



# Epidemiology of HIV infection in Ontario: Update to 2009

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## Background



- HIV epidemic in Ontario remains unstable and dynamic
- Critical to monitor trends in HIV transmission to:
  - evaluate effectiveness of prevention efforts and burden of HIV infection (incidence)
  - quantify the need for health care and support services (prevalence)



## Methods: Data sources

- HIV serodiagnostic data: First-time HIV positive diagnoses at HIV Laboratory, Ontario Ministry of Health and Long-Term Care (MOHLTC), 1985-2009
- Reported AIDS cases: Cases diagnosed to December 2008 and reported to Public Health Division, MOHLTC by November 2009
- Laboratory Enhancement Program (LEP): Data used to adjust HIV diagnoses for unknown risk factors and previous HIV testing and to obtain estimates of HIV incidence (detuned assay)

# Modeled MSM population, HIV prevalence and incidence by health region, Ontario, 2008



Health region	Population at risk	HIV prevalent number	HIV prevalence rate (%)	Annual HIV incident number	Annual HIV incidence rate (%)	Proportion MSM tested in 2008
Toronto	48,960	10,730	21.9%	520	1.4%	26.7%
Ottawa	10,600	1,190	11.2%	80	0.85%	36.3%
Central East, other	12,330	840	6.8%	35	0.30%	20.3%
Eastern, other	2,730	260	9.5%	15	0.61%	33.8%
Central West	8,150	990	12.1%	45	0.63%	21.7%
Southwest	6,610	890	13.5%	40	0.70%	39.6%
Northern	3,020	180	6.0%	10	0.35%	22.7%
<b>Ontario, total</b>	<b>92,400</b>	<b>15,070</b>	<b>16.3%</b>	<b>745</b>	<b>0.96%</b>	<b>27.5%</b>

## MSM: Epidemiologic highlights



- As of December 2008:
  - 15,070 infected, of whom 70% diagnosed
  - New HIV diagnoses in 2008 up 10.7% over 2003
  - HIV prevalence 16.3%: Toronto 21.9%, Ottawa 11.2% and other regions 6-13%
  - HIV prevalence up 26% 2003 to 2008, annual increase 4.7%
  - 745 incident HIV infections in 2008
  - HIV incidence 0.96%: Toronto 1.4%, Ottawa 0.85% and other regions 0.30-0.70%
- Compared to 2008, new HIV diagnoses in 2009 down 2.5%

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- OHEMU web site: [www.phs.utoronto.ca/ohemu](http://www.phs.utoronto.ca/ohemu)