



2017 Health Protection Report Saddle Lake Cree Nation

This report supplements the 2017 Health Protection Report for First Nations in Alberta. This report provides information specific to Saddle Lake Cree Nation.



MESSAGE FROM THE SENIOR MEDICAL OFFICER OF HEALTH

Dear reader

Welcome to the 2017 Health Protection Report for Saddle Lake Cree Nation. Let me begin by sharing with you an **historic occurrence**: in 2017, there were no new active pulmonary tuberculosis cases in First Nations communities on reserve in Alberta. Together we celebrate this important achievement thanks to the robust and excellent collaboration of the community-based and regional staff in case finding and holding, contact tracing and directly observed therapy with our provincial tuberculosis partners in case management.

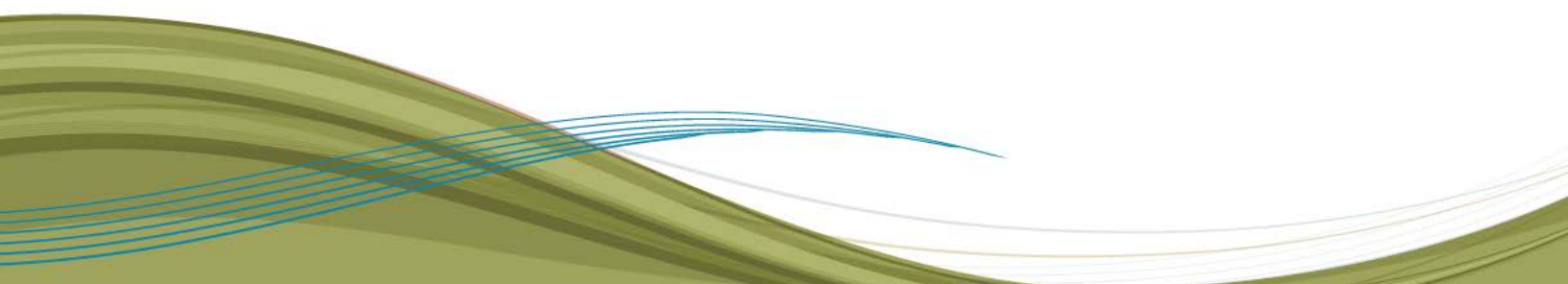
I would like to extend a very sincere acknowledgment to and appreciation of the hard work that brought us to such an accomplishment. As we continue to serve in this field, we are inspired by the new start of access to a shorter regimen of preventative medication, Rifapentine, which it is hoped will support clients who require this therapy to complete their regimen and improve their health, which ultimately results in healthy individuals, families and communities.

Health Protection (Communicable Disease Control and Environmental Public Health Services) remain one of the highest priorities for the health of First Nations and much remains to be done in partnership toward the goal of healthy individuals, families and communities.

Together on the journey,



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DATA SOURCES

The following data sources are used to compile this supplement.

- Indigenous Services Canada (ISC), First Nations and Inuit Health Branch (FNIHB)- Alberta Region, Communicable Disease Control (CDC) Databases–Immunization, Notifiable Disease Reports (NDRs), and Animal Exposures
- Government of Alberta, Alberta Health (NDRs and Sexually Transmitted Infections(STIs))
- ISC, Indian Registry System (IRS)
- Environmental Public Health Information Suite (ELPHIS) Database, ISC–FNIHB
- Canadian Network for Public Health Intelligence (CNPHI) Water Advisory Database, ISC-FNIHB
- Hedgehog Inspection Database, ISC-FNIHB

DEFINITIONS

Immunization coverage is the proportion of the population within a specific age group immunized on time as recommended (i.e. completed the recommended immunization series by the recommended age)

Immunization uptake is the proportion of the population within a specific age group that have started but not completed the recommended immunization series by the recommended age.

Immunization Target is the critical proportion of the population needed to be immunized in order to achieve the best protective effects of immunization or to develop community immunity.

An Animal Exposure refers to an animal bite or scratch, or contact of an animal saliva or infected tissue with an open wound or mucous membrane of an individual.

Microbiological water testing involves looking for specific indicator bacteria (total coliforms and E.coli) in the water which, if present, could mean that the water is contaminated and potentially unsafe.

