

JULY 3RD, 2002

MONTHLY INCIDENCE OF COMM. DISEASE,
SK, FROM 1910 TO 1927

DATA NOT INCLUDED IN ANNUAL REPORTS,
YEARS : 1911-1912, 1915-1920

I. Outbreaks of Infectious Diseases, 1910—Continued.

Date	District	Disease	No. of cases	Remarks
Nov. 16	Hill Farm County, Lemberg	Diphtheria	2	L.I.D. 185
Nov. 18	Harris	Scarlet fever	*2	R.M. 316
Dec. 8	Warman	Typhoid	2	L.I.D. 374
Dec. 9	Macklin	Diphtheria	23	
Dec. 15	Herbert	Diphtheria	5	L.I.D. 165
Dec. 21	Manor	Scarlet fever	3	L.I.D. 63
Dec. 22	Dana	Scarlet fever	4	Village, R.M. 371
Dec. 22	Outlook	Scarlet fever	1 family	Town, R.M. 284
Dec. 23	Walsh	Diphtheria	*2	Unorganised territory
Dec. 28	Grayson	Diphtheria	2 families	L.I.D. 184
Dec. 29	Morse	Smallpox	2	L.I.D. 165
Dec. 30	Langenburg	Scarlet fever	8	L.I.D. 181

NOTE.—* before figures in tables re outbreaks indicates that "at least" that number of cases was reported.

II. Reports of Infectious Diseases from the Cities.

The following tables have been copied from the monthly reports of the medical health officers:

Regina.

Diseases	January	February	March	April	May	June	July	August	September	October	November	December	Total
Typhoid													
Tuberculosis													
Scarlet fever	1	8	2	28	7	14	3		1	3	1	1	1
Diphtheria		1	3	5	1	1			6	2	2	2	69
Smallpox													4
Chickenpox	2	2	1	1	2	2							12
Measles	8	1	1	2	2	5				1	3	3	22
German measles													
Whooping cough													
Mumps													
Trachoma													
Acute anterior poliomyelitis													
Total	11	19	7	36	12	22	3		7	10	10	7	144

Regina reported 48 city typhoids from hospitals.

Prince Albert

Diseases	January	February	March	April	May	June	July	August	September	October	November	December	Total
Typhoid	2												
Tuberculosis	1												
Scarlet fever													
Diphtheria													
Smallpox													
Chickenpox													
Measles	12	4	3	3									
German measles													
Whooping cough													
Mumps													
Trachoma													
Acute anterior poliomyelitis													
Total	15	8	3	5			1	30	13	3	3	8	87

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*Reports of Infectious Diseases from the Cities.
Saskatoon.*

Diseases	January	February	March	April	May	June	July	August	September	October	November	December	Total
Typhoid	2	1	1	2		1	8	51	43	30	8	6	153
Tuberculosis	1												1
Scarlet fever		1		1	4		3	2	1		1		13
Diphtheria					4						1		5
Smallpox													
Chickenpox											4		4
Measles		2	30	6	9								47
German measles													
Whooping cough													
Mumps													
Trachoma													
Acute anterior poliomyelitis											1		1
Total	3	3	32	8	10	9	11	53	44	30	14	7	224

Moose Jaw.

Diseases	January	February	March	April	May	June	July	August	September	October	November	December	Total
Typhoid							3	20	54	44	20		141
Tuberculosis	1	1											2
Scarlet fever	1	6	4	9	2		2	1	3			1	29
Diphtheria	1	2					1		2	1		1	8
Smallpox	1	1					2						4
Chickenpox					1								1
Measles	17	31	29	25	7	1							110
German measles													
Whooping cough													
Mumps													
Trachoma													
Acute anterior poliomyelitis													
Total	21	41	33	35	9	7	23	59	45	20	2		295

Regina reported 192 cases of infectious disease.
 Prince Albert reported 87 cases of infectious disease.
 Saskatoon reported 224 cases of infectious disease.
 Moose Jaw reported 295 cases of infectious disease.
 Total cases, 798 from cities.

III. Reports of Infectious Diseases from Towns, Villages and Rural Districts.

Total cases reported from the Province of Saskatchewan are 1,569
 Total cases reported from the cities of the Province are.... 798

Total cases reported from the towns, villages and rural districts 771

This is best illustrated by the accompanying diagram. (See Drawing No. 1.)

Estimating the population of the province at 400,000 and the total population of the cities at 50,000, the rural population will be 350,000. That is, the rural population of 350,000 reports less than half the total cases of infectious diseases. In future we must look for greater improvement in reporting cases from the rural districts.

Three conditions which prevail in the country may account for the lessened number of cases of infectious diseases reported.

1. Many cases reported in the cities come from the rural districts, as, typhoid fever.

2. Less danger of "contact" infection in rural districts.

3. Greater carelessness in rural districts to notify physicians.

IV. Reports of the Various Infectious Diseases Separately.

TYPHOID FEVER.

Five hundred and eighty-seven cases, and one hundred and fifty-one deaths were reported for this Province during 1910; Regina reported forty-eight, Moose Jaw one hundred and forty-one, Prince Albert fifty-four, and Saskatoon one hundred and fifty-three.

The cities reported three hundred and ninety-six cases; the towns, villages and rural districts reported one hundred and ninety-one cases.

The following chart shows the monthly returns of cases and deaths. (See Drawing No. 2.)

The majority of the cases were reported in the late summer and autumn months, August, September, October and November, the number reaching as high as 148 cases in the month of August. The death curve corresponds with the case curve. The greatest number of deaths, 45, was in the month of September.

Typhoid Fever Returns (1905-1910).

Year	Number of cases reported	Number of deaths
1905	—	30
1906	—	120
1907	—	54
1908	297	77
1909	831	95
1910	587	151

"In fowls the normal temperature of the body is about 104 degrees Fahrenheit, and, if inoculated with the bacillus of anthrax, it will not grow in them, and the inoculation is harmless; but if they are made to stand with their feet in cold water until their temperature falls to 98 degrees, they succumb to inoculation with anthrax in the same way as oxen and men."

The microbes of pneumonia are ubiquitous, more so than those of phthisis, and are present in the nose and throat of very many healthy people. So long as these individuals retain their vitality pneumonia microbes do no harm.

MEASLES.

