

COMMUNICABLE DISEASE REPORT

Quarterly Report

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December 2015

Immunization Coverage Rates

Vaccine-Preventable Disease

Hepatitis C Tuberculosis

Immunization Coverage Rates

The immunization coverage rates in Newfoundland and Labrador continue to be quite high. From Figure 1 at age two years over 95% of children have received the complete series for their age. This would include:

Age	Vaccine Offered
2, 4, 6 and 18 months	DTaP-IPV-Hib - protects against diphtheria, tetanus, pertussis, polio and Haemophilus influenzae type b
12 and 18 months	MMRV - protects against measles, mumps, rubella & varicella (chickenpox)
2,4,12 months (some babies may be offered a 4 th dose at 6 months)	Pneu-C-13 - protects against 13 types of pneumococcal disease
12 months	Men-C - protects against type C meningococcal disease

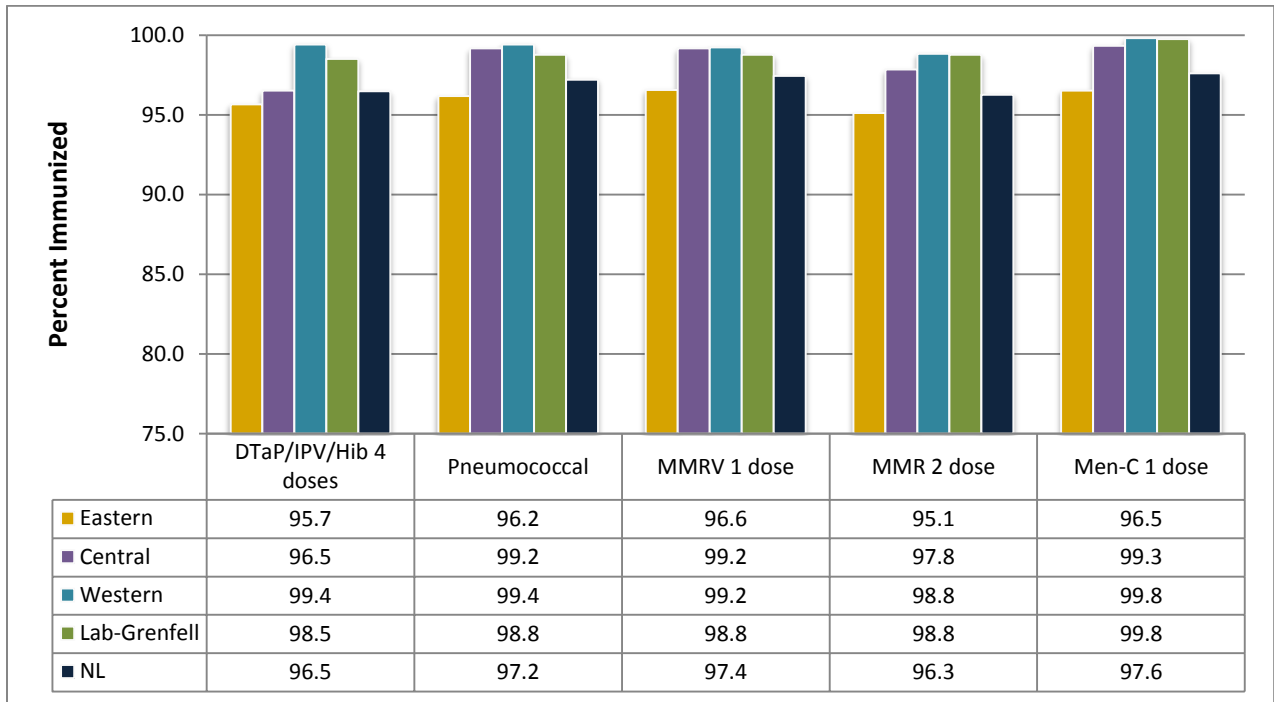


Figure 1: Immunization Coverage Rates for Primary Series, 2 year olds, 2014-2015

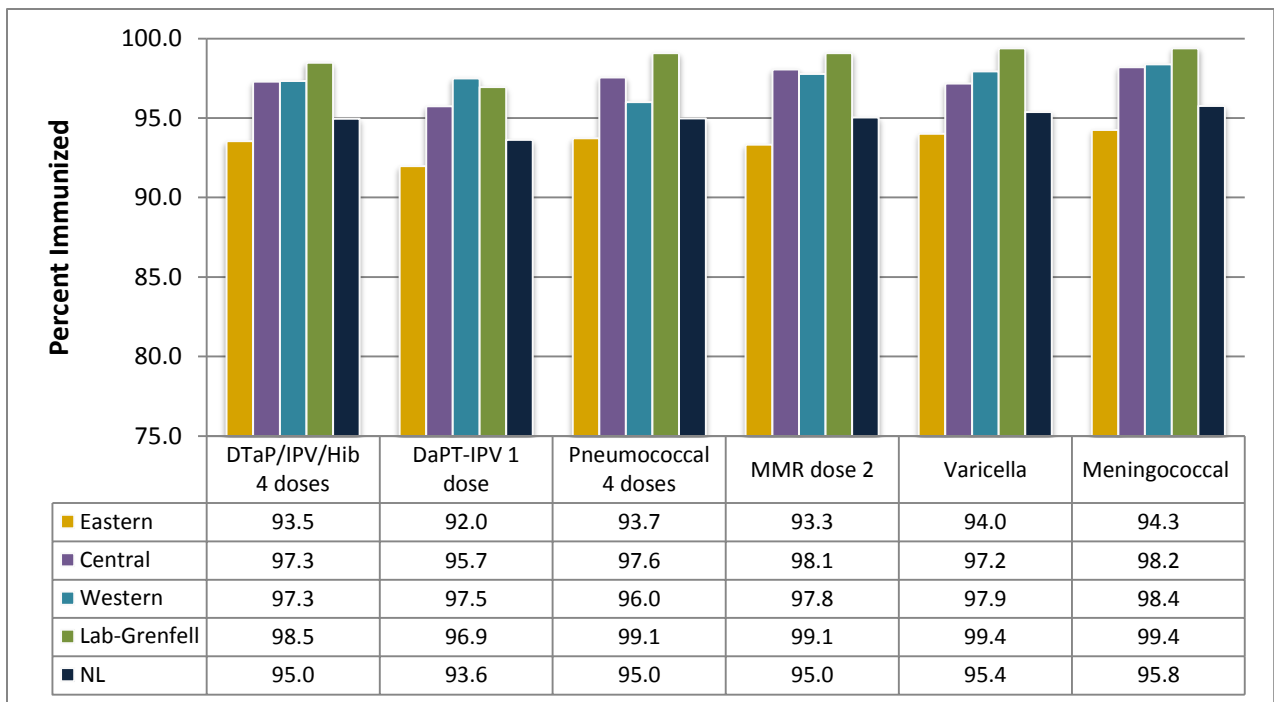


Figure 2: Immunization Coverage Rates for Kindergarten Entrants, 2014-2015

Prior to or during the kindergarten year children at age 4-6 years are offered a booster dose of DTaP-IPV vaccine which protects against diphtheria, tetanus, pertussis, and polio. At the same time their immunization record is reviewed and any missing vaccines are offered.

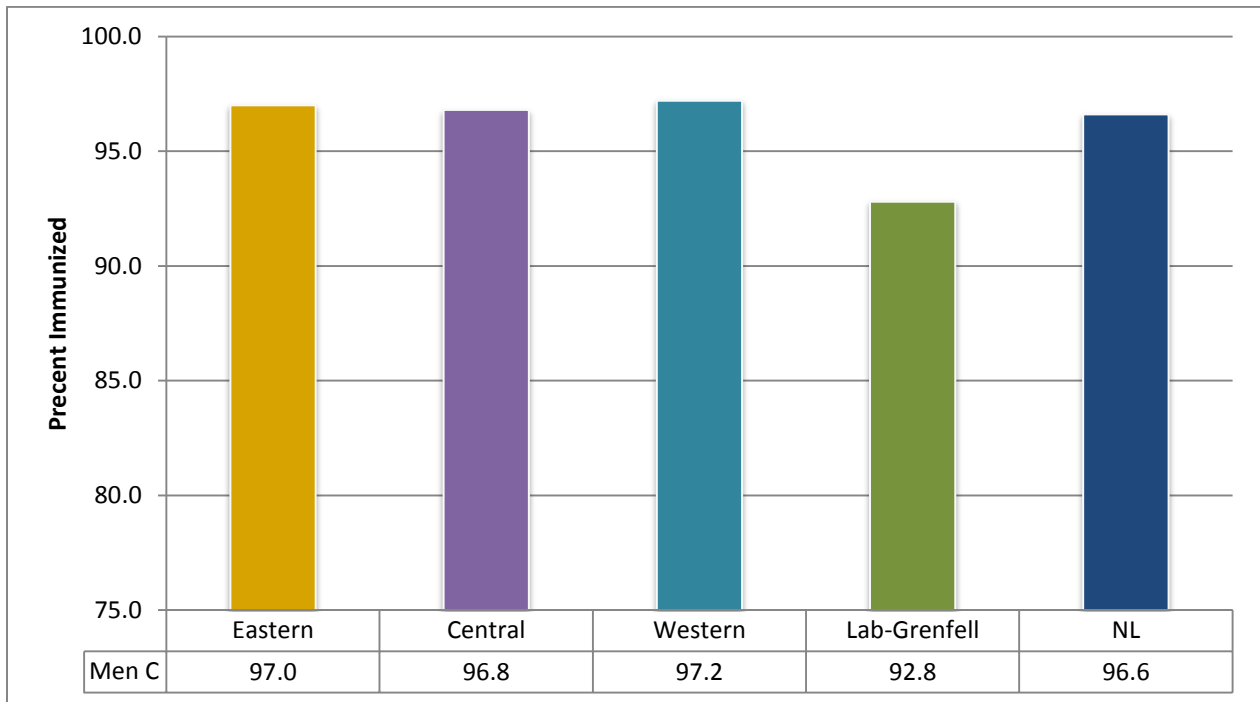


Figure 3: Immunization Coverage Rates for Grade 4 Students, 2014-2015

The school age programs are offered by public health nurses in the school setting. The nurse collects a consent form from parents or guardians prior to the immunization being offered. The programs in school include:

Grade	Vaccine offered
Grade 4	Men-C-ACYW135 protects from meningococcal disease
Grade 6	HPV (2 doses) females only protects from human papilloma virus HB (2 doses) protects from hepatitis B
Grade 9	Tdap protects from tetanus, diphtheria and pertussis (whooping cough)

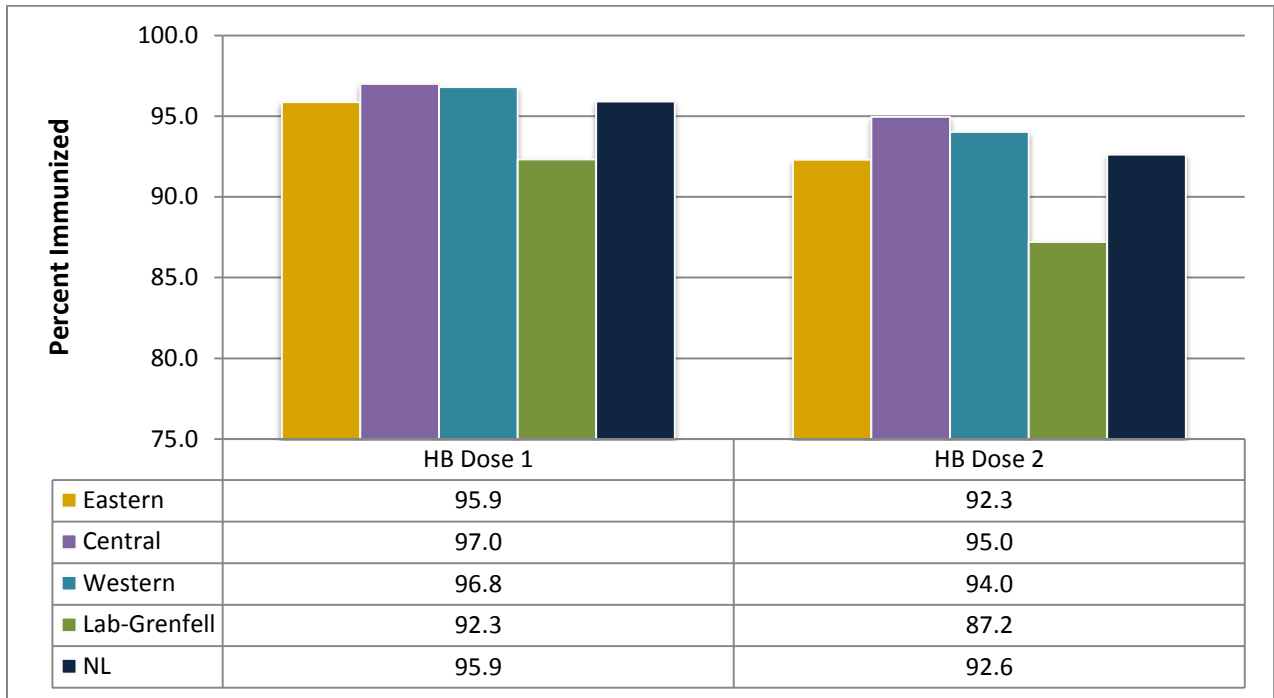


Figure 4: Immunization Coverage Rate for Hepatitis, Grade 6, 2014-2015

The hepatitis B vaccine has been offered since 1995 to children born 1986 and after, the coverage continues to reach over 90%. In 2012 the program was moved from grade 4 to grade 6 and 2 doses are currently administered at six months apart.

The Human Papilloma Virus vaccine was first offered in 2007 to grade 6 females. There has been continued good uptake for this program, see Figures 5 and 6.