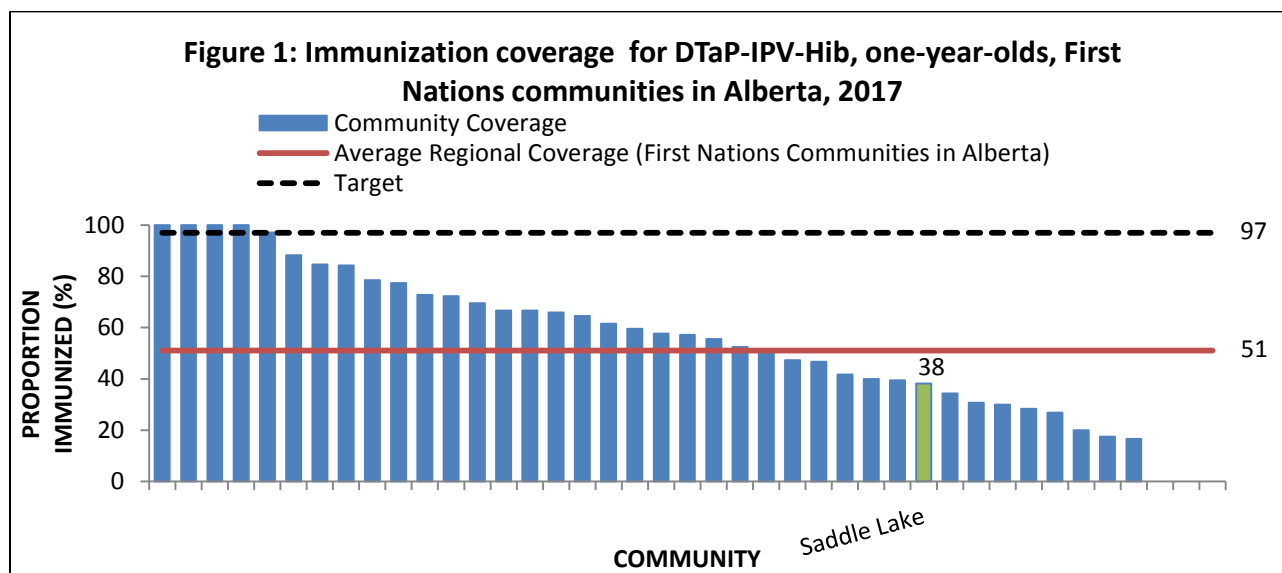
Drinking water advisories are used to notify users of a water system that the drinking water may be unsafe, as well as the actions that should be taken to protect their health.

Facility inspections refer to inspections conducted by FNIHB-AB Environmental Public Health Officers (EPHO) in accordance with the Alberta Public Health Act and associated regulations and standards, and as outlined in community-specific environmental public health work plans.

Vaccine Abbreviations	
dTap	Diphtheria, tetanus and pertussis
DTaP-IPV	Diphtheria, tetanus, pertussis and polio
DTaP-IPV-Hib	Diphtheria, tetanus, pertussis, polio and Haemophilus influenzae type b
HBV	Hepatitis B
Hib	Haemophilus influenzae type b
HPV	Human papillomavirus
MenC	Meningococcal conjugate – type C
Mening A/C/Y/W135	Meningococcal conjugate – types A/C/Y/W135
MMR	Measles, mumps, rubella
PCV13	Pneumococcal conjugate 13-valent
Rot	Rotavirus
Var	Varicella (chickenpox)

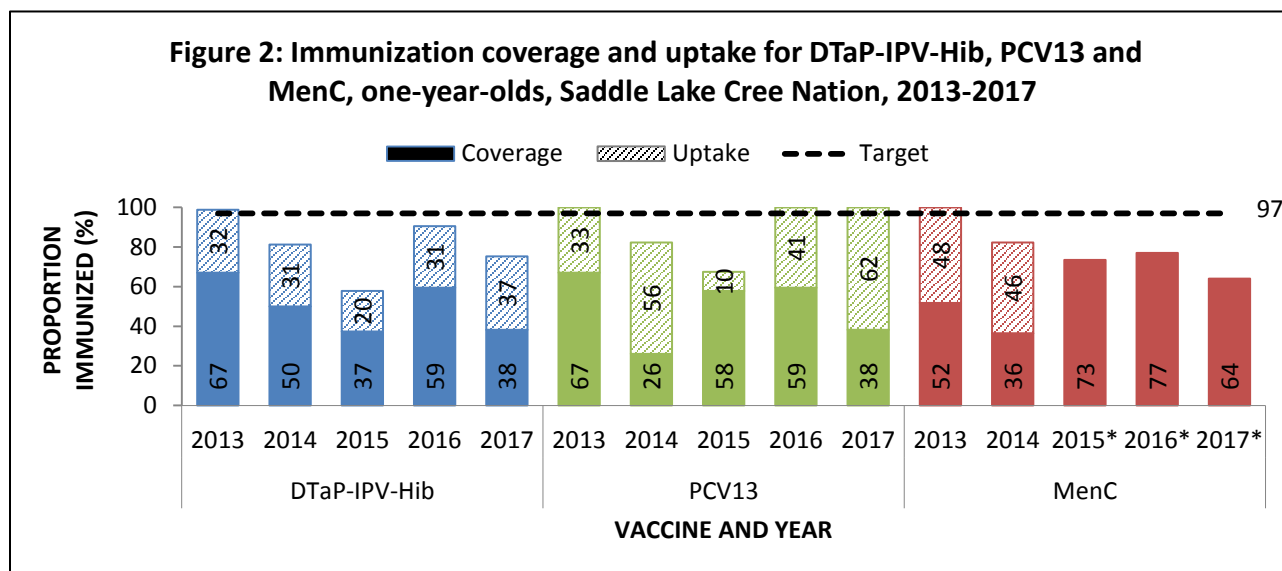
Environmental Public Health Services Abbreviations	
EPHO	Environmental Public Health Officer
PWS	Public Water Supply
SPWS	Semi-public Water Supply
E. coli	Escherichia coli
DWA	Drinking Water Advisory
BWA	Boil Water Advisory
DNC	Do Not Consume Advisory
DNU	Do Not Use Advisory
GUDI	Groundwater under the direct influence of surface water