Four hundred and twenty-four cases and nineteen deaths have been reported. Measles is not a trivial disease, and should receive as much careful attention as any of the more, so-called, serious diseases. Measles as an uncomplicated disease nearly always ends in recovery but complications render it frequently a grave and fatal disease. Such complications are broncho-pneumonia, otitis media, laryngitis, cancerum oris and ulcerative stomatitis.

WHOOPING COUGH.

Twenty-four deaths were reported for 1910. Physicians should remember that this disease must be reported.

Infantile paralysis, cerebro-spinal meningitis, influenza, and trachoma have not been reported as carefully as they should have been.

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V. Mortality and Infectious Statistics.

1910	Typhoid	Tuber-culosis	Scarlet fever	Measles	Diphtheria	Whooping cough	Smallpox	Infantile paralysis	Cerebro-spinal meningitis	Influenza	Trachoma	Total Deaths	Cases Deaths							
January-----	7	2	7	13	1	3	28	-	1	-	-	-	8	66	19	1	1	1	1	
February-----	1	2	2	8	48	1	4	3	50	1	1	1	1	1	106	16	1	1	1	
March-----	3	2	3	11	27	-	6	3	97	3	1	1	1	1	137	21	1	1	1	
April-----	8	2	3	8	55	2	15	4	65	2	2	2	1	1	147	20	1	1	1	
May-----	2	4	2	15	55	2	5	2	58	2	6	1	1	1	123	31	1	1	1	
June-----	1	3	2	13	22	3	12	2	28	6	1	1	1	1	65	28	1	1	1	
July-----	8	5	1	18	11	3	7	3	37	2	3	3	1	1	64	34	1	1	1	
August-----	126	15	2	11	27	2	9	2	42	2	5	7	1	1	215	56	1	1	1	
September-----	144	45	3	7	15	-	11	2	2	2	2	2	1	1	175	56	1	1	1	
October-----	148	36	7	8	13	-	22	1	1	1	1	1	1	1	197	47	1	1	1	
November-----	123	26	2	7	24	1	33	2	12	2	2	2	1	1	120	38	1	1	1	
December-----	16	9	1	6	13	-	16	2	4	2	6	2	1	1	9	65	17	1	1	
Total-----	587	151	35	125	323	15	143	28	424	19	1	24	17	1	2	35	1,580	384	2	2

DIPHTHERIA

Cities, 63; Towns and Villages, 114; Rural Municipalities, 135. Total cases reported for the Province, 312.

Localities	Cases	Incidence rate per 1000 persons living.
Regina.....	27.....	.56
Saskatoon.....	19.....	.63
Moose Jaw.....	17.....	.56
Prince Albert.....	0.....	.00
Total.....	63.....	.52

TOWNS AND VILLAGES.....	114	Canora.....
Those chiefly affected were:		Briercrest.....
Arcola.....	12	Kindersley.....
Roche Percee.....	11	Neville.....
Melfort.....	8	Herbert.....
Stronfield.....	6	Kerrobert.....
Southey.....	5	Fort Q'Appelle.....
Leross.....	5	Blaine Lake.....
Cupar.....	4	Weyburn.....
Vonda.....	4	Maple Creek.....
Whitewood.....	4	McGee.....
Rosthern.....	4	Labret.....
Macklin.....	3	Frobisher.....
Broadview.....	3	Hawarden.....
Davidson.....	3	Grenfell.....
Estevan.....	3	Colgate.....
Warman.....	3	Moosomin.....
Glen Ewen.....	3	Vanguard.....
Indian Head.....	3	

RURAL MUNICIPALITIES.....	135	No. 22.....
No. 252.....	15	No. 211.....
No. 6.....	13	No. 185.....
No. 168 (Cabri).....	11	No. 103.....
No. 218.....	11	No. 434.....
No. 111.....	10	No. 345.....
No. 369.....	9	No. 69.....
No. 291.....	8	No. 247.....
No. 166.....	6	No. 163.....
No. 244.....	5	No. 127.....
No. 404.....	4	No. 96.....
No. 375.....	4	No. 335.....
No. 231.....	4	No. 243.....
No. 260.....	4	No. 374.....
No. 261.....	3	No. 219.....
No. 187.....	3	No. 37.....
No. 130.....	3	No. 372.....
No. 373.....	2	No. 67.....

ANNUAL REPORT 1913

SK

Season	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Cities.....	2	5	19	10	5	7	2	0	2	2	3	7	63
Towns and Villages.....	8	12	2	7	10	5	14	3	8	8	14	23	114
Rural Municipalities.....	35	29	4	16	10	0	11	6	0	2	12	10	135
	45	46	—	25	33	24	—	—	12	27	9	10	312

The Season varies slightly with each group.

Cities

Maximum in March 19, and in April 10. Minimum in August 0. There were 7 cases in both June and in December, while as in scarlet fever the disease was lowest during July to November.

Towns and Villages

Highest in December 23 cases, then July and November record 14 cases each, while February had 12 and May 10. This seasonal curve is not distinctive and is brought about through sporadic outbreaks in certain localities having been allowed to get a firm hold, from various causes, e.g. inefficient administration of the quarantine laws and regulations regarding disinfection, etc.

Rural Municipalities

Maximum in January 35, and February 29 cases. Minimum June 0, and September 0. In all of them the total's favorite period of the year was: December, January, February, March, April, accounting for 209 cases out of 312 in the 12 months.

BUREAU OF PUBLIC HEALTH

88

SCARLET FEVER

Seasonal Variations	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Cities.....	33	61	70	31	44	35	10	10	9	6	20	7	336
Towns and Villages.....	74	62	110	72	115	62	18	3	7	20	8	30	576
Rural Municipalities.....	41	46	60	58	53	39	21	16	5	16	11	27	388
	148	169	240	161	212	136	49	29	21	42	39	64	1300

Thirteen hundred cases of scarlet fever were reported in the province throughout the year including 61 cases of mixed infection (scarlet fever and diphtheria).

The season varies slightly with each group.

Cities

Maximum in February 61 and March 70. Minimum in October 6 cases.

Towns and Villages

Maximum during March 110 and May 115. Minimum in August 3 cases.