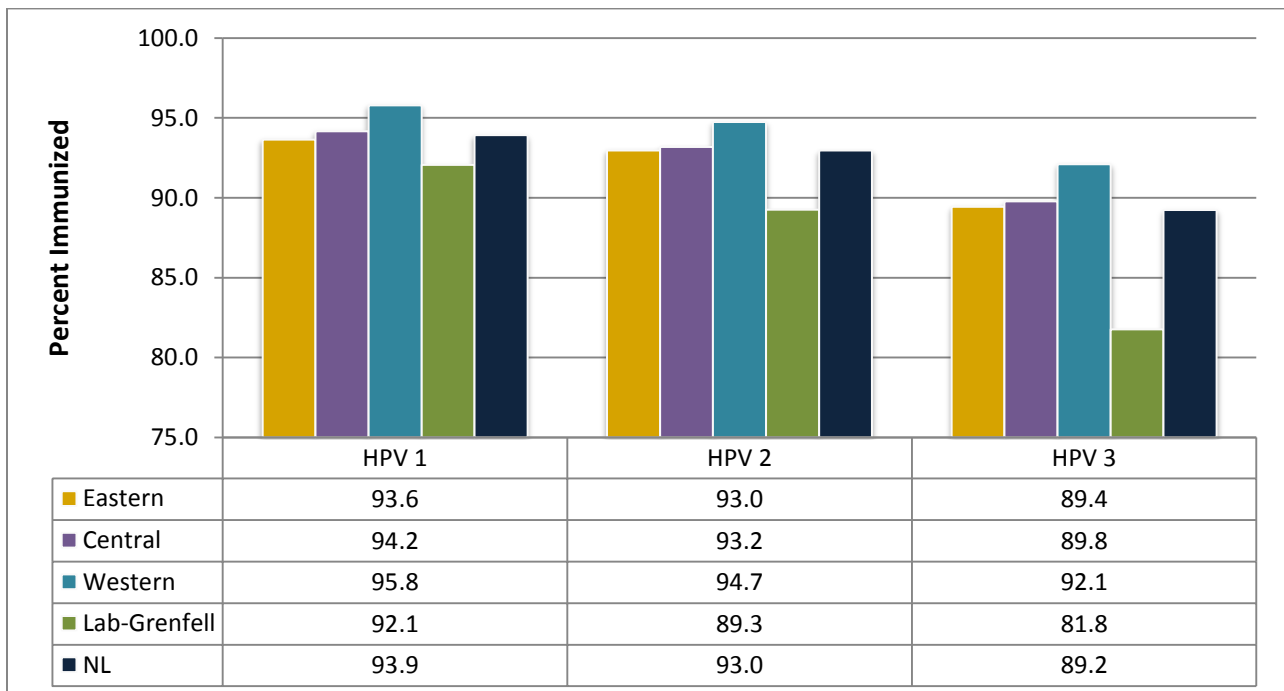


Figure 5: Immunization Coverage Rate for HPV, Grade 6, 2014-2015

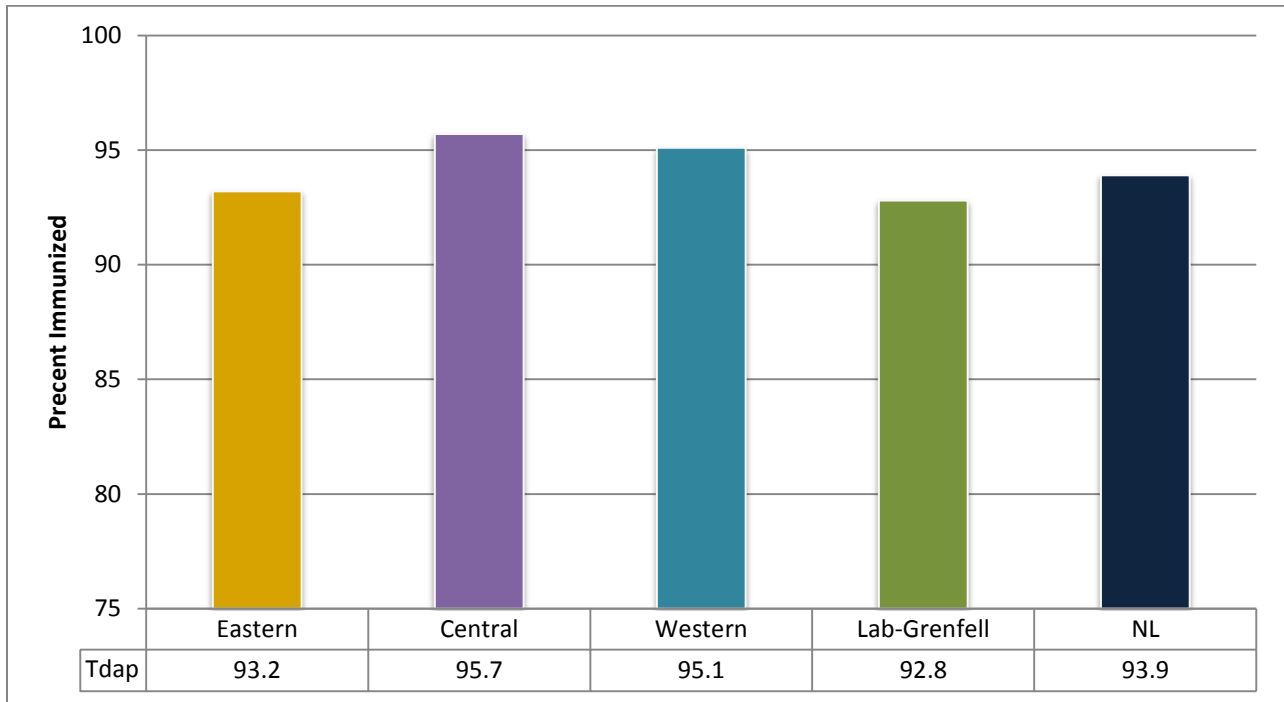


Figure 6: Immunization Coverage Rate for HPV, Grade 6, 2014-2015

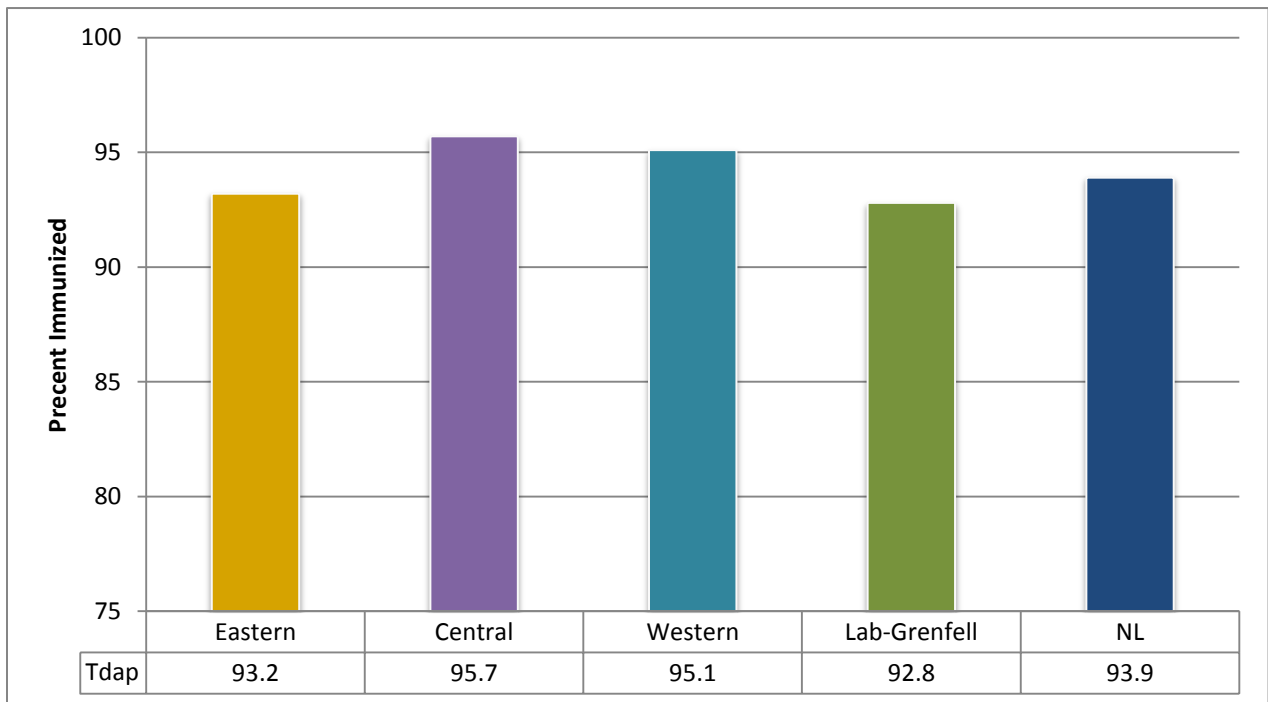


Figure 9: Immunization Coverage Rates for Booster Dose (Tdap), Grade Nine, 2014-2015

Vaccine-Preventable Disease (VPD)

The VPDs continue to be reported at very low numbers.

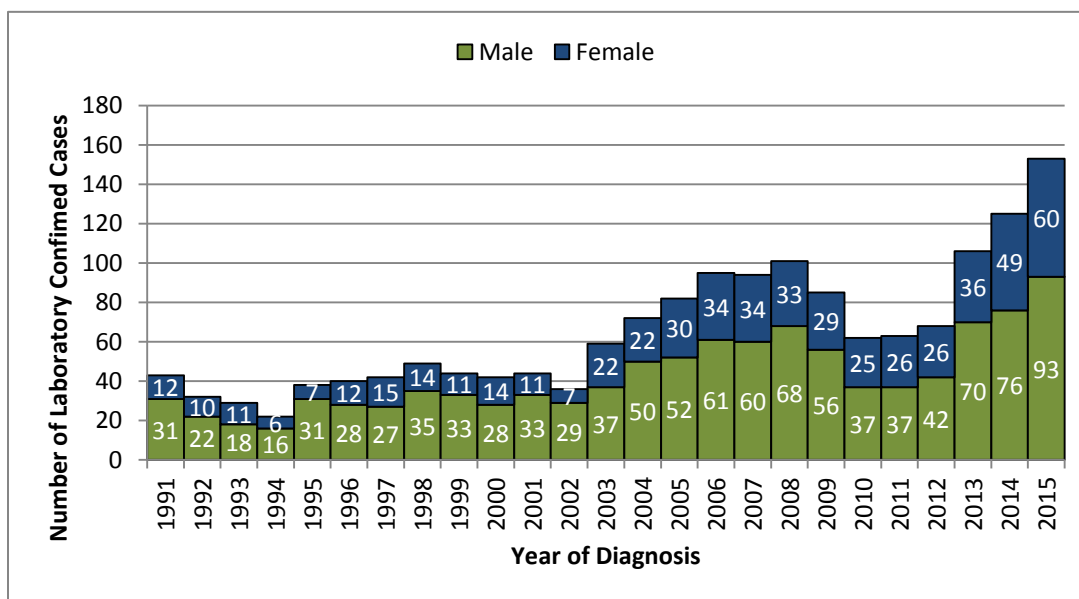
- There were 19 cases of hepatitis B are between 17 and 60 years of age. The majority of which are in the non-immunized population.
- Of the 7 pertussis (whooping cough) cases the age range was two months to 63 years of age. An adult dose of a pertussis containing vaccine, such as Tdap, is recommended, this replaces the Td vaccine.
- Chickenpox circulated throughout 2015, most cases were 10 years of age and under. A second dose of varicella vaccine has been offered to all children born in 2013 and after.
- There were two cases of invasive Hib non-type B; one teenager and one elderly person.