ONE-YEAR-OLD IMMUNIZATION COVERAGE



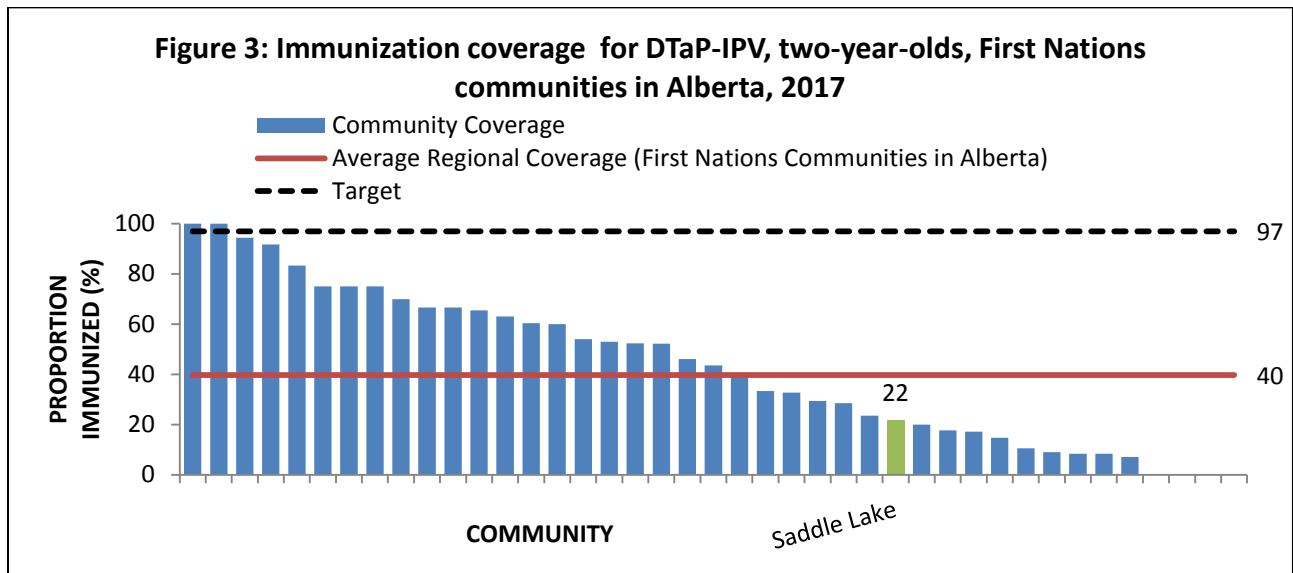
The immunization coverage (38%) for DTaP-IPV-Hib in Saddle Lake Cree Nation was lower than the average coverage of 51% in First Nations communities in Alberta and the target of 97% (Figure 1).

Coverage rates decreased for DTaP-IPV-Hib, PCV13 and MenC in 2017 compared to 2016 (Figure 2).



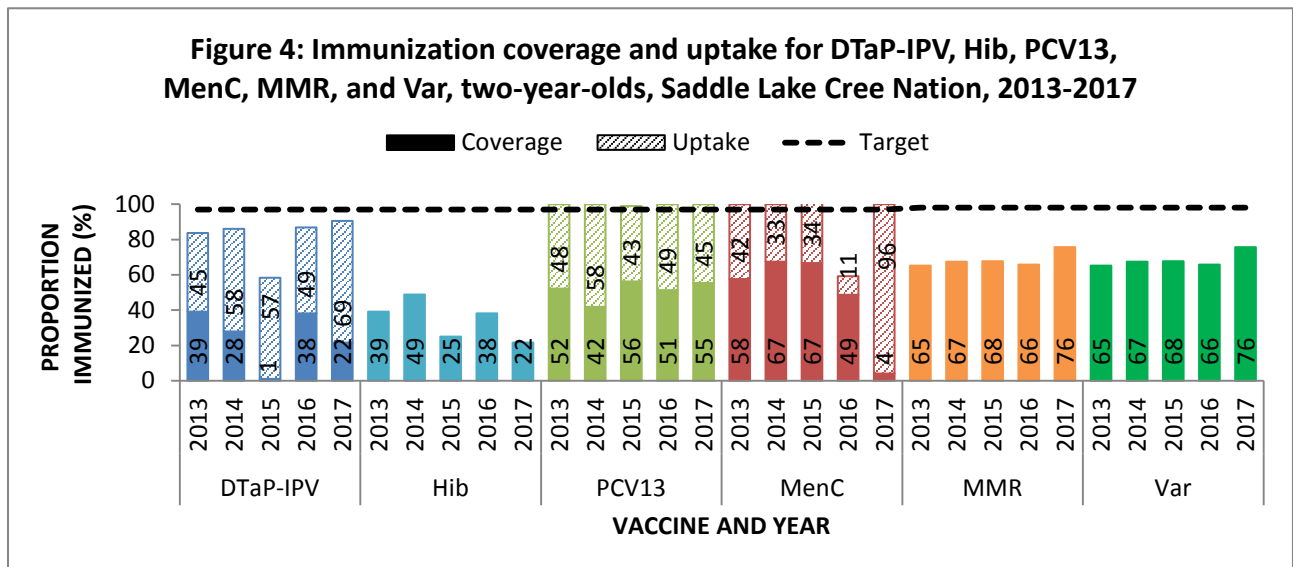
* As of January 2015, only one dose of MenC is required prior to 12 months of age whereas previously two doses were required for series completion.