Rural Municipalities

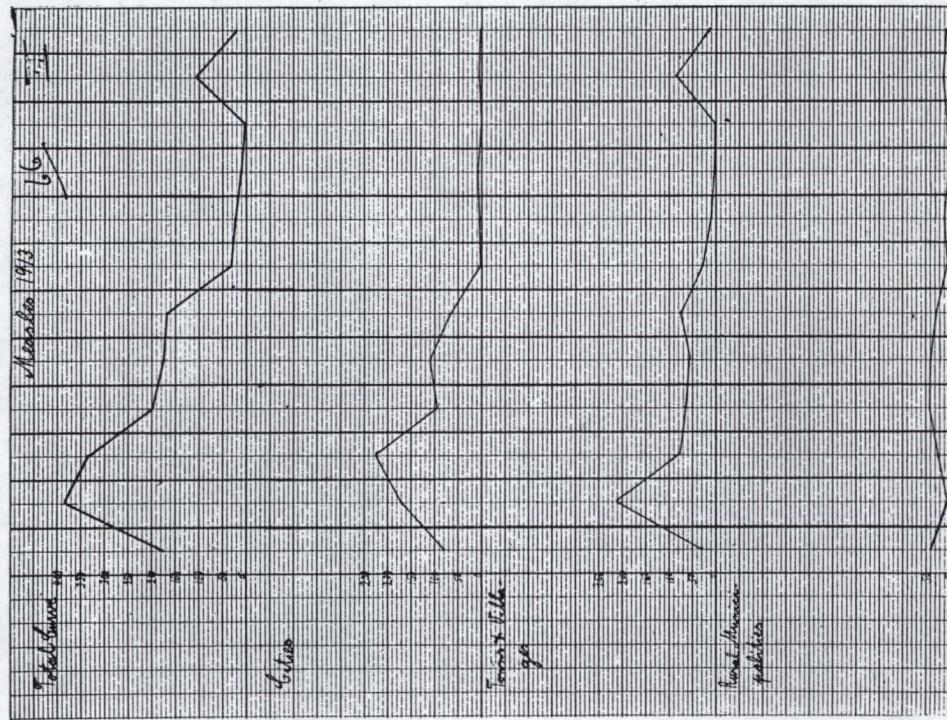
Highest in March, 60, and April 58. Lowest in September, 5.

In all of them—the totals of the diseases are most prevalent during the first six months of the year, reaching its maximum in March 240 cases, continuing to May 212 cases and declining through June with 136 cases and 49 cases in July and less in the succeeding months until it commences to increase again in December with 64 cases.

The mixed infections also occurred in January, February, March, April and May; and the explanation is inasmuch as the latter invariably commenced in one or two roomed shacks that these are the months for foetid atmospheres in many homes, the season of closed doors and windows, bad hygiene, especially bad ventilation.

Families with a common living room and sleeping room are, in the winter especially prone to every form of infectious disease and these diseases show marked virulence in such homes.

Rural Municipalities—continued	
No. 165	No. 63.....
No. 69	No. 185.....
No. 35	No. 195.....
No. 73	No. 193.....
No. 403	No. 229.....
No. 275	No. 128.....
No. 375	No. 125.....
No. 183	No. 131.....
No. 121	No. 155.....
No. 40	No. 151.....
No. 67	No. 307.....
No. 434	No. 107.....
No. 130	No. 194.....
No. 245	No. 122.....
No. 72	No. 429.....
No. 341	No. 343.....
No. 336	No. 158.....
No. 213	No. 78.....
No. 127	No. 493.....
No. 279	No. 219.....
No. 74	No. 133.....
No. 100	No. 644.....
No. 137	Cases of mixed infection scarlet fever and diphtheria were known to have occurred in:
No. 93	Cupar.....
No. 34	Whitewood.....
No. 186	R.M. No. 218.....
No. 374	R.M. No. 404 (Waindheim).....
No. 96	R.M. No. 168 (Cabri).....
No. 105	R.M. No. 252 (Davidson and Girvin). Total.....



MEASLES

Seasonal Variations	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Cities.....	72	172	226	94	101	66	1	2	3	0	5	1	753
Towns and Villages.....	31	208	81	65	36	76	29	9	3	1	86	14	639
Rural Municipalities.....	53	5	24	41	38	27	2	13	1	1	11	5	221
	156	385	331	210	175	169	32	24	7	2	102	20	1613

Cities

Maximum in March with 226 cases. Minimum in October 0 cases.

Towns and Villages

Maximum in February with 208 cases. Minimum in October 1 case.

Rural Municipalities

Maximum in January with 53 cases. Minimum in October 1 case.

Totals

Maximum in February 305 and minimum in October 2.

The incidence varies considerably throughout the year, but is lowest during July with 32 cases, August with 24 cases, September, 7 cases, October 2 cases and December with 20 cases. The prevalence is greatest as in other diseases in the first six months of the year. The large number of 102 cases in November being more accidental and were all except 19 cases in one locality where a sporadic case occurred and found at that season a large amount of susceptible material from which to constitute an epidemic. Susceptible material was a number of young children of suitable age who never had the disease before.

SMALLPOX

Cities 58; Towns and Villages 115; Rural Municipalities 425. Total cases 598.

Cities 58 cases, as follows:

Locations	Cases	Incidence rate per 1000 persons living
Regina.....	10.....	.57
Saskatoon.....	25.....	.83
Moose Jaw.....	14.....	.46
Prince Albert.....	9.....	.66
Totals:.....	58.....	.47

Smallpox, however, in Saskatchewan is a disease of the country districts and while for other diseases the incidence rate of the cities might be taken a fair criterion of the whole province, for smallpox it cannot. The estimated incidence rate for the whole province is 1.18 per 1000 persons.

