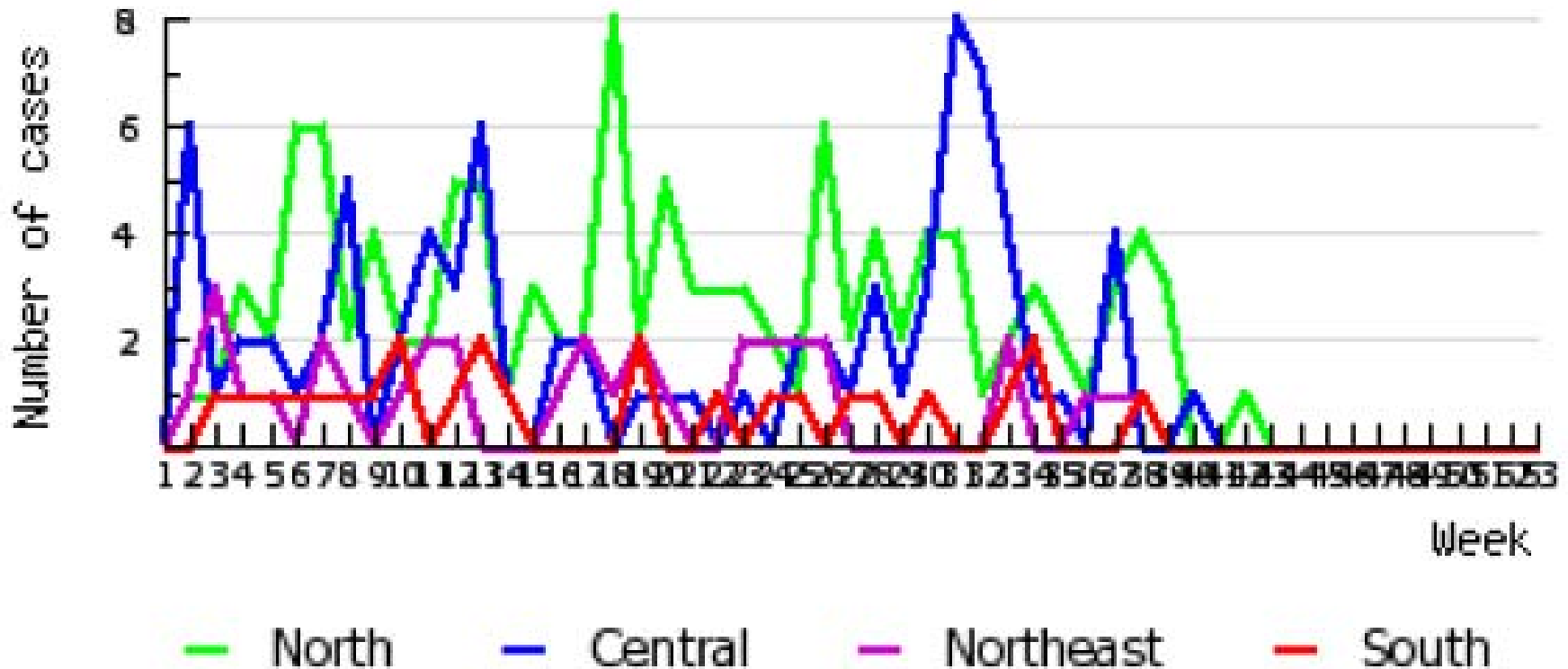
Reported cases of hepatitis in Thailand by age-group (2004)