TWO-YEAR-OLD IMMUNIZATION COVERAGE

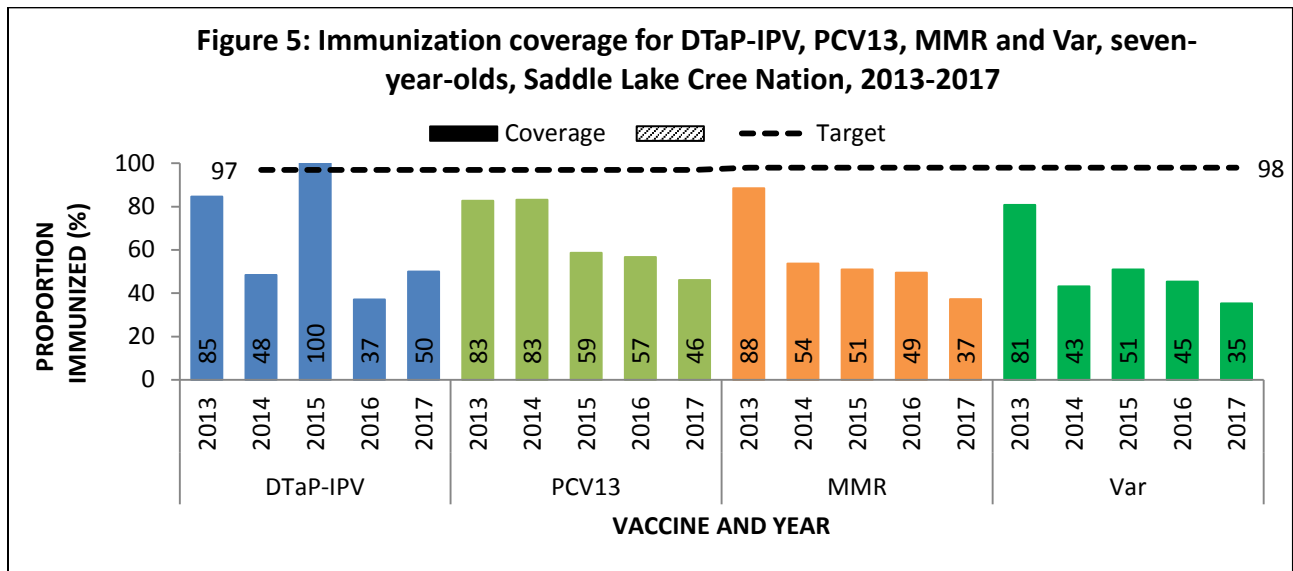


The immunization coverage (22%) for DTaP-IPV in Saddle Lake Cree Nation was lower than the average coverage (40%) in First Nations communities in Alberta and the target of 97% (Figure 3).

Full coverage for vaccines at two years of age is required to provide best protection throughout their preschool years. The immunization coverage for PCV13, MMR and Var increased in 2017 compared to 2016 (Figure 4).

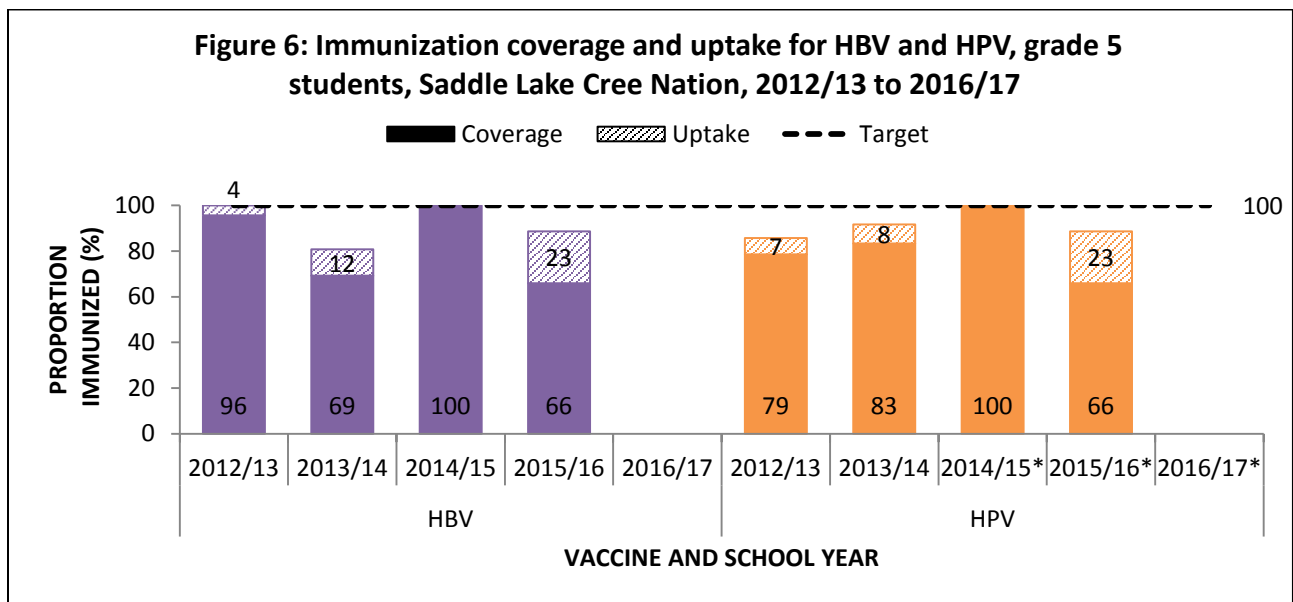


SEVEN-YEAR-OLD IMMUNIZATION COVERAGE



The coverage rates for PCV13, MMR and Var decreased in 2017 compared to 2016 (Figure 5).