TOWNS AND VILLAGES.....	115	Mortlack.....	2
Battleford.....	20	Morsel.....	1
Munster.....	12	Gull Lake.....	1
Watrous.....	9	Rosthern.....	1
Colonsay.....	9	Weyburn.....	1
Fillmore.....	7	Simpson.....	1
Keeler.....	7	Brownlee.....	1
Dalmeny.....	6	Vanguard.....	1
Havorden.....	4	Perdue.....	1
Biggar.....	4	Dilke.....	1
Herbert.....	4	Davidson.....	1
Radville.....	3	Rosetown.....	1
Kerrobert.....	3	Edenwold.....	1
Redvers.....	3	Briercrest.....	1
Young.....	2	Canora.....	1
Langham.....	2	Marcelin.....	1
RURAL MUNICIPALITIES.....	425	No. 2.....	3
No. 369.....	50	No. 312.....	3
No. 525.....	35	No. 438.....	3
No. 439.....	33	No. 109.....	3
No. 463.....	32	No. 61.....	3
No. 461.....	30	No. 187.....	3
No. 346.....	22	No. 429.....	3
No. 6.....	20	No. 191.....	3
No. 374.....	19	No. 342.....	3
No. 375.....	18	No. 223.....	3
No. 460.....	16	No. 165.....	3
No. 468.....	13	No. 161.....	3
No. 222.....	11	No. 69.....	3
No. 194.....	10	No. 163.....	3
No. 158.....	9	No. 403.....	3
No. 3.....	7	No. 494.....	3
No. 408.....	7	No. 497.....	3
No. 404.....	7	No. 470.....	3
No. 12.....	6	No. 437.....	3
No. 221.....	6	No. 3.....	3
No. 406.....	6	No. 93.....	3
No. 32.....	5	No. 92.....	3
No. 248.....	5	No. 373.....	3

Season

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Cities.....	2	8	15	19	8	5	1	0	0	0	0	0	58
Towns and Villages.....	16	24	27	11	5	9	2	2	0	8	6	5	115
Rural Municipalities.....	125	48	75	26	21	45	4	0	6	35	16	24	425
	143	80	117	56	34	59	7	2	6	43	22	29	598

Cities

Maximum in March 15 cases and April 19 cases. Minimum last six months of the year.

Towns and Villages

Maximum in March 27 cases. Minimum in September 0 cases.

Rural Municipalities

Maximum in January 126 cases. Minimum in August 2 cases.

In the totals, the diseases like all other infectious diseases except typhoid fever, the greatest prevalence is during the first six months of the year from January to June, with its maximum in January and March.

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CHICKENPOX

Season	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Cities.....	3	1	9	3	16	32	10	2	1	13	22	22	134
Towns and Villages.....	2	4	0	6	1	4	0	0	0	4	0	0	21
Rural Municipalities.....	3	5	1	6	2	2	0	0	0	5	0	0	24
	8	10	10	15	19	38	10	2	1	22	22	22	134

Cities

Maximum in June 32. Minimum in September and February 1.

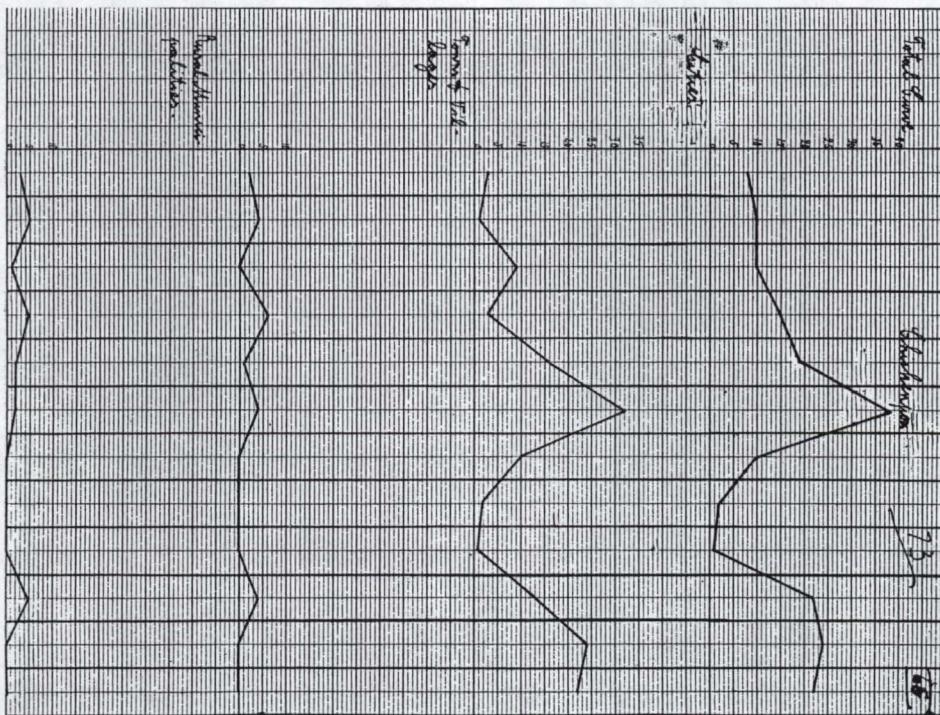
Towns and Villages

Maximum in April 6. Minimum in March, July, August and September, November, December 0.

Rural Municipalities

Maximum in April 6. Minimum in July, August, September, November, December 0.

The total curve shows the usual preference for the first six months of the year with the maximum in June, 38 cases,



WHOOPING COUGH

Cities, 183; Towns and Villages, 61; Rural Municipalities, 60. Total cases, 304.

The greater proportion was undoubtedly never reported.

Locations	Cases	Incidence per 1000 persons living	
Regina.....	70.....	1.47	
Saskatoon.....	94.....	3.13	
Moose Jaw.....	5.....	16	
Prince Albert.....	14.....	1.03	
Totals.....	183.....	1.51	
 TOWNS AND VILLAGES.....			
Lipton.....	12.....	Roche Percee.....	5
Estevan.....	8.....	Waldeck.....	4
Quill Lake.....	7.....	Yorkton.....	3
Weyburn.....	6.....	Wilkie.....	3
Southey.....	6.....	Dundurn.....	1
Fort Qu'Appelle.....	5.....	North Portal.....	1
RURAL MUNICIPALITIES.....	60.....		
No. 340.....	11.....	No. 166.....	3
No. 69.....	10.....	No. 137.....	3
No. 4.....	9.....	No. 342.....	2
No. 376.....	7.....	No. 273.....	2
No. 306.....	6.....	No. 248.....	1
No. 313.....	4.....	No. 375.....	1

Maximum in March 32 cases. Minimum in July 1.