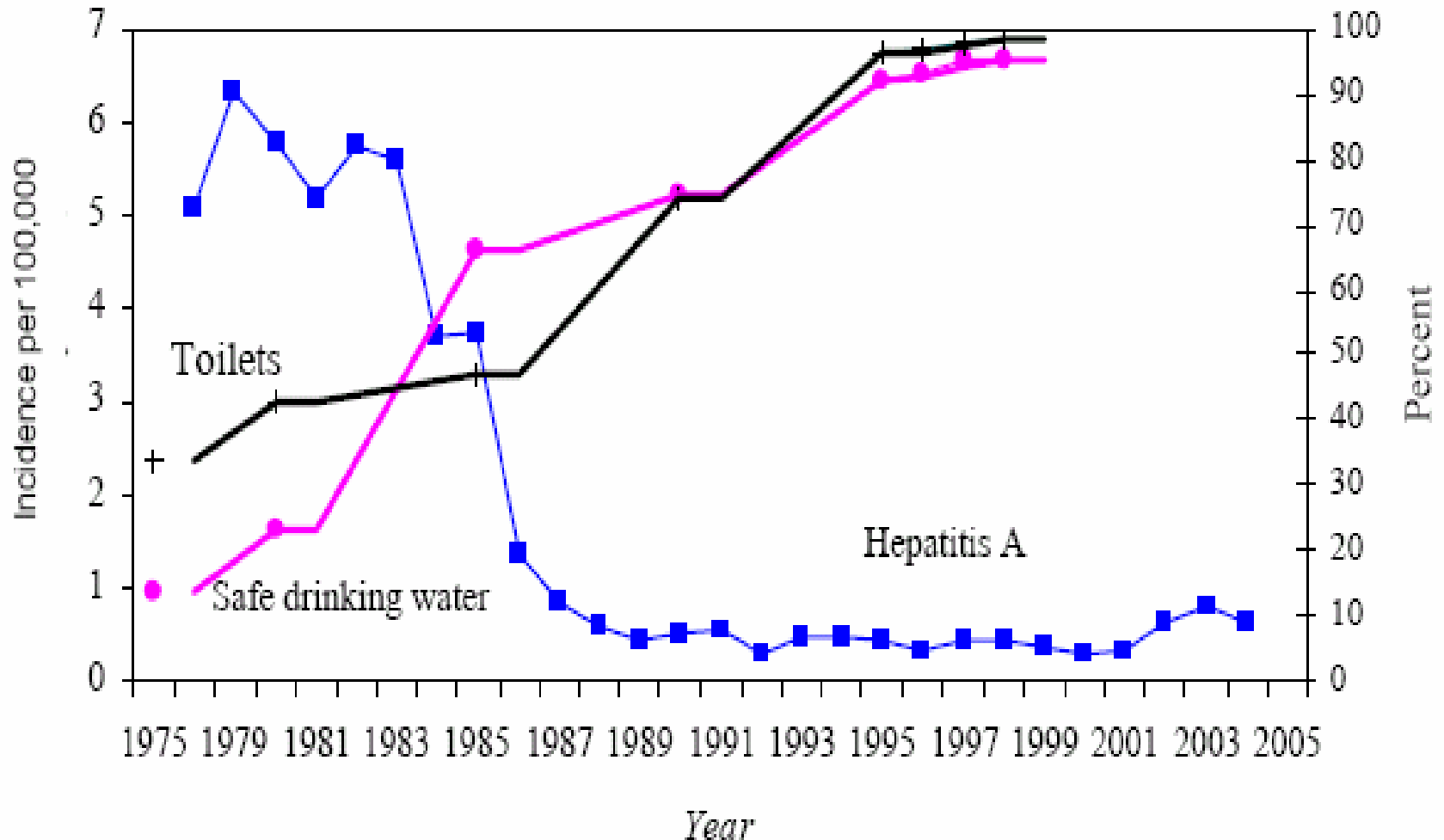
Reported Cases of HAV & HBV in Thailand



Number of hepatitis A cases by region (2007)



Reported HAV & percent of households with toilet & safe drinking water



Changing seroepidemiology of HAV infection in Thailand

- **Year 2004**
 - **Subject aged 6 mos – 60 yrs**
 - **Specimens collection 6237 samples**
 - **Selected to test anti-HAV 3997 samples**
-