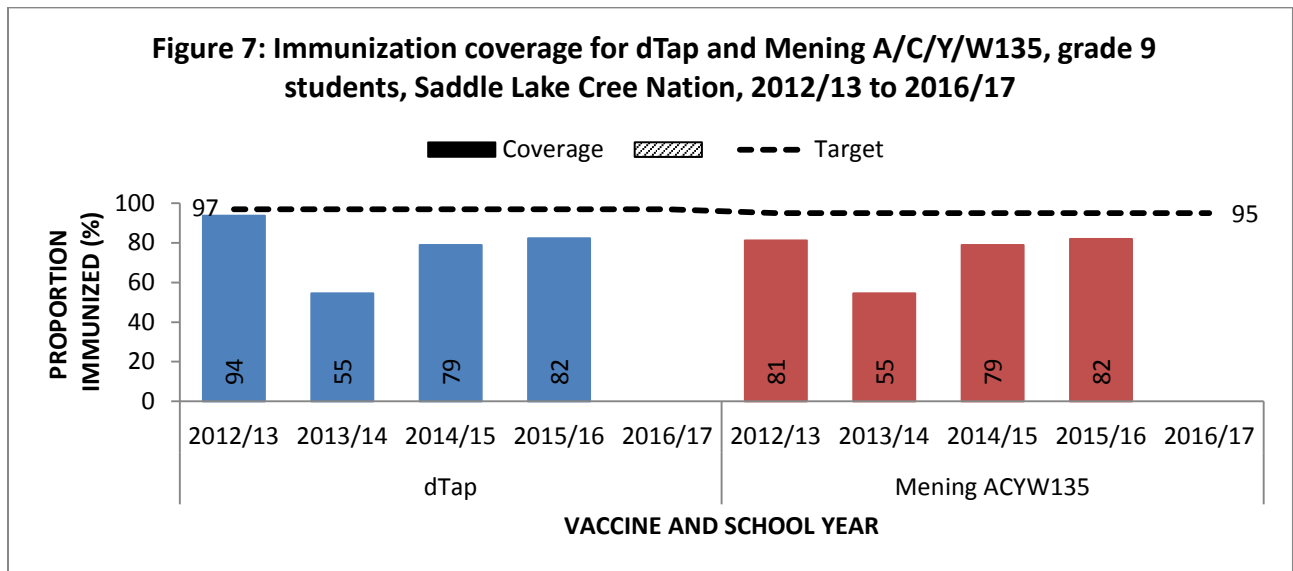
GRADE 5 STUDENT IMMUNIZATION COVERAGE



*data for HPV include data for both males and females. HPV data prior 2014/15 included data for females only

Grade 5 immunization information was not received from Saddle Lake Cree Nation for 2016/17 school year (Figure 6).

GRADE 9 STUDENT IMMUNIZATION COVERAGE



Grade 9 immunization information was not received from Saddle Lake Cree Nation for 2016/17 school year (Figure 7). A single-dose each of Mening A/C/Y/W135 and dTap are offered to all Grade 9 students attending school in the community.

INFLUENZA IMMUNIZATION

Table 1: Distribution of doses of the seasonal influenza vaccine administered in Saddle Lake Cree Nation, 2016/17 and 2017/18

Target Group		2016/17	2017/18
Age Group	6-23 months	3	8
	24-59 months	8	12
	5-8 years	12	18
	9-64 years	135	108
	65+ years	21	24
Pregnant Women		1	2
Health Care Workers		15	23
Total number of doses administered		195	195

A total of 195 doses of the seasonal influenza vaccine were administered in 2017/18.. The seasonal influenza vaccine is available beginning in October or November to all individuals over six months of age (Table 1).

HEPATITIS C

Between 2013 and 2017, there were 43 cases of Hepatitis C in Saddle Lake Cree Nation.

INVASIVE GROUP A STREPTOCOCCAL DISEASE (iGAS)

Between 2013 and 2017, there were 12 cases of iGAS in Saddle Lake Cree Nation.

PERTUSSIS

Between 2013 and 2017, there was no case of pertussis in Saddle Lake Cree Nation.

INVASIVE PNEUMOCOCCAL DISEASE

Between 2013 and 2017, there were 12 cases of invasive pneumococcal disease in Saddle Lake Cree Nation.

TUBERCULOSIS CASES

In Saddle Lake Cree Nation, there were less than five cases of active pulmonary tuberculosis reported in the twenty-year period between 1998 and 2017.

