

# COMMUNICABLE DISEASE REPORT

## Sexually Transmitted and Bloodborne Infections

### Reporting

All laboratory-confirmed sexually transmitted and bloodborne infections (STBBIs) are to be reported to the Regional Medical Officer of Health (RMOH) or designate responsible for appropriate investigation, treatment, case follow up and provincial reporting.

For more information on STBBIs in Canada see the Public Health Agency of Canada website: <http://www.phac-aspc.gc.ca/id-mi/index.html#st>

### Reportable STBBIs in Newfoundland and Labrador

Chancroid	Hepatitis B Virus (HBV)	Lymphogranuloma venereum (LGV)
Chlamydia	Hepatitis C Virus (HCV)	Syphilis, all categories
Gonorrhea	HIV Infection	

For a complete list of Reportable Diseases in Newfoundland and Labrador, please visit <http://www.health.gov.nl.ca/health/publichealth/cdc/listabc20.pdf>

### Ten-Year STBI Incidence Rates

Table 1: January to June YTD Rate per 100,000 of STBBIs by year, 2001 to 2010, Newfoundland and Labrador,

Infection	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Chlamydia	60.5	47.5	52.8	71.5	69.4	56.2	53.7	52.9	48.8	68.9
Gonorrhea	0.0	1.2	0.6	0.2	0.2	0.4	1.0	1.8	1.0	1.4
Syphilis, all categories	0.0	0.0	0.0	0.0	0.2	0.4	0.0	1.2	0.4	1.0
HIV Infection	0.6	0.2	0.6	1.4	1.4	1.2	0.0	0.2	0.6	0.2
Hepatitis B Virus (HBV)	1.7	0.8	1.7	2.5	2.3	1.2	1.6	3.6	2.8	2.6
Hepatitis C Virus (HCV)	4.0	3.1	4.4	4.8	8.2	10.4	8.7	10.3	7.9	6.9

### HCV: Sexual Transmission

Sexual transmission of hepatitis C virus (HCV) is considered rare. But a new study by researchers at Mount Sinai School of Medicine, working with the Centers for Disease Control and Prevention (CDC), provides substantial evidence that men with HIV who have sex with other men (MSM) are at increased risk for contracting HCV through sex. The results of the study are published in the July 21 edition of the CDC's Morbidity and Mortality Weekly Report.

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## HCV: Sexual Transmission

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HCV transmission primarily occurs through exposure to blood, and persons who inject drugs at greatest risk. When Mount Sinai researchers observed a large increase in the number of new cases of HCV transmission among HIV-infected men who did not inject drugs, they took a closer look to examine the role of sexual transmission among these men. The researchers identified 74 HIV-infected men between October 2005 and December 2010 who had documented new HCV infection and yet reported no other risk factor for HCV infection, including injection drug use. When they compared 22 of these men with a control group of 53 closely matched HIV-infected MSM who did not have HCV infection, they found that the men who had recently contracted HCV were 23 times more likely to have had unprotected anal sex with men. In addition, HCV genetic analysis suggested that HCV was transmitted within social networks of these men, consistent with the presence of a city-wide epidemic.

Source: Science Daily 21 July 2011

<http://www.sciencedaily.com/releases/2011/07/110721131204.htm>

## Gonorrhea

*Neisseria gonorrhoeae* infection is a common sexually transmitted infection. It is nationally notifiable and is the second most common bacterial sexually transmitted infection in Canada. It is a major cause of pelvic inflammatory disease, ectopic pregnancy and infertility in women. In men, untreated infections can result in epididymitis and rare cases of infertility. Like other non-ulcerative STIs, gonorrhea can increase the risk of acquiring HIV and increasing the rate of transmission possibly by increasing the concentration of cells in genital secretions.

Newfoundland and Labrador has had low levels of gonorrhea infection over the past 20 years, despite higher rates at the national level (2.8 and 38.2 cases per 100,000 population in 2008, respectively). However while seeing this low level trend of infection in Newfoundland we have been seeing a much higher rate of infection in the northern region of the province, more specially Labrador. The rate of infection in Labrador is closer to the national rate per 100,000 (5-year average of 25.0 cases per 100,000 population, 2006-2010) .

Co-infection with *Chlamydia trachomatis* is common and in March 2011 the provincial Public Health Laboratory introduced a new test platform to simultaneously detect both *Chlamydia trachomatis* and *Neisseria gonorrhoeae* in specimens submitted to the lab. This automated nucleic acid amplification test offers several advantages including greater specificity, reduced need for confirmatory testing, increased throughput and improved turn-around-time. The name of the test is Cobas® 4800 CT/NG Test (Roche Diagnostics).

While sometimes challenging, an important component of controlling any STI involves promptly locating, notifying and treating all sex partners.