Cities

Towns and Villages

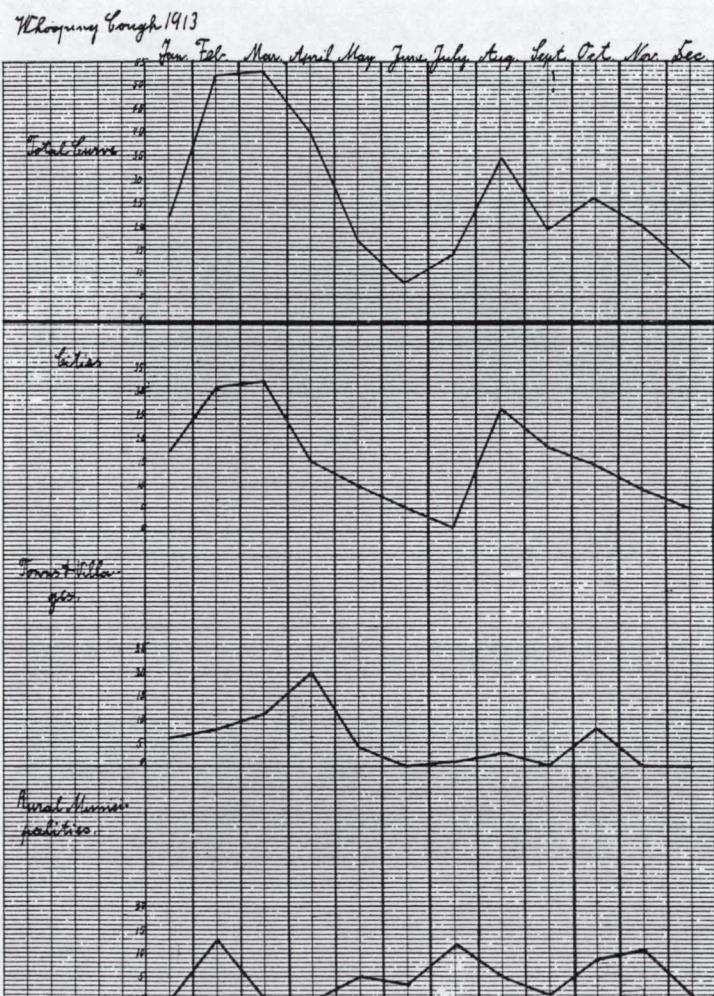
Maximum in April 20 cases. Minimum in June, November and December 0.

Rural Municipalities

Maximum in July 12 cases. Minimum in March and April 0 cases.

Although in the total curve, there were 34 cases in August and 31 in October; this disease also is most prevalent during the first six months of the year with the maximum in February 52 cases, and the minimum in December, 6 cases.

Season	WHOOPING COUGH												Totals
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Cities.....	17.....	31.....	32.....	15.....	10.....	5.....	1.....	26.....	18.....	14.....	9.....	5.....	183
Towns and Villages.....	6.....	8.....	11.....	20.....	4.....	0.....	1.....	3.....	0.....	8.....	6.....	0.....	61
Rural Municipalities.....	0.....	13.....	0.....	0.....	5.....	3.....	12.....	5.....	1.....	9.....	11.....	1.....	60
	—	—	—	—	—	—	—	—	—	—	—	—	304
	23.....	52.....	43.....	35.....	19.....	8.....	14.....	34.....	19.....	31.....	20.....	6.....	



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MUMPS

Total cases 132.

In this disease like whooping cough, probably the greater proportion of the cases were not reported.

Total cases in cities 128, as follows:

Locations	Cases	Incidence per 1000 persons living
Regina.....	24	50
Saskatoon.....	98	2.06
Moose Jaw.....	6	44
Prince Albert.....	0	0
Totals.....	128	1.09

TOWNS AND VILLAGES.....	Cases	Viceroy.....	1
Wakaw.....	6	Watrous.....	1
Indian Head.....	5	Lebret.....	1
Estevan.....	4	Balcarres.....	1
Canora.....	2		

RURAL MUNICIPALITIES.....	Cases	No. 72.....	1
No. 378,.....	1	No. 379.....	1

MUMPS

Season	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Cities.....	16	17	16	25	19	4	3	0	2	4	2	2
Towns and Villages	0	3	3	1	3	4	0	0	0	0	2	5
Rural Municipalities	1	2	0	0	0	0	0	0	0	0	0	0

The total curve, alone need here be considered. The greatest prevalence is in January to May with the maximum of 26 in April, and the minimum in August 0 cases.

TUBERCULOSIS

There were 63 cases reported throughout the year:
Cities 41; Towns and Villages 13; Rural Municipalities 19.

ANTERIOR POLIOMYELITIS

There were five cases reported:

Three in September: 1 in Morse, 2 in Rural Municipality No. 121; 2 in November; 1 in Canora, 1 in Rural Municipality No. 43.

CEREBRO-SPINAL MENINGITIS

There were four cases reported:
One in April: at Wilkie; 2 in May: 1 in Regina, 1 in Rural Municipality No. 306; 1 in October at Rural Municipality 280.

TRACHOMA

There were eight cases reported for this year only:
Two in Regina; 1 in Saskatoon; 1 in Sedley; 2 in Rural Municipality No. 219; 2 in Rural Municipality No. 251.

Cities, 96—Regina, 71; Saskatoon, 16; Moose Jaw, 14; Prince Albert, 6; Swift Current, 2; North Battleford, 8; Weyburn, 1.

Towns and villages, 136.—Canora, 6; Rouleau, 5; Indian Head, 5; Wakaw, 4; Francis, 4; Yellow Grass, Estevan, Ogema, Maple Creek, Cudworth, Buchanan, each 3. 30 towns and 58 villages reported cases.

Rural Municipalities, 138.—R. M. No. 275, 11; R. M. No. 156, 5; R. M. No. 463, R. M. No. 402, R. M. No. 334 and R. M. No. 246, each 4; R. M. No. 431, R. M. No. 344, R. M. No. 63, R. M. No. 126 and R. M. No. 319, each 3. In all 85 rural municipalities provided cases of this disease.

SEASON.—Although this has less to do with pulmonary tuberculosis than with some other communicable diseases it has been calculated and found:

For the Province.—Highest in January and June. Alternating throughout the year up and down the chart with maxima during January, April, June, August, October, December, and minima during February, March, May, July, September, November, of the latter September and November being much lower than the other months mentioned.

For Cities.—The variation for season is slight, being more or less prevalent equally all the year round, but with minima in February and November.

For Towns and Villages.—As in cities, but maxima during January and June, minima in April, September, November.

For Rural Municipalities.—Less variable still than the other two divisions, with maxima in April and July, minima in May, October, November, December.