ANIMAL EXPOSURE SUMMARY

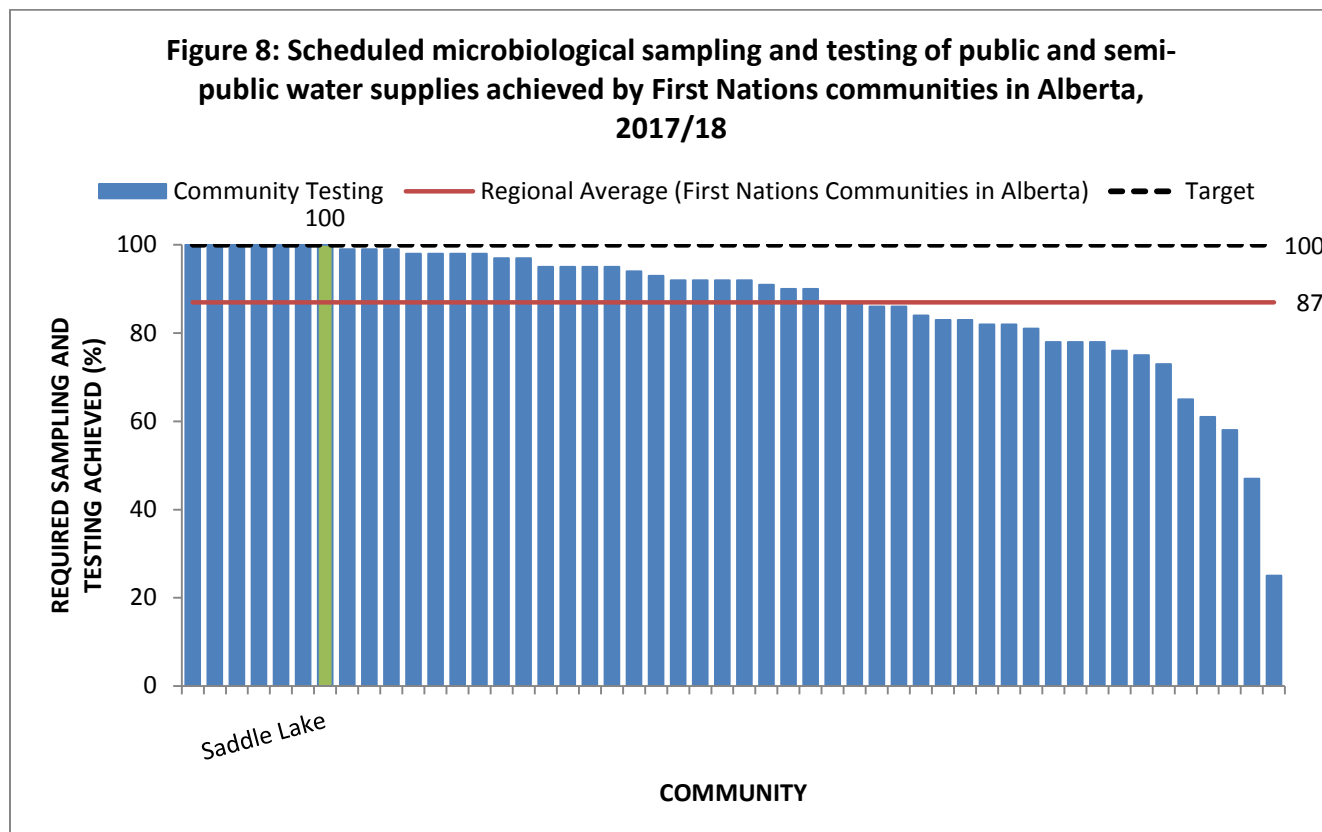
Table 2: Number of animal exposures in Saddle Lake Cree Nation First Nation, 2013–2017

Year	Number
2013	41
2014	39
2015	34
2016	43
2017	25
Total	182

There were 182 reported animal exposures that occurred in Saddle Lake Cree Nation between 2013 and 2017 (Table 2). Majority (176) were dog exposures.