CHIANGRAI

UDON THANI

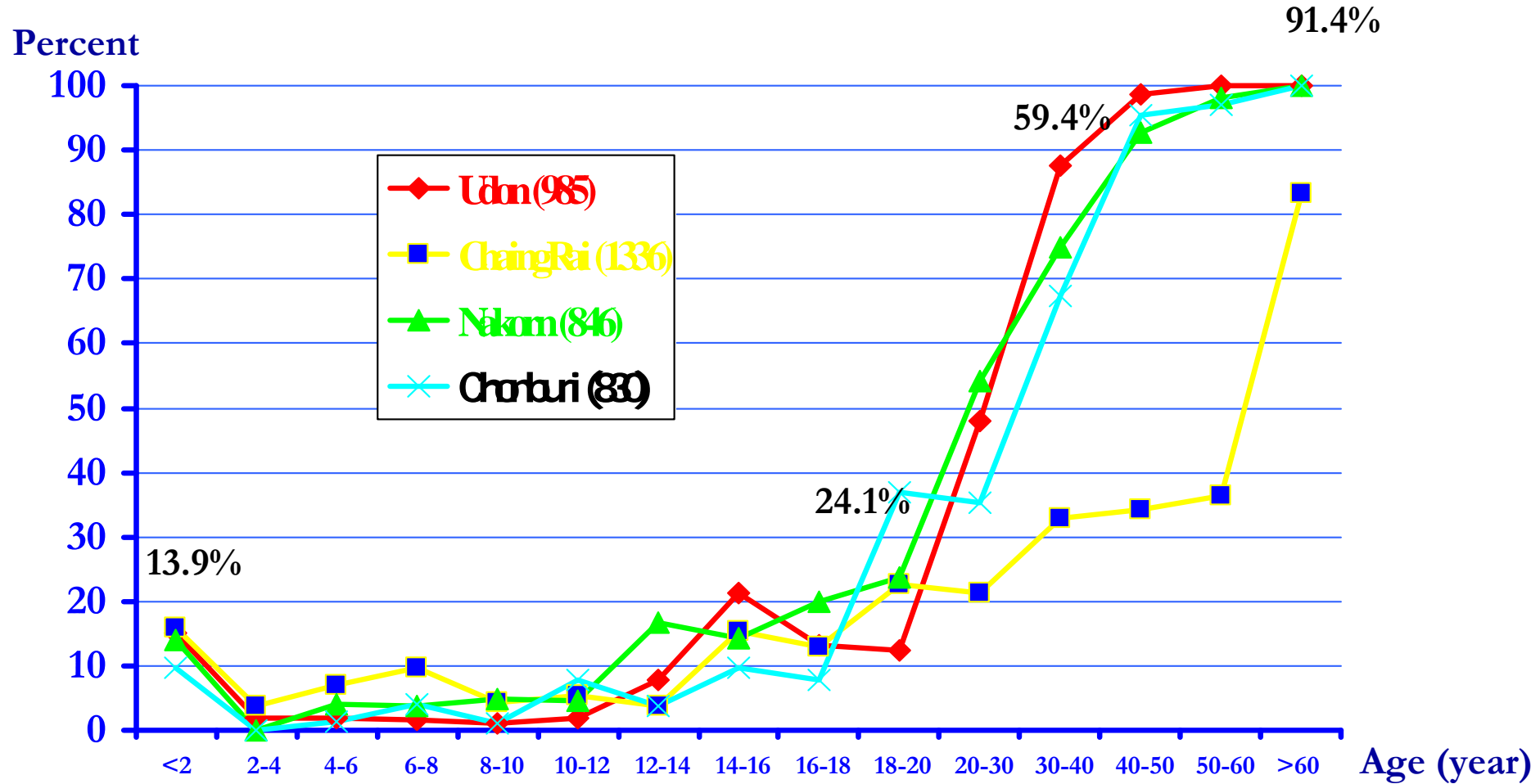
CHONBURI

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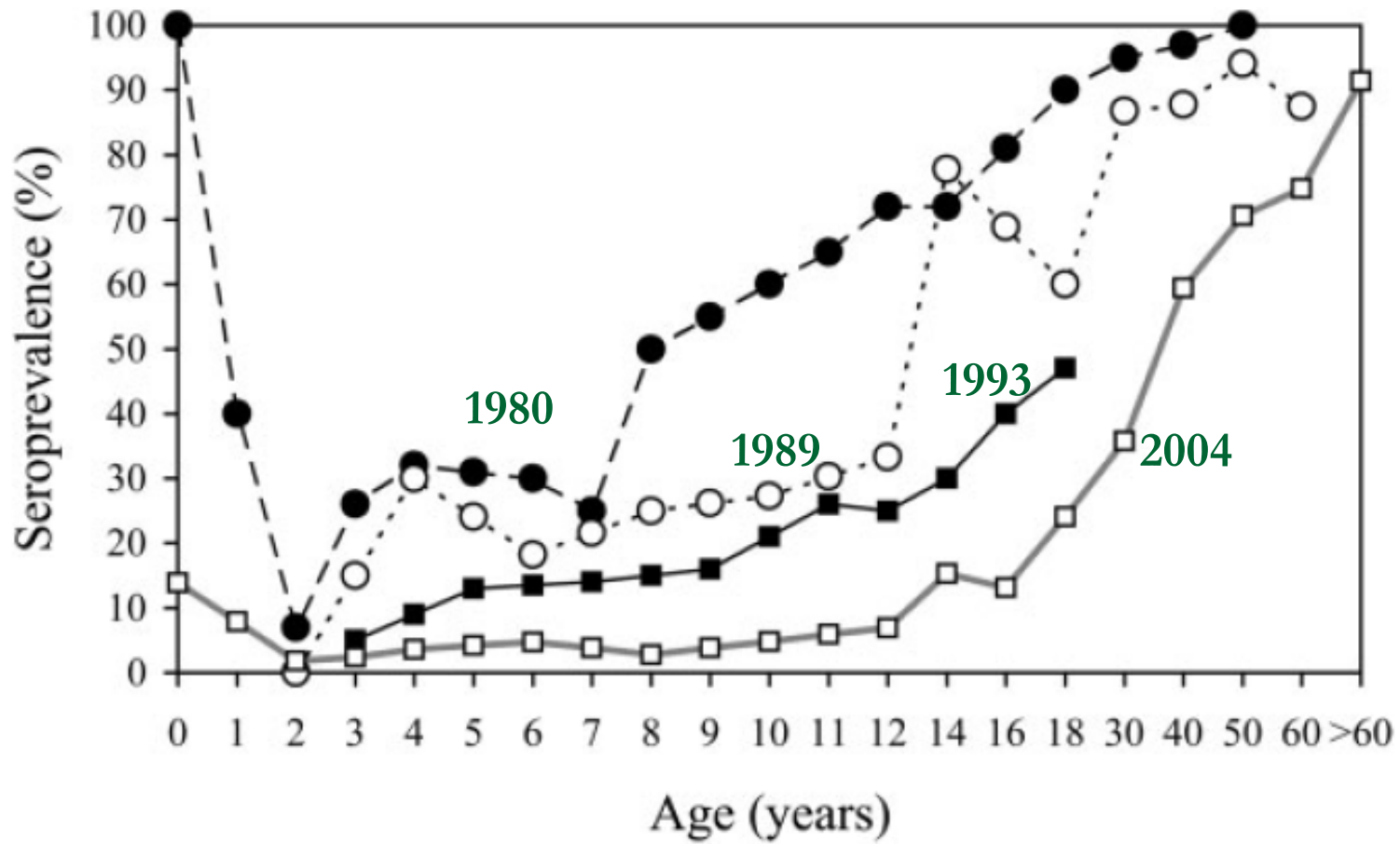
1999



Seroprevalence of anti-HAV among