For more information please visit:

http://www.health.gov.nl.ca/health/publichealth/cdc/health_pro_info.html#immunization

Hepatitis C

Cases of hepatitis C in Newfoundland and Labrador have been increasing over the past few years. The age group when people are first identified is decreasing; the mean age of diagnosis is 35.6 years of age. In 2015, there were 153 cases reported; up from 125 in 2014. Of these cases, 93 were male (60.8%). However, both male and female case reports are increasing.



Source: Communicable Disease Surveillance System, Department of Health and Community Services

Figure 7: Number of Laboratory-Confirmed Hepatitis C Cases, By Sex, NL, 1991-2015

Tuberculosis

Tuberculosis (TB) is a disease caused by a bacterium that usually affects the lungs. It is spread through airborne droplet particles expelled from a coughing infected person. In Canada, the number of cases of TB is highest in foreign-born people; however, the incidence rate of TB is highest among Canadian-born Aboriginal People. Similar to the Canadian situation, Aboriginal People in NL have the highest rate of TB, with people of Inuit origin being most significantly affected. Both Nunavut and Northern Quebec (Nunavik) have had a large number of cases recently. The disproportionate number of cases of TB affecting Inuit is felt to be rooted in a number of factors including the social and economic determinants of health such as lack of housing, food security, healthcare access, education and income.

When a case of TB is identified the first priority is treatment of the case; this requires taking multiple medications for 6 to 9 months and close follow-up by health professionals. The medications for TB cases are publicly funded and are usually given by a healthcare worker who observes the patient taking their medication. This is called directly observed therapy (DOT).

The process of identifying and following up people who may be at risk because of their contact with an active case of TB is called Contact Tracing. This involves obtaining a list of close contacts and doing testing to rule out or diagnose TB. In some cases the contact requires medications to prevent progression of disease. This may require direct observed therapy or prophylaxis (DOP).

The following graphs and tables reflect experience over a 15 year period. In 2015, the graphs demonstrate infrequent sporadic cases as well as two outbreaks in Labrador Grenfell Health Region in which cases are epidemiologically linked.

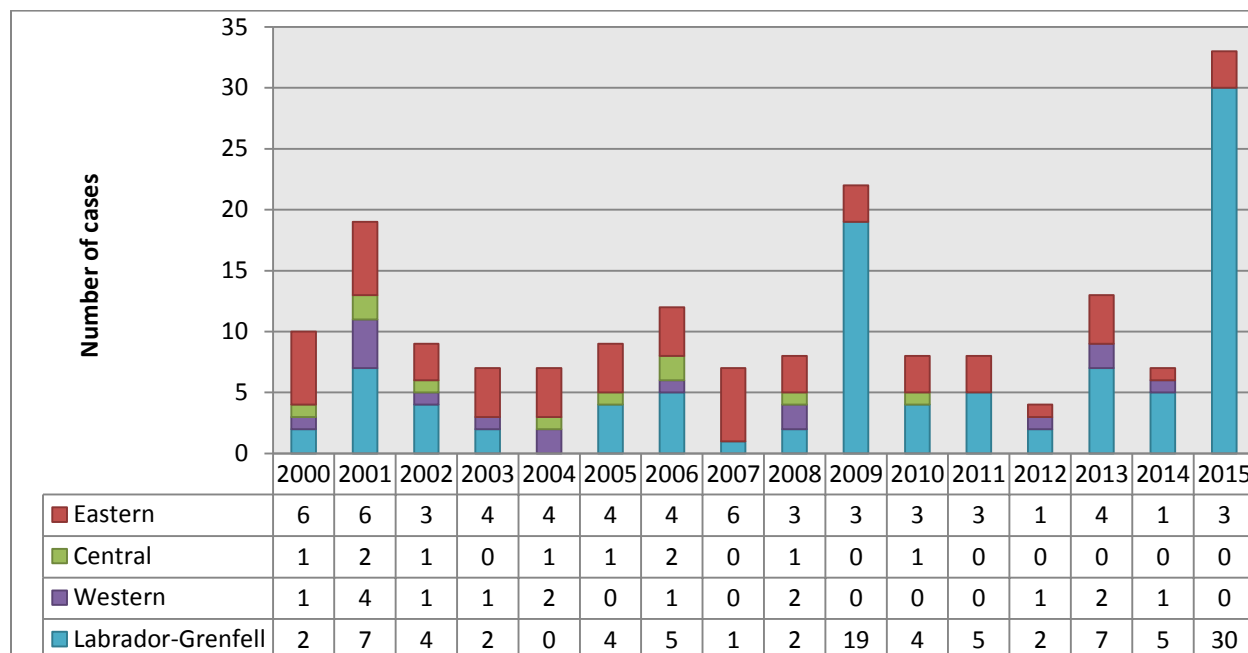


Figure 8: Tuberculosis cases by Regional Health Authority, Newfoundland and Labrador, 2000-2015

