

Annual Reportable Disease Surveillance Report

Attention: All Physicians, Nurse Practitioners, Family Health Teams, Walk-In Clinics, Emergency Departments, Infection Control Practitioners, Hospital Infection Control Practitioners, Hospital Occupation Health, Midwives, NSM LHIN, Central LHIN, Post-Secondary Institutions, Long Term Care Homes, Rest and Retirement Homes

Date: October 30, 2015

The Annual Reportable Disease Surveillance Report, released by Simcoe Muskoka District Health Unit's Clinical Service, is now available. The report provides a summary of the reportable disease trends for the year 2014 compared to the five previous years.

Highlights of the report

Significant increases were observed for:

- Influenza: 647 cases, poor vaccine match for predominant H3N2 strain, 57 institutional outbreaks.
- Invasive Group A Streptococcus: 37 cases, increasing provincial incidence in past 10 years with no identified cause.
- Gonorrhoea: 119 cases, significant increase in local and provincial incidence since fall 2013. Mainly 20-39 year olds. Dual therapy with Ceftriaxone and Azithromycin is first line treatment.

Moderate increases were observed for:

- Campylobacter: 132 cases, increasing provincial incidence in past 5 years with no identified cause.
- Chlamydia: 1298 cases, increasing provincial incidence for many years. Mainly 15-24 year old females.
- Syphilis: 18 cases, recent local increase in infectious cases. 70% are men who have sex with men (MSM).
- Hepatitis C: 197 IgG+ cases, important to do viral load and refer to GI specialist for possible treatment.
- HIV/AIDS: 14 cases, mainly affects MSM.
- Lyme Disease: 5 cases, increasing incidence in Ontario. Simcoe Muskoka is a low risk area.

This year's ***In Focus*** section provides an update on the epidemiology of hepatitis C in Simcoe Muskoka, and summarizes the recommendations for testing.

Hepatitis C is the most burdensome infectious diseases in Ontario based on years of life lost due to premature mortality (YLL) and years of reduced functioning. The most recent model available for Simcoe Muskoka estimates a prevalence of 0.87% or 1 in 115 people, concentrated among risk populations such as people who have used injection drugs (even if only once), and people who have been incarcerated. Action items for health care providers are included in the on-line report.

The full Annual Reportable Disease Surveillance Report with the ***In Focus*** section is available on the health unit's www.smdhu.org/HSReport2014. Please find the first two pages of the Surveillance Report appended to this HealthFax.

Annual Reportable Disease Surveillance Report

The Communicable Disease Surveillance Unit at the Simcoe Muskoka District Health Unit (SMDHU) performs ongoing surveillance of infectious diseases. We depend on disease reporting from health care practitioners, laboratory results, and our active surveillance to generate a continually monitored database to detect disease clusters and outbreaks. This surveillance report provides health care practitioners with a snapshot of pertinent diseases in Simcoe Muskoka to improve clinical decision making, patient care, and detection of unusual clusters. This year's *In Focus* section provides an epidemiological profile of hepatitis C in Simcoe Muskoka and screening recommendations.