different age groups in Thailand (overall 27.4%)



Seroprevalences of hepatitis A virus in Thailand



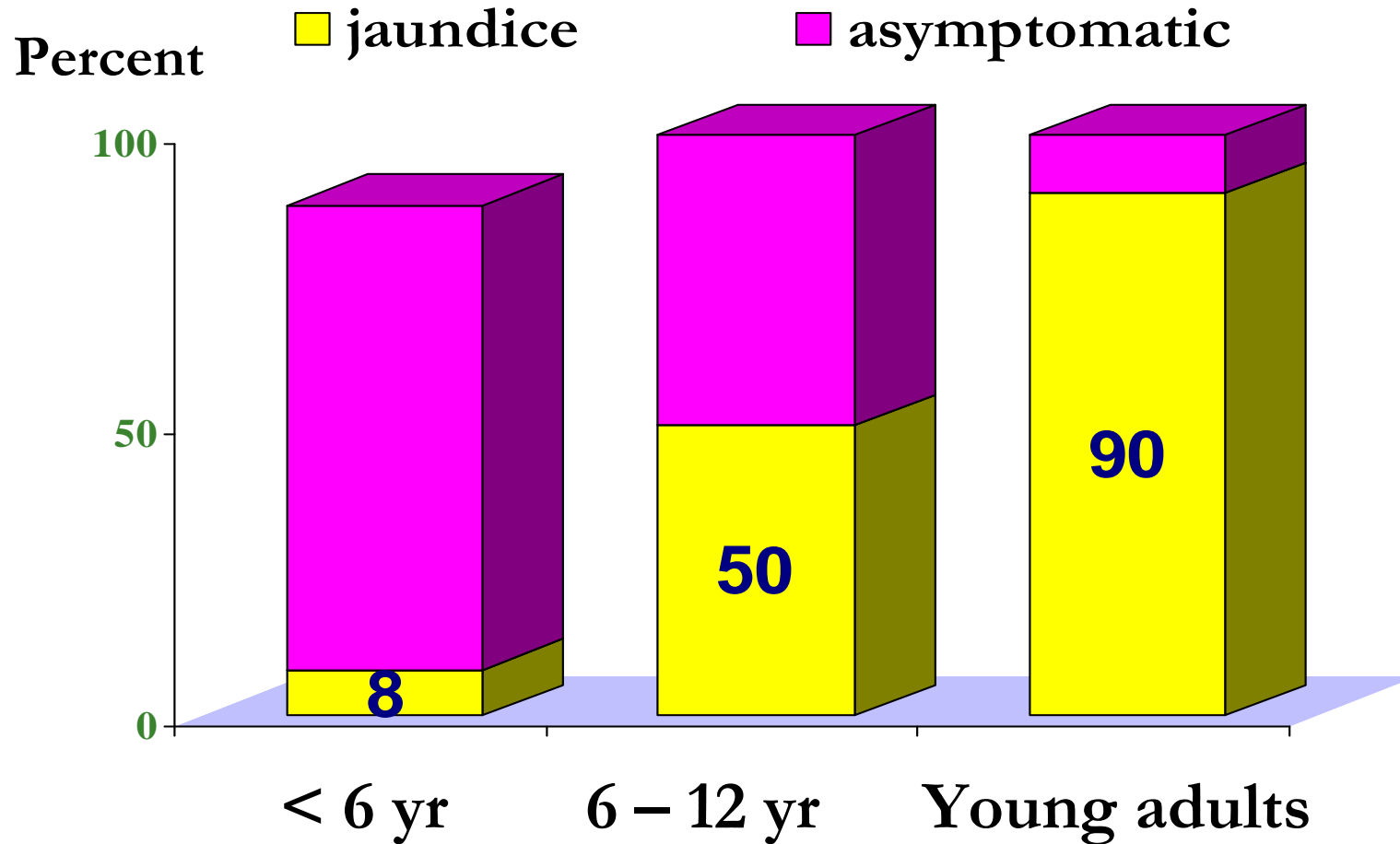
Seroprevalence of anti-HAV among medical student in Bangkok