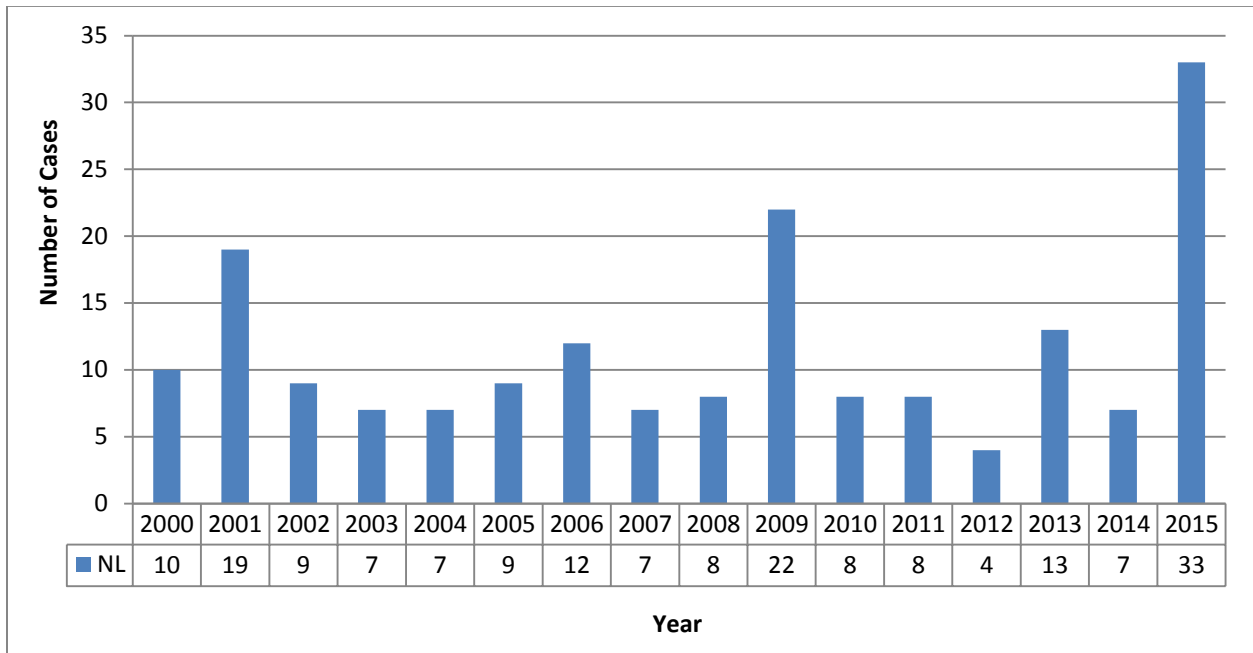


Figure 9: Tuberculosis cases in Newfoundland and Labrador, 2000-2015

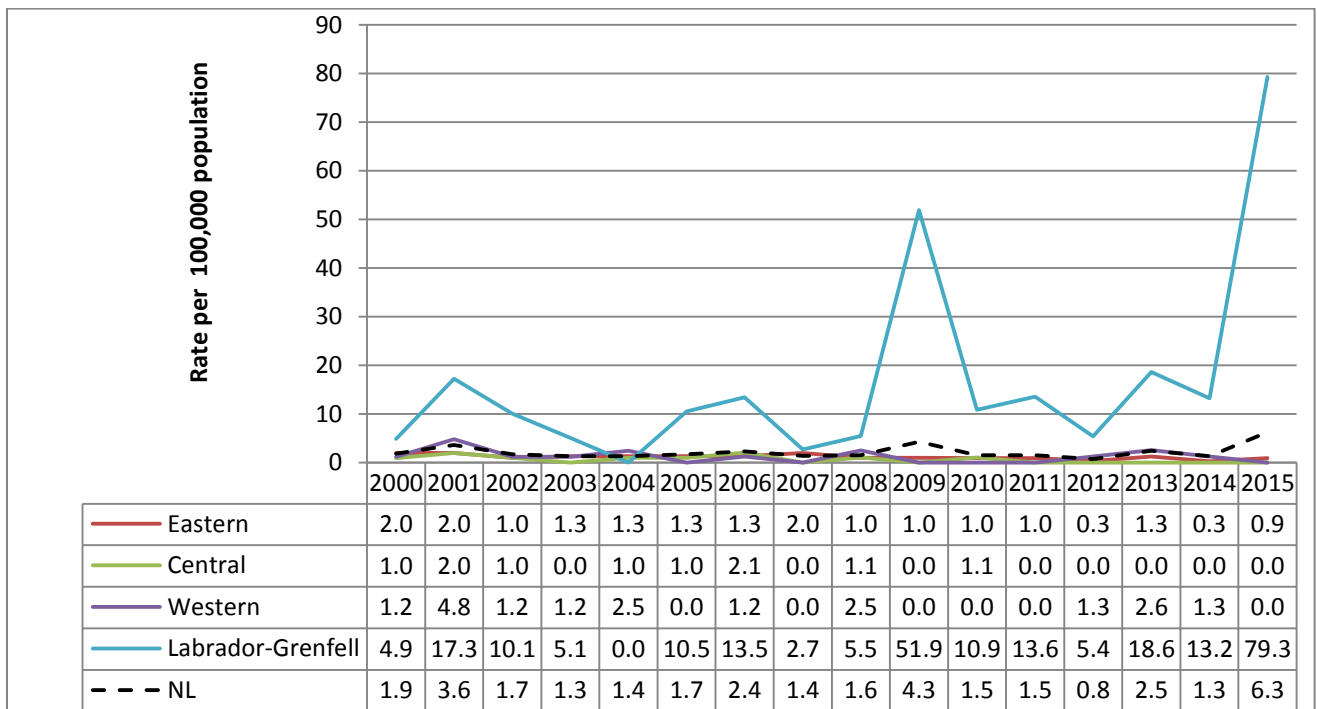


Figure 10: Rate of Tuberculosis cases per 100, 000 population by Regional Health Authority, Newfoundland and Labrador, 2000-2015