Cases not officially notified.—Cities, 9; towns and villages, 28; rural municipalities, 67; total, 104.

Besides pulmonary tuberculosis, cases of other forms of tuberculosis were found as follows:

Tubercular glands.....	35	Tubercular testicle.....	4
Tubercular joints.....	33	Tubercular pleurisy.....	3
Tubercular peritonitis..	13	Tubercular abscesses.....	3
Tubercular kidney.....	13	Tubercular meningitis....	2
Tubercular bones.....	10	Tubercular breast.....	1
Tubercular spine.....	6	Tubercular cystitis.....	1
Tubercular laryngeal...	4	Tubercular salpyngitis....	1

Tubercular diseases other than phthisis, 129. Total tubercular cases, $129 + 370 = 499$.

Death Rate.—(a) Rough estimate for towns and country (exclusive of cities):

Towns and villages.—110 cases showed 35 deaths. Death rate, 318.1 per 1,000 cases.

Rural municipalities.—87 cases showed 22 deaths. Death rate, 252.9 per 1,000 cases.

For the province.—197 cases showed 57 deaths. Death rate, 289.3 per 1,000 cases.

SK

(b) Official figures.—“Persons living” calculation:

1. *For all Forms of Tuberculosis*, pulmonary and otherwise.—265 deaths, giving 35.33 per 100,000 persons living.

2. *For Pulmonary Tuberculosis or Consumption*.—179 deaths were officially reported. There were 370 known cases. Giving a death rate of 483.7 per 1,000 cases. Rate for persons living was 24.0 per 100,000. Percentage of total deaths of England, 4.53.

The percentage of total deaths for pulmonary tuberculosis in Saskatchewan is 4.53. In England it is 30 per cent.

The rate per 100,000 persons living for Saskatchewan, 24.0. In England it is 130.0.

In Ontario there were 2,340 deaths from tuberculosis in 1914.

In 1904 there were 148 deaths to each 100,000 of population. This was reduced to 90 deaths for each 100,000 of population in 1914.

TUBERCULOSIS.

SEASONAL CURVE.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Cities.....	12	3	5	13	9	10	7	9	5	6	2	6	87+9+3 laryngeal
Towns and villages.....	16	13	6	5	7	16	6	10	5	10	5	9	108+28
Rural municipalities	8	5	8	10	3	7	10	7	4	3	3	3	71+64 +3
Provincial.....	36	21	19	23	19	33	23	26	14	19	10	18	266+104 +3 laryngeal

NOTE.—+ refers to cases for which no month is specified.

26
10/3
3/3

There were 875 known cases of typhoid fever throughout the province during 1914.

This information is obtained:

- (1) From official notifications by medical health officers.
- (2) From hospital returns.
- (3) From annual returns sent in by secretary treasurers of villages and rural municipalities.

There were notified officially, only 584.

The number of typhoid cases compared with this 875 for 1914, were 1,100 for the previous year, 1913.

There are seven cities in Saskatchewan, with an aggregate population of 128,873.

The number of cases of typhoid in those cities was 308, giving a rate of 2.38 per 1,000 persons living.

In towns and villages with populations ranging from 100 to 5,000, there occurred 345 cases.

In rural municipalities, 222 cases.

Death Rate.—Some estimate of the death rate in cases, may be obtained from the secretary treasurers' annual returns, as follows:

Towns and villages, out of 236 cases, were 22 deaths.

Rural municipalities, out of 149 cases, were 16 deaths.

Giving the death rate for cases as:

For towns and villages, .93 per 1,000 cases, .93 per 100,000.

For the country, 107.3 per 1,000 cases, 1.07 per 100,000.

For the province, 105.3 per 1,000 cases, 1.05 per 100,000.

The total number of official deaths for the province was 92.

Death rate for typhoid fever for Saskatchewan, 12.40 per 100,000 persons living.

Compare with death rate for typhoid fever in England and Wales: 6.0 per 100,000 persons living.

Percentage of typhoid deaths to total deaths, 2.32.

TYPHOID.

SEASONAL CURVE.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Cities.....	14	7	5	13	2	6	17	89	73	37	13	3	279+29
Towns and villages.....	6	2	6	2	10	9	8	55	20	26	18	1	163+182
Rural municipalities	5	..	3	3	4	6	9	6	5	12	8	9	70+78 +74*
	25	9	14	18	16	21	34	150	98	75	39	13	

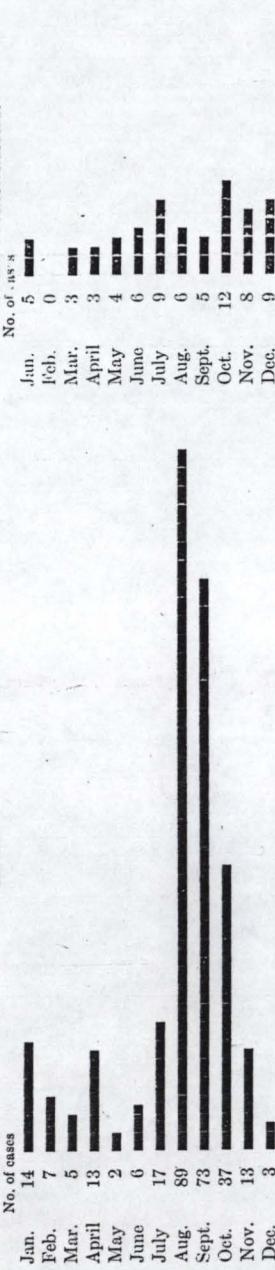
* Cases from rural municipalities treated in hospitals.

CASES IN CITIES.