For more information on gonorrhea, please visit <http://www.phac-aspc.gc.ca/std-mts/gono-eng.php>

## Syphilis in Canada

Infectious syphilis (primary, secondary, and early latent) is the least common of reportable bacterial sexually transmitted infections (STI). Syphilis was rare in the 90's but started to increase in the early 2000's. Since that time there have been outbreaks in BC, AB, ON, QC, NS and most recently NB. Most of the outbreaks have been in men who have sex with men (MSM) but there have been infections in the heterosexual population as well. Syphilis is diagnosed through a simple blood test and is easily treated with penicillin or other antibiotics. Left untreated, syphilis moves through five stages:

- ⇒ primary;
- ⇒ secondary;
- ⇒ early latent;
- ⇒ late latent; and
- ⇒ tertiary.

Syphilis is infectious mostly during the primary, secondary and early latent (less than one year) stages. During the latent stage, syphilis may progress into a tertiary infection. It is at this stage that syphilis can do the most damage to the body, affecting the brain, blood vessels, the heart and bones. It can eventually lead to death. Syphilis can also be passed from an infected pregnant woman to her unborn child. Not everyone infected with syphilis will develop symptoms. That is why it is important to know if you are at risk and how to take preventative action. For the public following these suggestions may help a person protect themselves from contracting syphilis:

- ⇒ Learn about safer sex and safer injection practices;
- ⇒ Make informed decisions. Talk to your partner about their STI status and the use of protection;
- ⇒ Correct use of condoms reduces the risk of STI transmission; and
- ⇒ Ask for a syphilis test.

Individuals who are most at risk of acquiring syphilis are:

- ⇒ Individuals with more than one sexual partner (heterosexuals and MSM);
- ⇒ Injection drug users and their partner(s);
- ⇒ Sex trade workers and their clients / partner(s);
- ⇒ People whose sexual partner has syphilis; and
- ⇒ People who have been diagnosed with another STI.

If you are diagnosed and treated for syphilis, be sure to follow up with your doctor after treatment is complete to make sure the infection is gone. It is also important that you or someone from your public health department notify any of your sexual or needle-sharing partners who may have been put at risk of infection. They will also need to be tested and possibly treated.

Given the resurgent of syphilis in Canada universal screening of all pregnant women continues to be important and remains the standard of care in Newfoundland and Labrador.

For more information on syphilis, please visit  
<http://www.phac-aspc.gc.ca/publicat/std-mts/syphilis-eng.php>

## Prevent Infection: Diabetes Care

Infections can be spread from the blood of an infected person to another person by sharing diabetes care equipment or items used for personal care. Use safe practices to prevent the spread of infection.

### 1. Clean Hands

- ⇒ Clean your hands before and after diabetes care.
- ⇒ Use soap and water or an alcohol-based hand sanitizer.

### 2. Injection Safety

- ⇒ **Never** re-use needles, lancets and syringes.
- ⇒ Consider using a single-use lancet that has a safety device and always use a single-use disposable needle and syringe for each insulin injection.
- ⇒ To measure the correct dosage, always use your own insulin and prepare in a clean, quiet area.

### 3. Equipment Care

- ⇒ Each person should have his/her own glucometer.
- ⇒ If another person must use the same glucometer, it must be disinfected between uses.
- ⇒ Follow the manufacturer's directions on how to clean and disinfect the glucometer and do it on a regular basis, particularly when there is blood on it.
- ⇒ Keep all supplies in a clean, safe storage area.

### 4. Safe Disposal of Sharps

- ⇒ Place sharps (including lancets and needles) in a puncture-proof container immediately after use and keep in a safe location.
- ⇒ Dispose of the puncture-proof container as recommended by your diabetes care provider and the policy in your municipality.

**For more information on safe diabetic care practices, contact your:**

- ⇒ Diabetes Educator
- ⇒ Doctor
- ⇒ Public Health Nurse
- ⇒ Pharmacist; or
- ⇒ Newfoundland and Labrador HealthLine(1-888-709-2929)

For more information on Infection Prevention and Control, please visit <http://www.health.gov.nl.ca/health/publichealth/cdc/infectionpreventionandcontrol.html#prevention>



Newfoundland and Labrador Communicable Disease Surveillance  
 Monthly Disease Report: June 2011