ENVIRONMENTAL PUBLIC HEALTH SERVICES

MICROBIOLOGICAL WATER TESTING

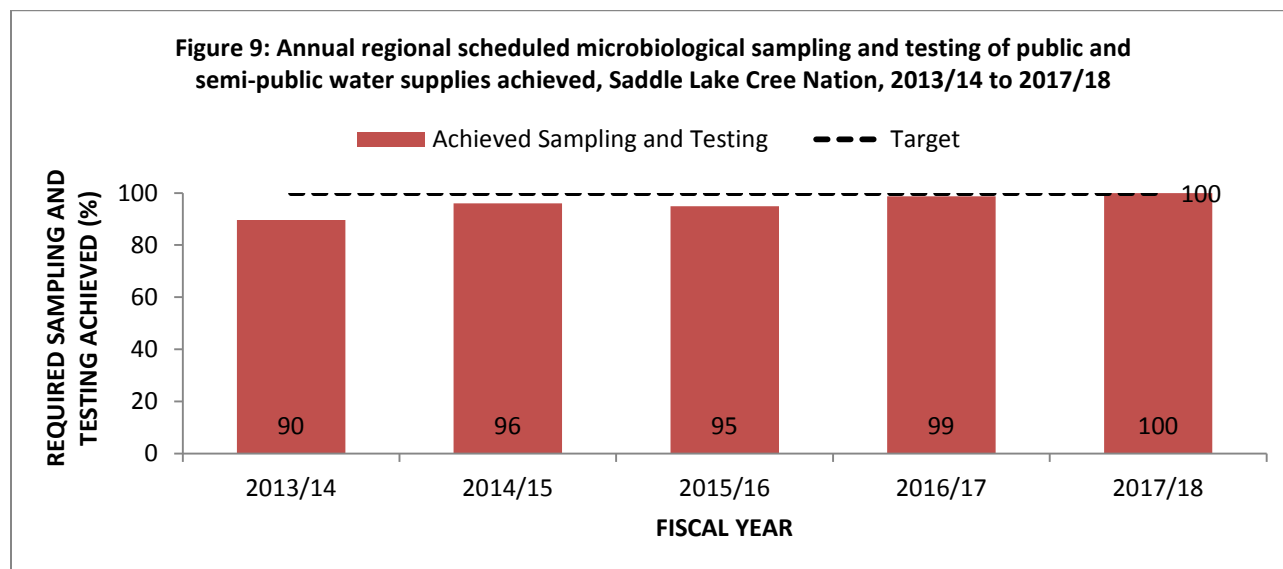


In 2017/18, Saddle Lake Cree Nation achieved 100% of the scheduled microbiological water sampling and testing, which is higher than the regional average of 86% and equal to the target level of 100% (Figure 8).

One of the factors for not attaining a higher percentage of the scheduled microbiological water sampling and testing in 2017/18 in First Nations Communities in Alberta is due to water samples not being tested as a result of:

- Water samples being received more than 24 hours after the time of collection.
- Date and time of collection not being provided.

Scheduled water sampling and testing rates decreased from 90% in 2013/14 to 100% in 2017/18 (Figure 9).



MICROBIOLOGICAL WATER TESTING RESULTS

The presence of total coliforms in a drinking water supply may indicate contamination in the supply, inadequate disinfection, leaks or cracks in the drinking water system, or poor drinking water system maintenance. The presence of *E.coli* in drinking water indicates that the water has been recently contaminated with feces and represents a risk to human health because it indicates disease-causing organisms (pathogens) may be present.

Table 3: Number (percent) of water samples that tested positive for total coliforms, *E.coli*, by water supply type, Saddle Lake Cree Nation, 2017/18

Water supply type	Total number of samples tested	Samples that tested positive for total coliforms	Samples that tested positive for <i>E. coli</i>
	N	n (%)	n (%)
Public	371	1 (0.3%)	0 (0%)
Semi-public	8	2 (25%)	0 (0%)

In 2017/18, 1 out of 371 water samples from public and 2 out of 8 water samples from semi-public water supply systems in Saddle Lake Cree Nation tested positive for total coliforms. None of the water samples from public and semi-public water supply systems in Saddle Lake Cree Nation tested positive for *E.coli*. (Table 3).

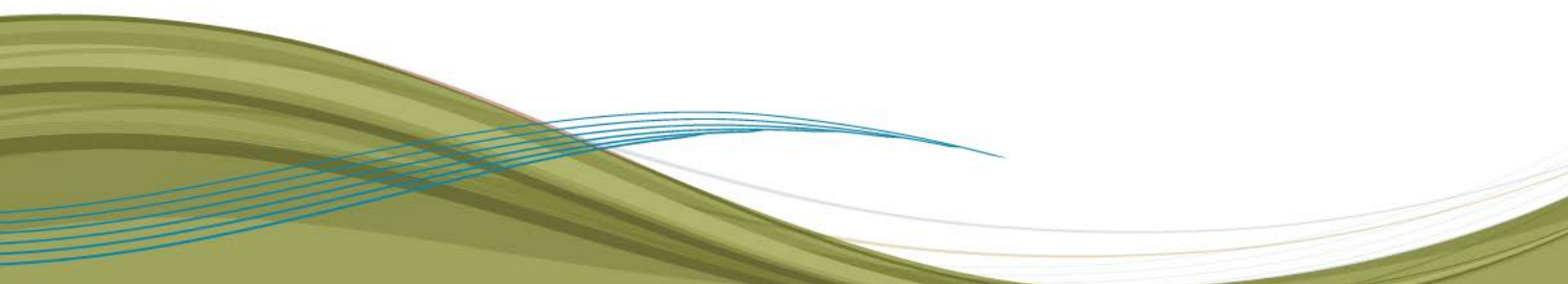
Table 4 displays the number of houses with a private well or cistern which were sampled and the percentage of those houses that had at least one positive result for total coliforms or *E. coli* in 2017/18. Among these houses, 10% serviced by cisterns and 7% serviced by wells tested positive for total coliforms (Table 4). 3 out of the 392 houses serviced by cisterns tested positive for *E. coli*.

