# A four year evaluation of the performance and outcome of an universal antenatal HIV screening programme

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# **Background**

Prevention of mother-to-child transmission (MTCT) of HIV became a reality with the proven effectiveness of antiretroviral prophylaxis during and after pregnancy. Diagnosis of infected expectant mother is a prerequisite for effective intervention. Universal antenatal testing has been advocated in this regard.

#### Methods

Hong Kong implemented its universal antenatal HIV screening programme in September 2001. Data is collected from the HIV laboratories, Obstetric units and Paediatric units through standardised templates. Aggregate statistics on the process and outcome as well as case-based statistics on HIV positive pregnancies are maintained.

### Results

As of the end of 2004, 132333 HIV testings were performed for 136052 eligible antenatal women. The yearly opt-out rate in public hospitals was 2.1% to 3.4% during the four-year period. However, only about 85% of all mothers had their HIV status known at time of delivery in 2003 and 2004, reflecting that a substantial proportion presented late and missed chance for prompt elucidation of infection status. Twenty-eight mothers were newly diagnosed HIV positive (6-9 per year), giving an average annual prevalence rate of 0.02% (0.01% to 0.05%). Ten women opted for termination of pregnancy and fourteen courses of antiretroviral therapy were prescribed for the rest. Fifteen babies were eventually born in Hong Kong and so far one HIV positive baby was documented (the mother of this infected baby presented late in labour without HIV status diagnosed and thus missed the opportunity for intervention). Taking a natural transmission rate of 25% and assuming the 4 lost-to-follow-up babies were uninfected, six of seven perinatal HIV infections have been averted.

## **Conclusion**

The low HIV prevalence among antenatal women in Hong Kong mandates a high rate of HIV testing and uptake of antiretroviral prophylaxis for a successful MTCT programme. Measures to close the gap of missed opportunities to intervene HIV positive pregnancies are necessary.

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