Council Direction:

This report is provided in keeping with the Board of Health policy on communication between the Medical Officer of Health and the Board of Health, as outlined in Report PH06038.

Information:

Sexually Transmitted Disease (STD) control is one of several public health programs mandated by the Ontario Ministry of Health and Long Term Care (MOHLTC) under the Mandatory Health Programs and Service Guidelines (MHPSG), 1997.

The following outlines the requirements described in the MHPSG’s and activities provided by the STD Program in Hamilton:

1. *The board of health shall provide or ensure the provision of appropriate case management. This shall be accomplished, at a minimum, through:*

   (a) distribution of procedures and protocols for the management and treatment of cases that are consistent with the Ministry of Health STD Control Protocol (December, 1997); 2006 Canadian STD Guidelines were distributed to community physicians and hospitals in Hamilton.

   (b) ensuring that STD patients are managed and treated according to Ministry of Health STD Control Protocol (December, 1997);
Laboratories and physicians are required to report diagnoses of sexually transmitted infections to their local Medical Officer of Health under the Health Protection and Promotion Act (HPPA). Public health nurses (PHNs) ensure the individual is treated appropriately and has completed the recommended course of treatment through contact with community physicians and clients. Clients are contacted by PHNs via telephone, mail, email or home visit to provide counselling, information about treatment, testing and prevention strategies. A PHN is assigned daily to a confidential phone line to respond to phone calls from clients and their sexual partners.

All case and contact management information is entered into the provincial integrated public health information system (iPHIS) by staff from the Surveillance Unit (SU) and STD teams and is accessible by the Public Health Division of the MOHLTC. iPHIS is compliant with the requirements under the Personal Health Information Protection Act (PHIPA).

(c) identification of contacts and partner notification and referral according to Ministry of Health STD Control Protocol (December, 1997);

PHNs interview all clients who test positive for STDs including HIV to obtain partner information, which is an important component of controlling the secondary spread of infections. Partners are then contacted by a PHN who informs the person about their exposure to HIV/STD without revealing the source of the information.

Studies have shown that there is a higher success rate that partners are aware they have been exposed when partners are notified by a health professional rather than by the infected person. This information, combined with our increasing rates, has guided our policy to speak directly to all individuals with an STD or HIV and their partners with the exception of chlamydia. Operationally it is not possible for the program to contact all clients and partners of over 1000 cases of chlamydia in Hamilton per year. In these cases, PHNs speak to the physician who ordered the test to determine if the client has been treated and advised to notify his/her partner(s). If treatment or partner discussion has not occurred, PHNs will contact these clients.

(d) provision of provincially approved drugs as required at no cost to the client, according to Ministry of Health STD Control Protocol (December, 1997); and

Antibiotics are distributed to Hamilton walk in clinics, physician offices and emergency departments to aid in prompt treatment of clients and their partners to prevent further spread of infection. This medication is obtained through the Ontario Government Pharmacy and there is no cost to the municipality.

(e) provision of condoms

Condom use is a highly effective method of preventing STDs and HIV. Free condoms in Hamilton increase the likelihood that a person will use a condom to prevent disease. Last year, 236 000 condoms were distributed to community agencies serving high risk
clients, community health care centres, medical practices and Public Health Services clinics at a cost of $38,000 per year (tendered).

2. *The board of health shall ensure the provision of a liaison and referral system for individuals with HIV infections, their families and support networks to access medical care and/or social agencies.*

Public Health Services is a designated Anonymous HIV testing site funded by the AIDS Bureau of Ontario. Anonymous HIV testing may increase the number of people who seek testing. Public Health Services staff offer anonymous HIV testing through 3 clinics in Hamilton: STD Clinic, East End Sexual Health Clinic and Street Health Clinic. A total of 421 anonymous HIV tests were done in 2006. Persons who test positive for HIV are offered support and education by a PHN. Clients who test HIV positive are referred to a clinic at McMaster specializing in HIV care (SIS-Special Immunology Services). A PHN liaises regularly with SIS clinic staff to facilitate services and follow up for HIV positive clients.

3. *The board of health, in conjunction with community partners, shall ensure the provision of health promotion activities, including the provision of condoms, aimed at preventing STDs, including HIV/AIDS.*

Community Education
65 presentations were given by PHNs in 2006 to community agencies, John School, English as a Second Language (ESL) programs, high risk youth, foster homes and to other divisions within Public Health services. The STD program has developed a number of STD/HIV pamphlets, posters, bookmarks, magnets and clinic photo tours to promote local STD/HIV services and prevention. These resources have been approved for use in 2007 by the Hamilton Wentworth Secondary School Board in the form of a resource binder for teachers. A chlamydia poster and pamphlet developed and distributed in 2003 to promote awareness and testing for chlamydia was adapted for use by other health units in Ontario. Currently, STD program staff are working with a Public Health Marketing Project Manager to develop strategies to increase HIV testing uptake and reduce STD rates.