Table 4: Number (percent) of houses with private water supplies that tested positive for total coliforms, E.coli, by private water system type, Saddle Lake Cree Nation, 2017/18

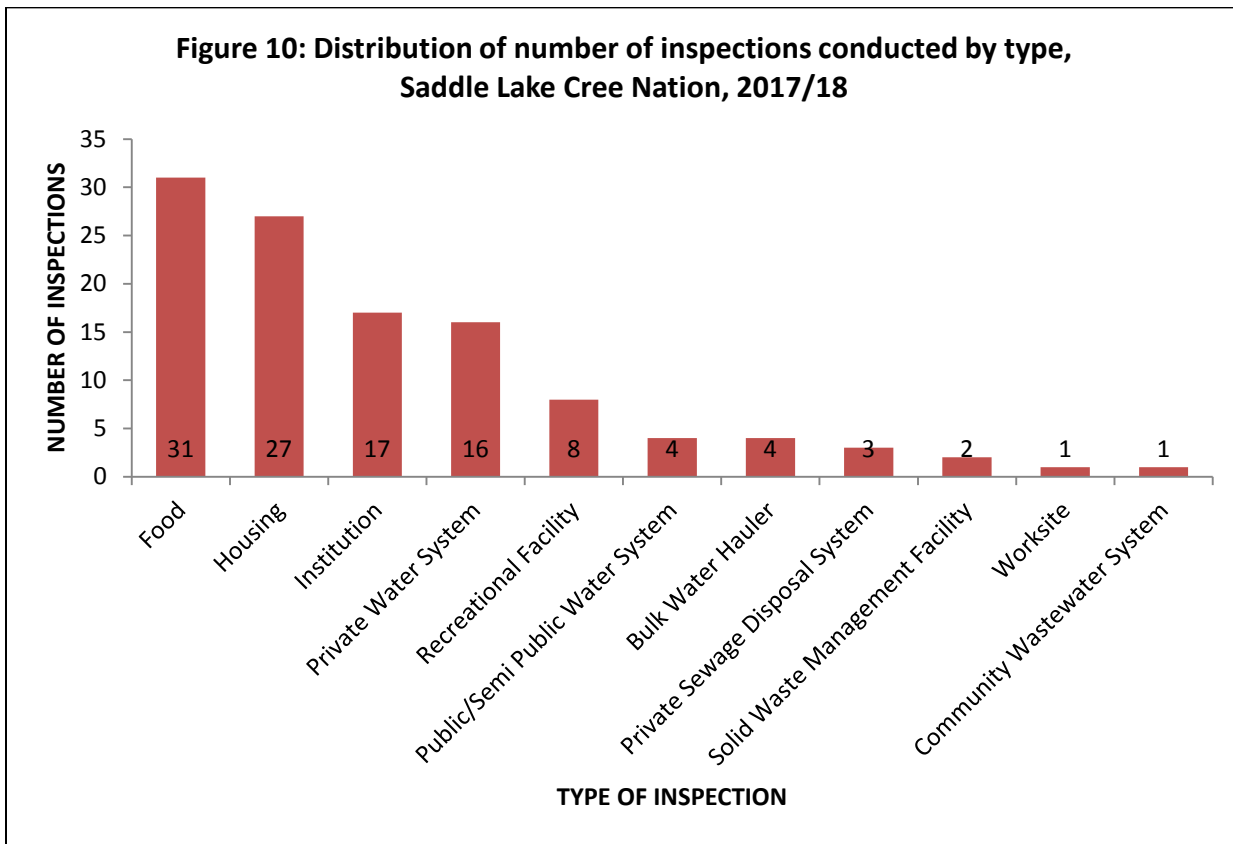
Private water system type	Number of houses with private water supply which were sampled and tested	Houses with private water supply testing positive for total coliforms	Houses with private water supply testing positive for E. coli
	N	n (%)	n (%)
Cistern	392	38 (9.7%)	3 (0.8%)
Well	28	2 (7.1%)	0 (0%)

DRINKING WATER ADVISORIES FOR PUBLIC AND SEMI-PUBLIC WATER SUPPLIES

There was no active drinking water advisory in 2017/18 in Saddle Lake Cree Nation for public and semi-public water supplies.



ENVIRONMENTAL PUBLIC HEALTH INSPECTIONS



A total of 114 inspections were carried out in 2017/18. Housing (24%) and food facilities (27%) were the top two types of facility inspections carried out in 2017/18 in Saddle Lake Cree Nation (Figure 10).

HOUSING INSPECTIONS

In 2017/18, a total of 27 housing inspections were completed in Saddle Lake Cree Nation and 337 deficiencies were observed. Approximately 32% of the observed housing deficiencies were related to interior structural issues and 25% were related to exterior issues (Table 6)

Problems with floors, water and moisture and walls were the most common interior housing deficiencies observed in First Nations communities in Alberta in 2017/18.

Deficient doors and windows, eaves and drainage, roof, cladding and attic were the most common exterior issues observed in First Nations communities in Alberta in 2017/18.

Observation Category	Frequency	Percent
Interior	107	31.8%
Exterior	84	24.9%
Safety	23	6.8%
Electrical System	23	6.8%
Mould	21	6.2%
Plumbing and Drainage System	18	5.3%
Indoor Air Quality	18	5.3%
Heating System	11	3.3%
Water Quality	10	3.0%
Pest Control	10	3.0%
Nuisance	7	2.1%
Barrier Free Design	5	1.5%
Total Potential Public Health Concerns	337	100%

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