For more information on disease surveillance please visit:

<http://www.health.gov.nl.ca/health/publichealth/cdc/informationandsurveillance.html>

**Newfoundland and Labrador Communicable Disease Surveillance
Monthly Disease Report: December 2015**



DISEASE CLASS	DISEASE NAME	TOTAL			EASTERN			CENTRAL			WESTERN			LABRADOR GRENFELL		
		Dec	YTD 15	YTD 14	Dec	YTD 15	YTD 14	Dec	YTD 15	YTD 14	Dec	YTD 15	YTD 14	Dec	YTD 15	YTD 14
Enteric, Food and Waterborne	Amoebiasis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Botulism	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Campylobacteriosis	4	56	40	2	38	30	0	4	6	2	13	4	0	1	0
	Cryptosporidiosis	0	8	4	0	1	0	0	1	0	0	6	3	0	0	1
	Cyclosporiasis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cytomegalovirus	2	32	29	1	27	17	0	2	6	1	2	4	0	1	2
	Giardiasis	0	23	20	0	0	1	0	3	5	0	19	9	0	1	5
	Hepatitis A	0	2	5	0	0	2	0	2	2	0	0	1	0	0	0
	Listeriosis	0	3	1	0	2	0	0	1	0	0	0	1	0	0	0
	Norovirus Infection	6	71	41	0	14	4	0	31	16	6	26	21	0	0	0
	Salmonellosis	6	73	83	4	33	31	1	18	26	1	16	21	0	6	5
	Shigellosis	0	0	2	0	0	1	0	0	0	0	0	0	0	0	1
	Typhoid/Paratyphoid Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Verotoxigenic Escherichia coli	0	10	9	0	7	9	0	1	0	0	2	0	0	0	0	
Yersiniosis	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	
Diseases Transmitted by Direct Contact and Respiratory Route	Creutzfeldt-Jakob Disease (CJD)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Group B Streptococcal Disease of Newborn	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1
	Influenza Virus of a Novel Strain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Invasive Group A Streptococcal Disease	0	14	10	0	11	6	0	0	0	0	3	4	0	0	0
	Invasive Haemophilus Influenza non-type B	0	2	2	0	1	0	0	0	1	0	0	1	0	1	0
	Invasive Meningococcal Disease (IMD), Conf	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	Invasive Meningococcal Disease (IMD), Prob	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Invasive Pneumococcal Disease (IPD)	0	9	10	0	2	4	0	0	4	0	6	2	0	1	0
	Legionellosis	0	1	1	0	1	0	0	0	1	0	0	0	0	0	0
	Meningitis, Bacterial (other than Hib, IMD or IPD)	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
	Meningitis, Viral	0	3	2	0	2	2	0	1	0	0	0	0	0	0	0
	Nontuberculosis Mycobacterial Disease	1	18	7	0	16	3	0	1	2	1	1	2	0	0	0
	Severe Respiratory Illness, unknown origin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis, non-respiratory	0	2	2	0	0	1	0	0	0	0	0	0	0	2	1	
Tuberculosis, respiratory	2	30	5	0	3	0	0	0	0	0	0	1	2	27	4	
Sexually Transmitted and Bloodborne Pathogens	Chlamydia	62	965	869	45	654	549	2	71	66	12	117	91	3	123	163
	Gonorrhoea	0	38	62	0	29	54	0	4	4	0	2	3	0	3	1
	Hepatitis C	14	153	125	11	109	92	2	17	12	1	22	20	0	5	1
	HIV Infection	1	12	8	1	11	8	0	0	0	0	1	0	0	0	0
	Syphilis, infectious	0	34	24	0	32	23	0	1	0	0	1	1	0	0	0
	Syphilis, non-infectious	0	7	5	0	4	4	0	0	0	0	3	1	0	0	0
Vectorborne & Other Zoonotic Diseases	Lyme disease	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Malaria	0	7	3	0	6	2	0	1	1	0	0	0	0	0	0
	Q Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rabies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Toxoplasmosis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Trichinellosis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	West Nile Virus Infection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vaccine Preventable	Chickenpox	4	166	104	2	119	60	2	17	29	0	21	8	0	9	7
	Congenital Rubella Syndrome	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Hepatitis B	3	19	13	2	12	8	1	1	2	0	4	0	0	2	3
	Invasive Haemophilus Influenza type B (Hib)	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0
	Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mumps	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Pertussis	0	7	10	0	2	10	0	5	0	0	0	0	0	0	0
	Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Source: Communicable Disease Control System, Department of Health and Community Services, Government of Newfoundland and Labrador

Date verified: 5-Feb-2016

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"

The majority of chickenpox cases meet the probable case definition

There was one case of Dengue Fever in August 2013 related to travel.