Predicted outcome of HAV infection

parameter	PREDICTED OUTCOME	
	Children (<5 years)	adults
Inapparent infection	80-95%	10-25%
Anicteric or icteric disease	5-20%	75-90%
Complete recovery	99+%	98+%
Chronic disease	none	
Mortality rate: • 14 years	0.1%	
• 15-39 years	0.3%	
• 40 years	2.1%	

Severity of HAV infection



Hepatitis A: high-risk groups

- School children
 - Homosexual men
 - Intravenous drug users
 - Travellers to high endemic area
 - Hospital workers
 - Nursery / child day care center employees
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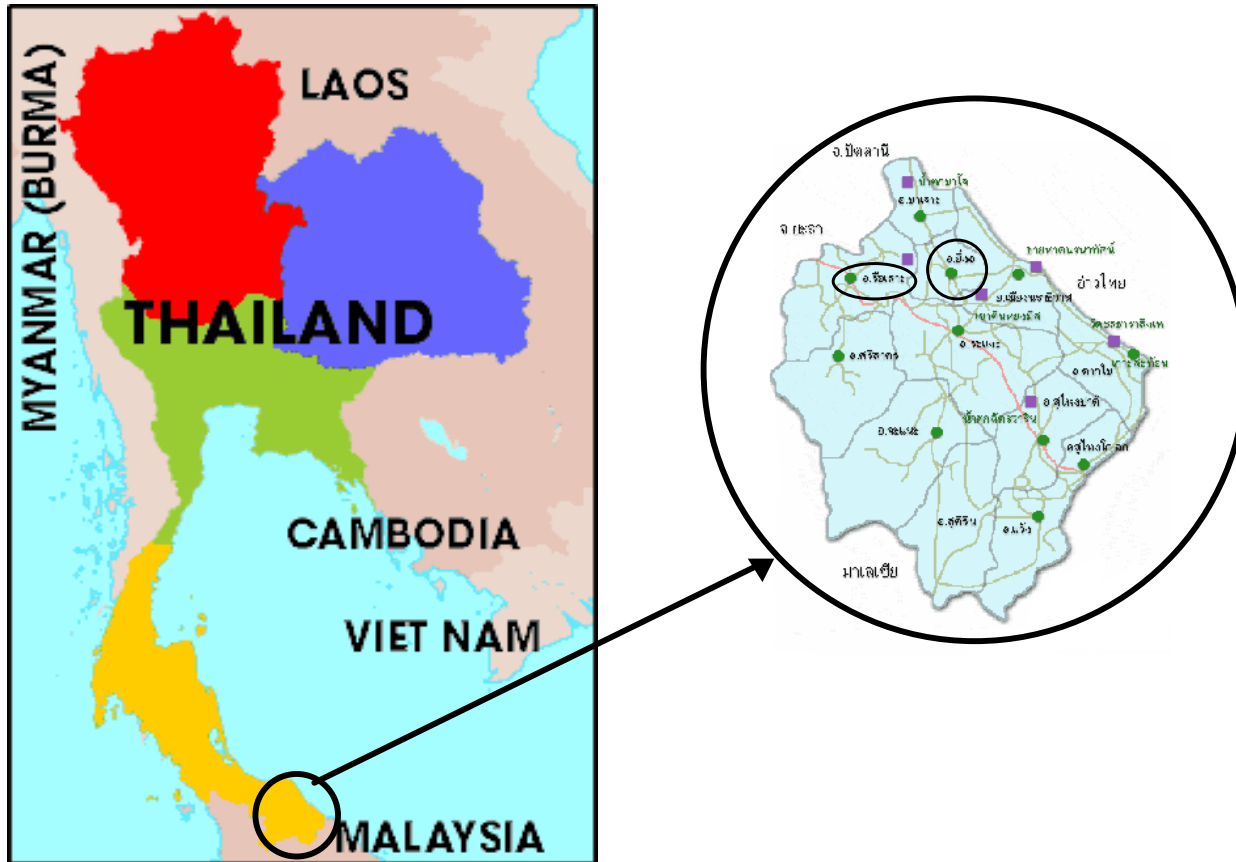
Hepatitis A outbreak in a child care institution