Sexual Health Information Line
1420 calls were received on the information line from the public and professionals primarily asking for information regarding STD testing and clinic services. This phone line is staffed by a public health nurse Monday to Friday, 8:30 – 4:30 pm.

Staff Complement
The STD Program has 1 program manager, 2 program secretaries who also support the Sexual Health Clinic Program and the Needle Exchange Program and 12.1 FTE public health nurses. The cost for the STD program is $698,000.

**Surveillance Reports:**
Annual Number of Cases Reported to the City of Hamilton

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
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</thead>
<tbody>
<tr>
<td>HIV &amp; AIDS</td>
<td>23</td>
<td>19</td>
<td>27</td>
<td>44</td>
<td>30</td>
<td>29</td>
<td>26</td>
</tr>
<tr>
<td>Chlamydia</td>
<td>786</td>
<td>777</td>
<td>833</td>
<td>955</td>
<td>983</td>
<td>1068</td>
<td>1057</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>93</td>
<td>109</td>
<td>124</td>
<td>135</td>
<td>208</td>
<td>156</td>
<td>238</td>
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<td>2</td>
<td>6</td>
<td>6</td>
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<td>6</td>
<td>13</td>
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<td>20</td>
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<tr>
<td>Syphilis, not yet staged/not stageable</td>
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<td>0</td>
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<td>1</td>
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<td>21</td>
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<td>Syphilis, congenital</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Syphilis, total</td>
<td>11</td>
<td>7</td>
<td>16</td>
<td>18</td>
<td>20</td>
<td>31</td>
<td>46</td>
</tr>
</tbody>
</table>

Cases arose or were first recognised during the year stated and are among individuals who resided within the City of Hamilton at the time of their diagnosis. Figures are preliminary and subject to change due to case follow-up procedures. **Data Source:** iPHIS–Extracted 2006-01-30.

**The trends of the STDs listed are explained in the following graphs.**

**Yearly HIV infections (includes newly recognized AIDS)**
by gender reported to the City of Hamilton, 1991-2006

In 2006, some individuals received their HIV diagnosis at the same time as being diagnosed with AIDS, which means individuals are infected for many years before the infection is detected. Undiagnosed or late diagnosed persons may not benefit fully from HIV treatments and may have unknowingly been spreading HIV. An HIV testing campaign to encourage individuals to get tested is currently under development.

All clients with HIV are counselled by public health staff about their responsibilities for informing partners of their HIV status.
Yearly Chlamydia cases by gender reported to the City of Hamilton, 1991-2006

This upward trend has been seen provincially as well as nationally, partly due to improved urine tests for chlamydia and gonorrhea. Clients prefer urine testing over more invasive swabs, resulting in more persons being tested.

Yearly Gonorrhea cases by gender reported to the City of Hamilton, 1991-2006
Yearly infectious Syphilis cases by gender reported to the City of Hamilton, 1991-2005

Yearly non-infectious Syphilis cases by gender reported to the City of Hamilton, 1991-2005

Note: Final staging of syphilis requires follow-up testing by patient's physician. For this reason, unstaged cases from 2006 are unlikely to be correctly classified as infectious or non-infectious until well into 2007, therefore the syphilis charts include data to 2005 only.

Men who have sex with men have a higher rate of infectious syphilis in Hamilton which is similar to provincial trends in men who have sex with men (MSM). In comparison, Calgary is dealing with a larger outbreak of 59 cases of infectious syphilis in 2006, with the majority also occurring in MSM.

A change in syphilis testing methods in 2004/2005 resulted in more non-infectious syphilis being detected, especially in older persons. Many of these cases were already treated in the past.
Trends & Issues:

Since the late 1990s, rates of gonorrhea, chlamydia and syphilis have been on the rise in many high-income countries, including Canada. Other reasons for the surge in STDs as noted above are complex and can vary depending on the population being surveyed but may include the following:

- A false sense of optimism arising from innovations in HIV therapy may have decreased fears of this infection as well as engagement in safer sex.
- Some young people are not aware of how to recognize and reduce the risks of STD transmission
- People have multiple sex partners and meet partners through the internet
- The use of "party" drugs, including ecstasy and crystal methamphetamine, is increasingly linked to unsafe sexual activity
- STD rates are often closely correlated to levels of education, employment and income in a community.

Program Review:

The STD Program is currently reviewing key program activities to provide an evaluation and support for future direction.

Conclusion:

STDs and HIV remain a concerning cause of both morbidity and mortality globally as well as locally. Locally, PHS works with physicians and the public to reduce the burden of illness and the number of cases of STDs and HIV. A multi-pronged approach is needed to increase the public's awareness of STDs/HIV, testing availability and prevention methods. Changing a person's sexual behaviours is a complex and difficult process which requires readiness to change, skills building and access to testing, treatment and condoms.

Hamilton Public Health’s STD Program staff are a skilled and dedicated group of nurses and allied professionals who provide an excellent resource to our community.

Elizabeth Richardson, MD, MHSc, FRCP
Medical Officer of Health
Public Health Services