Incidence of Most Relevant Reportable Diseases in Simcoe Muskoka in 2014

Data Source: Integrated Public Health Information System, Extracted August 2015

	Moderate (1-2 Standard Deviation (SD)) increase (↑) or decrease (↓), and significant (>2 SD's) increase (↑↑) or decrease (↓↓) compared to the historical average.	January-December 2014 [^]		5 Year Mean* Jan-Dec, 2009-2013		Comments
		# of Cases	Rate per 100,000 Population	# of Cases	Rate per 100,000 Population	
Respiratory Diseases						
Influenza	↑↑	647	119.4	330	62.9	Flu A (H3N2) predominated with poor flu A vaccine match. 1/3 of cases were from institutional outbreaks compared to 10% - 15% in flu A(H1N1) or flu B predominant seasons
Pertussis		11	2.0	16	2.9	
Invasive Group A Streptococcal	↑↑	37	6.8	22	4.1	Gradual increase in past 10 years consistent with provincial trend. Cause is unknown
Mumps		0	0.0	3	0.6	
Legionellosis		4	0.7	4	0.8	
Tuberculosis	↓	2	0.4	5	0.9	Local rate is less than 1/4 of Ontario rate. Concentrated in risk populations in urban centres (Toronto, Ottawa)
Meningococcal disease, invasive	↓	0	0.0	2	0.3	
Gastro-Intestinal diseases						
Campylobacter	↑	132	24.4	103	19.5	Gradual increase in past 5 years consistent with provincial trend. Cause is unknown
Salmonellosis		121	22.3	97	18.5	
Giardiasis		42	7.7	48	9.1	
Amebiasis, Cryptosporidiosis, Cyclosporidiosis, Shigellosis, and Yersiniosis	↑	37	6.8	25	4.7	Small local increases in amebiasis and cryptosporidiosis, consistent with provincial trends. Cause is unknown
Verotoxigenic E.coli		3	0.6	5	1.0	
Hepatitis A		1	0.2	3	0.5	
Listeriosis		1	0.2	2	0.5	

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		January-December 2014 [^]		5 Year Mean* Jan-Dec, 2009-2013		Comments
		# of Cases	Rate per 100,000 Population	# of Cases	Rate per 100,000 Population	
Sexually Transmitted Infections and Bloodborne Infections						
Chlamydia	↑	1298	239.5	1047	199.1	Local and provincial increase in past several years has slowed. Local percent positivity (6.5%) remained stable since 2012. Highest rate in 15-24 year old females
Hepatitis C	↑	197	36.3	166	31.7	
Gonorrhea	↑↑	119	22.0	51	9.7	Significant local and provincial increase since fall 2013. Local percent positivity (0.7%) has tripled since 2012. Mainly affecting 20-39 year olds. 20% of cases are men who have sex with men (MSM)
Syphilis	↑	18	3.3	13	2.5	Locally, infectious syphilis has gradually increased in recent years. 70% of cases are MSM. 10% are HIV+
HIV/AIDS	↑	14	2.6	8	1.5	Mainly affects MSM. Many partners meet online
Hepatitis B (acute)		2	0.4	2	0.4	
Vector-Borne and Zoonotic Diseases						
West Nile virus		1	0.2	1	0.3	
Lyme Disease (confirmed + probable)	↑	5	0.9	2	0.4	Increasing human cases in Ontario. Simcoe Muskoka is a low risk area. None of the 2014 cases were assessed to be acquired locally
Rare Diseases						
Varicella (lab-confirmed cases and those with severe outcomes)		4	0.7	5	0.9	
Group B Streptococcus		1	0.2	1	0.2	
Diphtheria, Polio, Rubella, Tetanus		0	0.0	0	0.1	
Haemophilus influenzae b		1	0.2	0	0.0	
Malaria		1	0.2	3	0.5	Imported cases
Measles		1	0.2	0	0.0	Local case was travel-related to U.S. Ontario had outbreak of travel-related and secondary cases in 2014
Rabies		No non-imported human cases in Ontario in 20+ yrs. Animals with highest incidence in Ontario are: bats, skunks, foxes and livestock. Cats and dogs can also become infected with rabies				

[^] All disease counts are reported by calendar year except influenza, which are reported by flu season (September to August).

* Outbreak years are excluded from historical average calculations.

For more information on infectious disease statistics in Simcoe Muskoka and Ontario, please visit:

www.simcoemuskokahealthstats.org

Please continue to report all confirmed or suspected cases of reportable diseases to the SMDHU via phone: (705) 721-7520 ext. 8809 (After hours: 1-888-225-7851), or fax: (705) 733-7738.

For more information and resources on infectious diseases, please go to our Primary Care Portal at:

www.smdhu.org/pcportal