- Number of children 112 cases
- Anti-HAV IgM positive 65 cases
- Children with clinical hepatitis 5 cases
- Symptomatic : asymptomatic 1:13
- No virus was detected in saliva
- HAV-RNA can be detected in stool for at least 3 wks

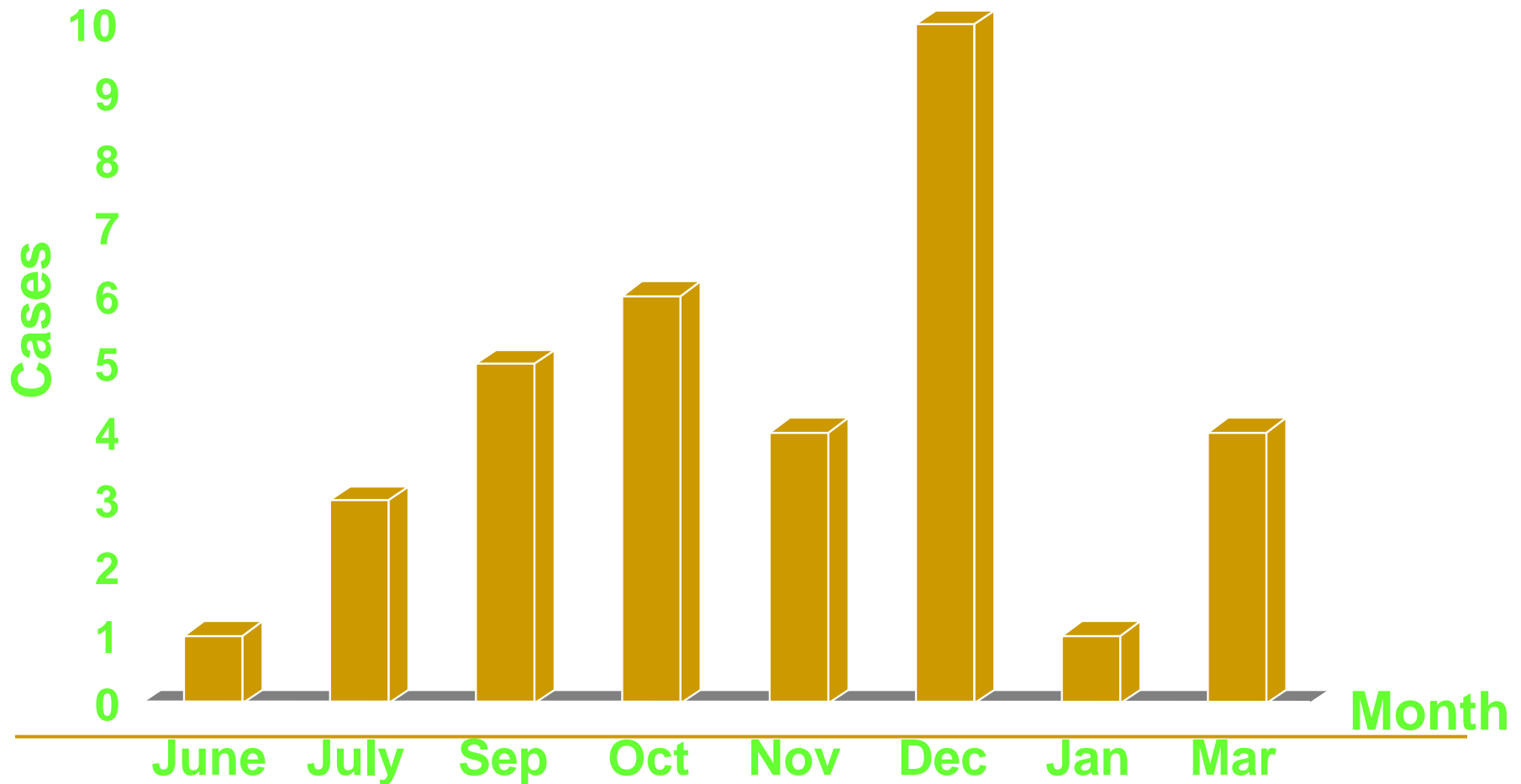
Hepatitis A outbreaks in Thailand during 2001-2005