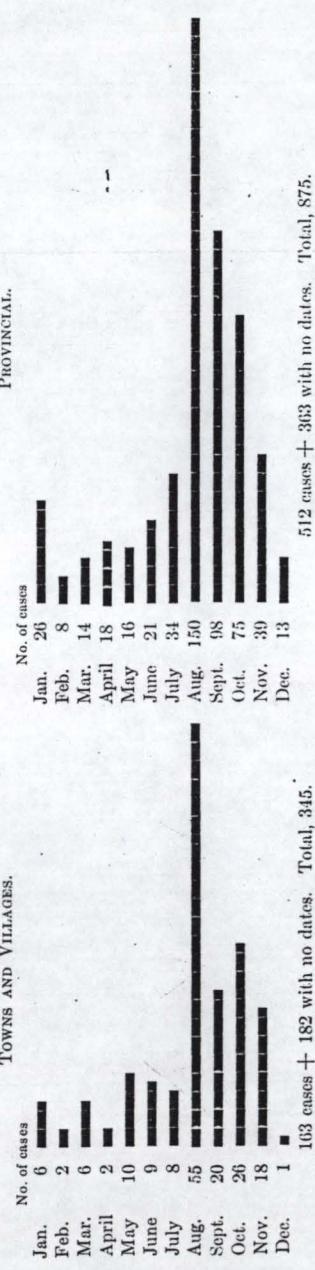
CITIES	Notified	Cases notified but belonging to elsewhere and not to this city	Cases found elsewhere belonging to and to be added to	Total cases belonging to city proper	Rate per 1,000 persons living
Regina.....	148	38	16	126	3.07
Saskatoon.....	33	7	4	30	1.08
Moose Jaw.....	42	..	5	47	1.57
Prince Albert.....	5	..	2	7	.51
Swift Current.....	..	3	53	50	8.67
North Battleford.....	6	6	1.02
Weyburn.....	68 with hospital returns	26	..	42	7.76

TYPHOID FEVER.

CITIES.



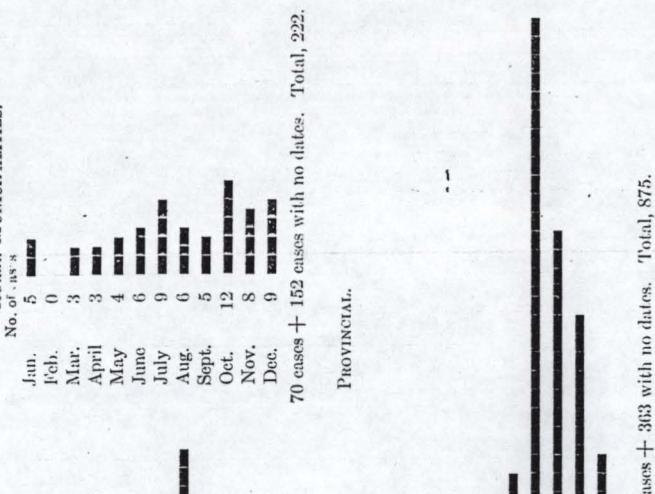
TOWNS AND VILLAGES.



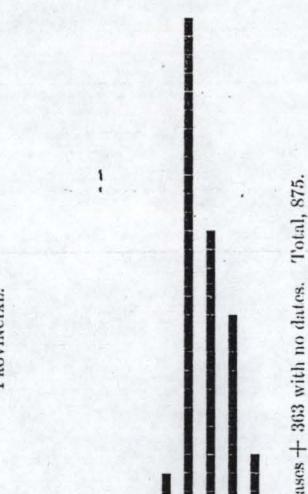
279 cases + 29 cases with no dates. Total, 308.

512 cases + 363 with no dates. Total, 875.

RURAL MUNICIPALITIES.



PROVINCIAL.



SCARLET FEVER.

Total number of cases in the province were 1,031, of which 236 occurred in the 7 different cities; 320 in the towns and villages, and 475 in the rural districts. Of the 1,031, 31 were known to be mixed cases of diphtheria and scarlet fever, but if accurate data were obtainable many more would be reckoned in this group.

Out of 236 in the cities, Regina showed, 92; Saskatoon, 66; Moose Jaw, 13; Prince Albert, 4; Swift Current, 7; Weyburn, 44; North Battleford, 0;

Out of 320 in the towns and villages, Moosomin, 40; Rosthern, 25; Springside, 22; Balcarres, 18; Wilkie, 18; Cupar, 14, of which 13 were mixed infection; Aneroid, 13; Star City, 10;

And out of the 475 in rural municipalities, R. M. No. 465, 40; R. M. No. 434, 36; R. M. No. 401, 27, of which 9 were mixed infection; R. M. No. 403, 26, of which 2 were mixed, etc.

"Mixed infection scarlet fever and diphtheria," occurred in Regina, Cupar, Watrous, R. M. No. 403, R. M. No. 401, R. M. No. 459 and R. M. No. 322.

Cases not officially notified were cities, 11; towns and villages, 32; rural municipalities, 111; total, 154.

During 1914 the season shows highest numbers for the province in January and March, lowest in August and November, while April, May and June take a middle mark:

For cities.—Highest in February and March, lowest in August and November, with a marked increase in May and September.

For towns and villages.—Highest in January and March, lowest in August and November, with a marked rise also in April, May, June, September and December.

For rural municipalities.—Highest in June; high in January and March; not so high in February, April and May; from June, the highest, there is a sudden drop to nearly nil in August and September.

Death Rate—

Towns and villages.—Out of 419 cases were 33 deaths. Death rate, 78.7 per 1,000 cases.

Rural municipalities.—Out of 332 cases were 28 deaths. Death rate, 84.3 per 1,000 cases.

For the province (exclusive of the cities).—Death rate, 78.7 per 1,000 cases.

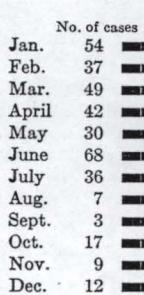
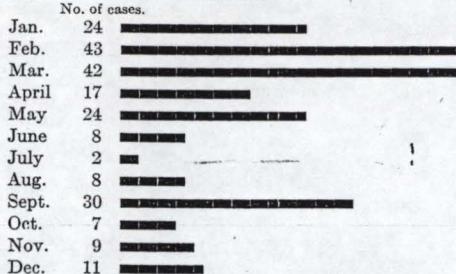
The official number of deaths sent in by registrars, 25, while the number of known cases were 1,031. This would give an official death rate of 24.2 as compared with the rough estimate of 78.7.

SCARLET FEVER.