DISEASE CLASS	DISEASE NAME	TOTAL		EASTERN		CENTRAL		WESTERN		LABRADOR GRENFELL	
		June	YTD 11 YTD 10	June	YTD 11 YTD 10	June	YTD 11 YTD 10	June	YTD 11 YTD 10	June	YTD 11 YTD 10
Enteric, Food and Waterborne	Amoebiasis	0	0	0	0	0	0	0	0	0	0
	Botulism	0	0	0	0	0	0	0	0	0	0
	Campylobacteriosis	5	20	3	15	3	15	2	3	3	0
	Cryptosporidiosis	0	0	0	0	0	0	0	0	0	0
	Cyclosporiasis	0	0	0	0	0	0	0	0	0	0
	Cytomegalovirus	0	4	2	2	1	0	2	2	0	0
	Giardiasis	4	21	3	4	3	6	1	13	6	1
	Hepatitis A	0	0	0	0	0	0	0	0	0	0
	Listeriosis	0	0	0	0	0	0	0	0	0	0
	Norovirus Infection	3	44	3	13	64	30	50	1	42	4
	Salmonellosis	6	29	2	14	8	6	3	8	4	3
	Shigellosis	0	0	0	0	0	0	0	0	0	0
	Typhoid/Paratyphoid Fever	0	0	0	0	0	0	0	0	0	0
	Verotoxigenic Escherichia coli	0	2	0	2	0	0	0	0	0	0
	Yersiniosis	0	0	0	0	0	0	0	0	0	0
Diseases Transmitted by Direct Contact and Respiratory Route	Creutzfeldt-Jakob Disease (CJD)	1	1	0	0	0	0	0	0	0	0
	Group B Streptococcal Disease of Newborn	0	0	0	0	0	0	0	0	0	1
	Influenza Virus of a Novel Strain	0	0	0	0	0	0	0	0	0	0
	Influenza A, Laboratory Confirmed	0	203	0	109	0	23	0	42	0	29
	Influenza B, Laboratory Confirmed	2	43	2	25	0	16	0	0	0	2
	Invasive Group A Streptococcal Disease	0	1	0	4	0	0	0	1	1	0
	Invasive Haemophilus Influenza non-type B	0	0	0	0	0	0	0	0	0	1
	Invasive Meningococcal Disease (IMD), Conf	0	1	0	0	0	1	1	0	0	0
	Invasive Meningococcal Disease (IMD), Prob	0	1	0	1	N/A	0	N/A	0	N/A	0
	Invasive Pneumococcal Disease (IPD)	1	9	1	7	11	0	1	2	3	0
	Legionellosis	0	0	0	0	0	0	0	0	0	0
	Meningitis, Bacterial (other than Hib, IMD or IPD)	0	1	0	1	0	0	0	0	0	2
	Meningitis, Viral	0	3	0	3	0	0	0	0	0	0



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		June	YTD 11	June	YTD 11	June	YTD 11	June	YTD 11	June	YTD 11
	Nontuberculosis Mycobacterial Disease	0	4	3	4	0	0	0	0	0	1
	Severe Respiratory Illness, unknown origin	0	0	0	0	0	0	0	0	0	0
	Tuberculosis, non-respiratory	0	1	0	0	0	0	0	0	0	1
	Tuberculosis, respiratory	0	4	2	1	0	0	0	0	0	2
<b>Sexually Transmitted and Bloodborne Pathogens</b>		<b>63</b>	<b>293</b>	<b>37</b>	<b>162</b>	<b>4</b>	<b>29</b>	<b>6</b>	<b>23</b>	<b>16</b>	<b>79</b>
	Chlamydia		351		184		39		26		102
	Gonorrhoea	4	10	1	4	0	0	0	1	4	9
	Hepatitis C	7	31	5	26	0	1	2	7	0	4
	HIV Infection	0	1	1	1	0	0	0	0	0	0
	Syphilis, infectious	0	3	3	2	0	0	0	0	0	1
	Syphilis, non-infectious	1	3	1	2	0	0	0	0	0	0
<b>Vectorborne &amp; Other Zoonotic Diseases</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	Lyme disease										
	Malaria	1	2	1	2	0	0	0	0	0	0
	Q Fever	0	0	0	0	0	0	0	0	0	0
	Rabies	0	0	0	0	0	0	0	0	0	0
	Toxoplasmosis	0	0	0	0	0	0	0	0	0	0
	Trichinellosis	0	0	0	0	0	0	0	0	0	0
	West Nile Virus Infection	0	0	0	0	0	0	0	0	0	0
<b>Vaccine Preventable</b>		<b>44</b>	<b>172</b>	<b>39</b>	<b>71</b>	<b>0</b>	<b>13</b>	<b>5</b>	<b>87</b>	<b>0</b>	<b>1</b>
	Chickenpox		34		22		12		0		0
	Congenital Rubella Syndrome	0	0	0	0	0	0	0	0	0	0
	Hepatitis B	3	13	3	10	7	2	0	3	0	0
	Invasive Haemophilus Influenza type B (Hib)	0	0	0	0	0	0	0	0	0	0
	Measles	0	0	0	0	0	0	0	0	0	0
	Mumps	0	0	0	0	0	0	0	0	0	0
	Pertussis	0	0	0	0	0	0	0	0	0	0
	Rubella	0	0	0	0	0	0	0	0	0	0
	Tetanus	0	0	0	0	0	0	0	0	0	0

Date verified: 17-Aug-2011

Source: Communicable Disease Control System, Department of Health and Community Services, Government of Newfoundland and Labrador  
 Disclaimer: Data are subject to continuous updates; small variations in numbers may occur.

Note: Prior to January 2011, "Invasive Meningococcal Disease, Probable" was included under the heading "Invasive Meningococcal Disease"