Duration	Location	District / Province	Affected population
2001	Central	Meaung/Suphanburi	Children,adolescents
2001	south	Hatyai/Songkhla	ND
2001-2	south	Yeengor/Narathiwat	Children
2001-2	south	Ruso/Narathiwat	Children, Adults
2002	south	Yeengor/Narathiwat	ND
2002	south	Sukhirin/Narathiwat	ND
2002	east	Pongnamron/Chantaburi	ND
2002-3	central	Pakkred/Nonthaburi	Children
2005	south	Hatyai/Songkhla	Children,adults
2005	north	Wangnuer/Lampaang	Adults
2005	north	Wiangpapao,Maesruai/ Chiangrai	Children,adults

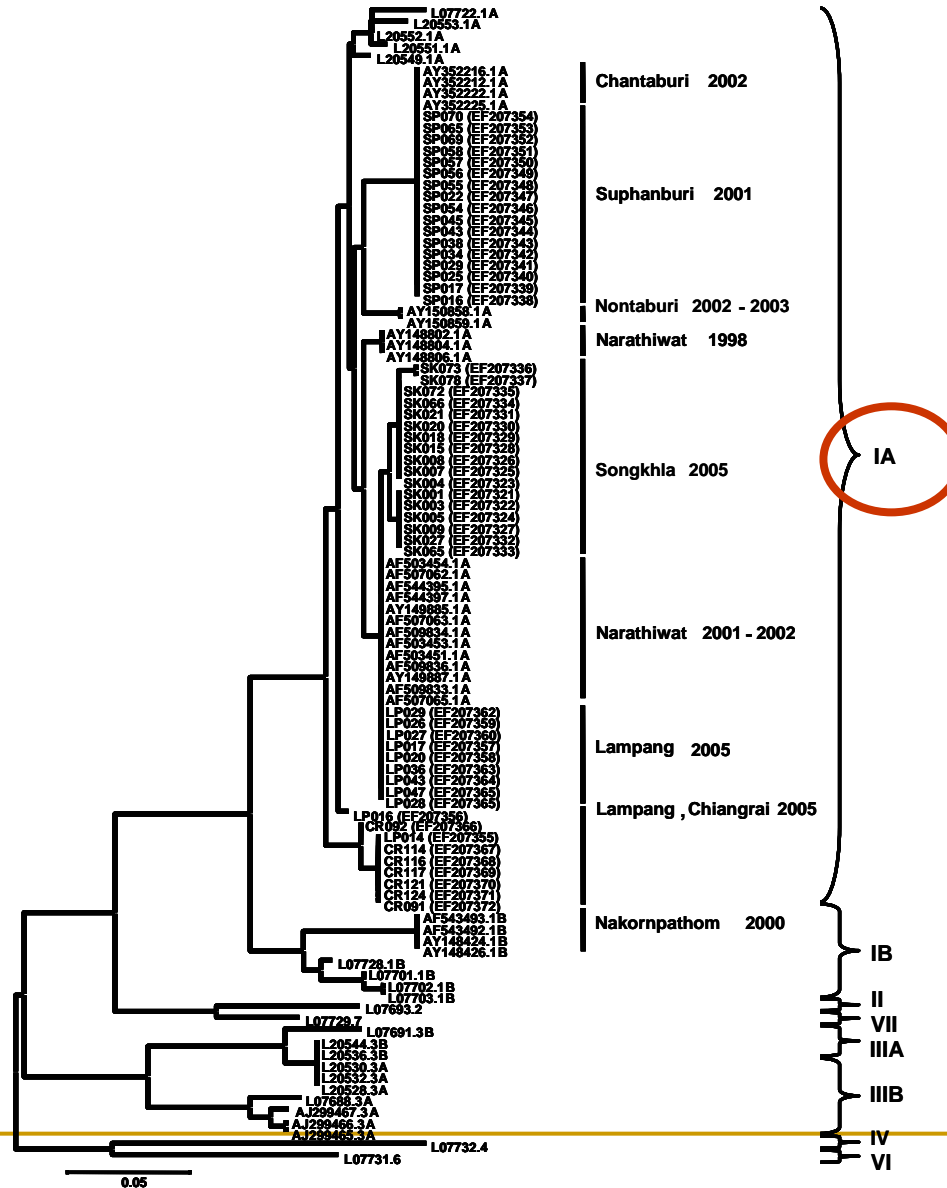
The location of Ruso and Yeengor districts in Narathiwat province, southern Thailand



