

## MOTHERISK UPDATE

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### Update on perinatal HIV

#### abstract

**QUESTION** Many patients in my practice come from countries where HIV is endemic. Are there current figures on their risk of being infected during pregnancy?

**ANSWER** In Ottawa and Toronto, Ont, about half the pregnant women identified as HIV-positive were born in countries where HIV is endemic.<sup>1</sup> If you suspect a woman has HIV or have other questions, call the Motherisk HIV-Healthline at 1-888-246-5840. Human immunovirus infection among pregnant women continues to be a serious public health concern. Most fetuses can be protected from contracting HIV if appropriate antiretroviral (ARV) therapy is instituted.

#### résumé

**QUESTION** Plusieurs de mes patientes viennent de pays où le VIH est endémique. Existe-t-il des données statistiques sur leur risque d'en être infectées durant la grossesse?

**RÉPONSE** À Ottawa et à Toronto, environ la moitié des femmes enceintes identifiées comme étant séropositives pour le VIH étaient nées dans des pays où le VIH est endémique<sup>1</sup>. Si vous soupçonnez qu'une femme est porteuse du VIH ou si vous avez des questions à ce propos, veuillez téléphoner à la ligne d'information-santé Motherisk VIH au 1-888-246-5840. L'infection au virus de l'immunodéficience humaine chez les femmes enceintes continue d'être une sérieuse préoccupation de santé publique. La plupart des fœtus peuvent être protégés contre l'infection au VIH si une thérapie antirétrovirale appropriée est instituée.

Every year, the Centre for Infectious Disease Prevention and Control, Division of HIV/AIDS Epidemiology and Surveillance, of the Bureau of HIV/AIDS publishes a report.<sup>2</sup> From January to June 2000, there were 1111 positive HIV test reports in Canada; 204 concerned adult women.<sup>2</sup> One third of these women contracted the primary infection through heterosexual exposure.<sup>3</sup>

In the past, many HIV-infected pregnant women were unaware of their HIV status, and their infection was undetected until either they or their children developed symptoms. It is currently recommended that all pregnant women be offered an HIV screening test as part of their prenatal care.

The HIV test is performed only after counseling and obtaining informed consent.<sup>4</sup>

Human immunodeficiency virus can be transmitted from mother to child during gestation and delivery or through breast milk. The rate of transmission of HIV from mother to child during pregnancy without intervention ranges between 15% and 40%; the rate with optimal ARV

management is 1% to 3%.<sup>5</sup> Testing for HIV during pregnancy provides an important opportunity for starting ARV treatment if necessary. Therapy for the mother reduces the risk of HIV transmission to her child.

While zidovudine monotherapy was initially the most frequently prescribed regimen, combination therapy is now more common. Combinations are either two nucleoside reverse transcriptase inhibitors (NRTIs), such as zidovudine and lamivudine, or two NRTIs with a protease inhibitor. In Canada, the currently licensed ARV agents are the NRTIs abacavir, didanosine, lamivudine, stavudine, zalcitabine, and zidovudine; the non-nucleoside reverse transcriptase

**D**o you have questions about the safety of drugs, chemicals, radiation, or infections in women who are pregnant or breastfeeding? We invite you to submit them to the Motherisk Program by fax at (416) 813-7562; they will be addressed in future Motherisk Updates. Published Motherisk Updates are available on the College of Family Physicians of Canada website ([www.cfpc.ca](http://www.cfpc.ca)). Some articles are published in *The Motherisk Newsletter* and on the Motherisk website ([www.motherisk.org](http://www.motherisk.org)) also.

Motherisk questions are prepared by the **Motherisk Team** at the Hospital for Sick Children in Toronto, Ont. **Drs Costei and King** are members and **Dr Koren** is Director of the Motherisk Team.

inhibitors (NNRTIs) delavirdine, efavirenz, and nevirapine; and the protease inhibitors amprenavir, indinavir, nelfinavir, ritonavir, and saquinavir.

Between July 1994 and December 1999, in Ontario, 162 mother-infant pairs were diagnosed with HIV; 107 received ARV therapy, but 55 did not. Of the 162 exposed infants, 34 became infected: three (2.8%) of those who received ARV therapy and 31 (56%) of those who did not.<sup>6</sup>

Half the HIV-positive mothers in Toronto and Ottawa emigrated from countries where HIV is endemic, and two thirds of the infected infants were born to women from these countries. This suggests that identification of HIV status before delivery was lower for women from countries where HIV is endemic than for other women.<sup>6</sup>

Between 1984 and 1999 the number of infants exposed perinatally to HIV in Canada was 1090; 356 infections were confirmed. To enable HIV-positive women to make informed decisions regarding ARV treatment, Motherisk in collaboration with the Pediatric HIV Program at the Hospital for Sick Children in Toronto established the HIV-Healthline. Our goal is to provide up-to-date information regarding the effectiveness and safety of ARV drugs. Our team has established a community network in Ontario that helps us provide services and gives us feedback on needs. The HIV-Healthline offers HIV-positive pregnant women an opportunity to have counseling either in person or through health care providers and follow up either in Toronto or in appropriate local HIV centres. 🍁

## References

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5. Fowler MG, Simonds RJ, Roongpisuthipong A. Update on perinatal HIV transmission. *Pediatr Clin North Am* 2000;47:21-38.
6. Singer J, Lapointe N, Forbes J, King SM, Allen UD, Read SE, et al. Antiretroviral therapy in pregnant women in Canada: access and outcome 1995-1996. Conference Record of the 12<sup>th</sup> World AIDS Conference; Geneva, Switz; 1998 June 29. Abstract no. 23315.

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