

# Using an electronic platform to study HIV epidemiology in the Pearl River Delta Region of Southern China

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## Key Words:

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## Background:

HIV spread in the Pearl River Delta Region (PRDR) of Southern China poses a big public health challenge given its vast economic growth, socio-cultural and geographical vicinity (Figures 1) and intense population mobility. It encompasses one of the drug trafficking routes from Yunnan to HK. There is a long history of commercial sex industry and drug abuse. Due to increase economic activities; there is an increase influx and mobility of migrant population from the north.

## Objective:

To better study the HIV epidemiology in PRDR, an electronic platform for systematic collection of HIV surveillance data was established to enhance the exchange and analysis of such information.

## Methods:

We conducted a descriptive analysis of data submitted by 12 large cities in PRDR using a cyber platform launched in June 2005. Data captured included population size, HIV and AIDS reported cases, HIV prevalence in subpopulations including drug users (DU), female sex workers (FSW), sexually transmitted infection (STI) clinic attendees, pregnant women or newborn and blood donors.

## Results:

The total population in PRDR amounted to over 50 million in 2008 and the reported HIV cases had increased in all except one city over the past 5 years (Figure 2). Over 4000 HIV cases were reported in 2008. The platform data indicated the occurrence of concentrated HIV epidemics in PRDR. Half of the cities over the past 5 years had ever recorded >5% HIV prevalence among DU (Figure 3). and STI clinic attendees (Figure 4) and all cities well below 0.1% for pregnant women or newborn and blood donors.

## Conclusions:

A regional approach to address HIV prevention and control is vital. By using a collective base to monitor HIV in PRDR, it not only unveiled a more comprehensive HIV picture, but also supported the planning and development of HIV interventions with regional collaboration.



Figure 1

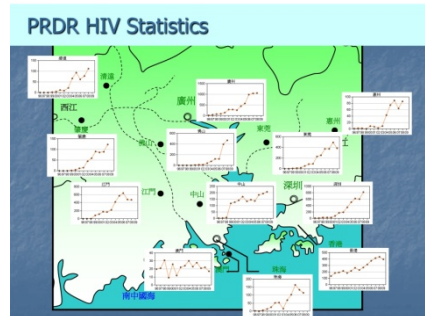


Figure 2

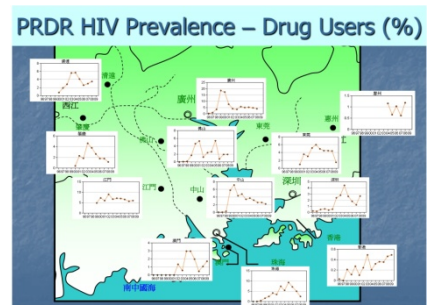


Figure 3

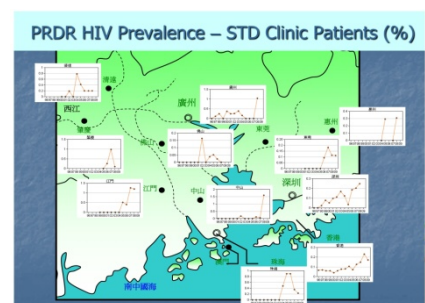


Figure 4