The distribution of admitted acute hepatitis cases in the Ruso outbreak



Genotype of HAV in Thailand

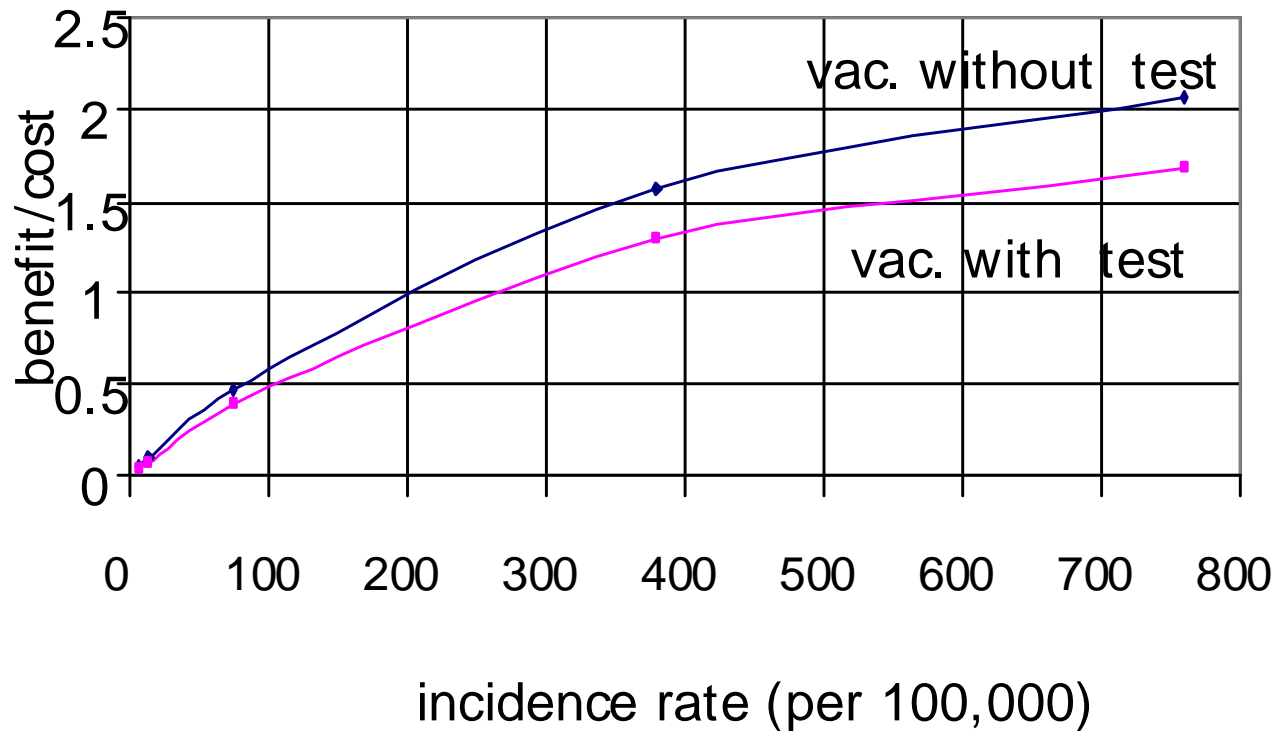


Control of hepatitis A virus infection

- **Implementation of standard and public health**
 - **Pre & post exposure prophylaxis**
 - **Active immunization**
 - **Passive immunization**
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Cost-benefit analysis of hepatitis A vaccination in Thailand

12-18-year group



Acknowledgements

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**Thank you for
your attention**