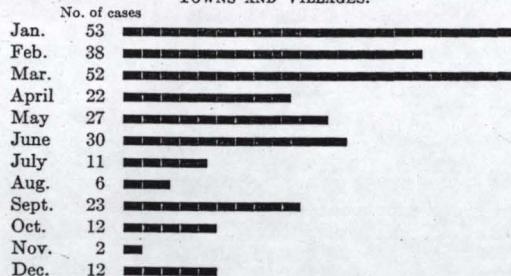
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Cities	24	43	42	17	24	8	2	8	30	7	9	11	225+11
Towns and villages	53	38	52	22	27	30	11	6	23	12	2	12	288+32
Rural municipalities	54	37	49	42	30	68	36	7	3	17	9	12	364+111
Total.....	131	118	143	81	81	106	49	21	56	36	20	35	877+154

SCARLET FEVER

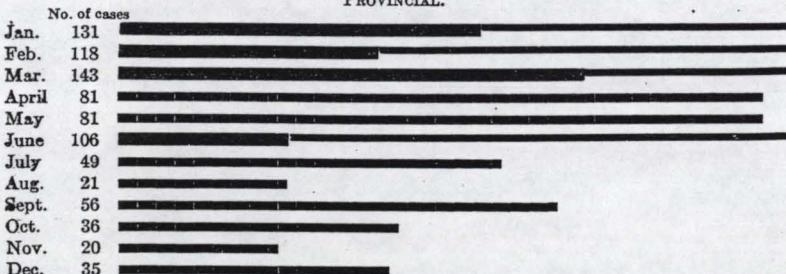
CITIES.



TOWNS AND VILLAGES.



PROVINCIAL.



SK

DIPHTHERIA.

Number of cases in province, 602; 31 were mixed infection. (See scarlet fever.)

Cities, 194.—Regina, 114; Saskatoon, 50; Moose Jaw, 17; Prince Albert, 4; Swift Current, 1; North Battleford, 2; Weyburn, 6.

Towns and villages, 183.—Indian Head, 37; Kerrobert, 21; Qu'Appelle, 6; Cupar, 5; Holdfast, 5; Francis, Gull Lake, Rouleau, Estevan, Radville, Rosthern, 4 each.

Rural municipalities, 225.—R. M. No. 69, 32; R. M. No. 313, 16; R. M. No. 6, 8; R. M. No. 158, R. M. No. 457, R. M. No. 67, R. M. No. 168, R. M. No. 459 and R. M. No. 379, 6 each; R. M. No. 458 and R. M. No. 403, 5 each.

Mixed infection occurred as in the scarlet fever returns.—Kerrobert, 1; R. M. No. 219, 2.

Cases not officially reported were.—Cities, 12; towns and villages, 27; rural municipalities, 69. Total, 108.

Death Rate—

a. 1. Towns and villages, out of 215 cases were 22 deaths. Death rate, 102.3 per 1,000 cases.

2. Rural municipalities, out of 155 cases were 16 deaths. Death rate, 103.2 per 1,000 cases.

3. For the province this gives a death rate per case of 102.7.

b. The official number of deaths sent in by registrars was 42. There were 602 cases of the disease, giving the official death rate, 69.5 per 1,000 cases.

DIPHTHERIA.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Cities.....	17	6	13	18	14	12	7	8	12	26	27	24	184+12 4 mixed
Towns and villages.....	10	10	18	21	22	21	9	25	7	3	1	9	156+27 3 mixed
Rural municipalities	12	11	23	13	19	18	21	25	2	5	4	3	156+69 9 mixed
Total.....	39	27	54	52	55	51	37	58	21	34	32	36	496+108 16 mixed

Death Rate—

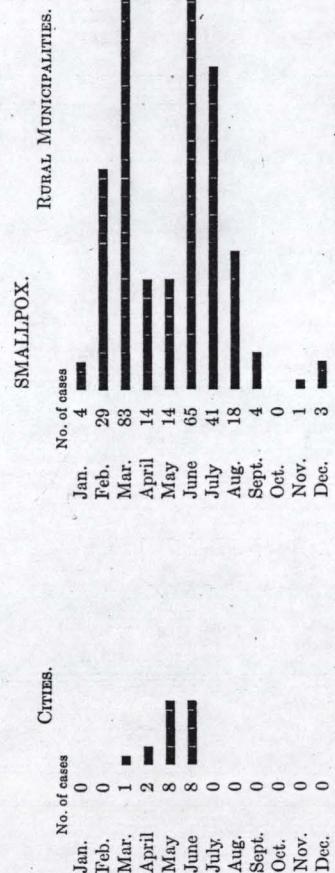
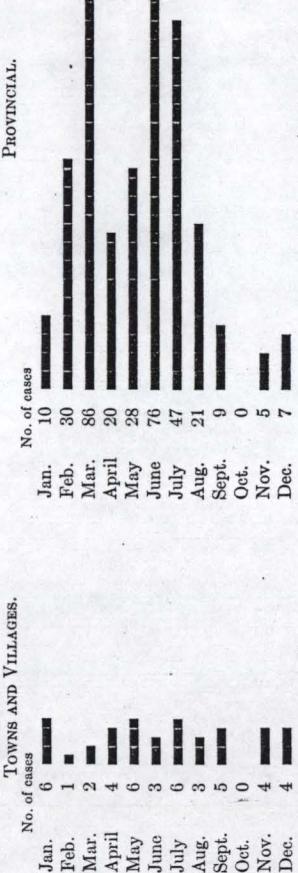
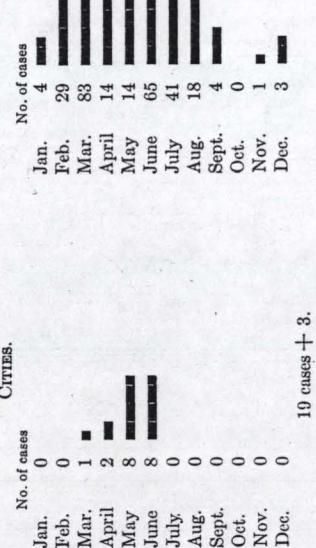
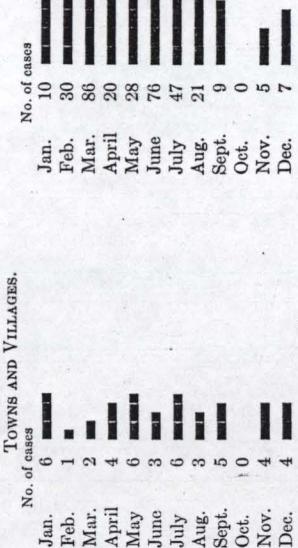
- a. In the rough estimate out of 199 cases were no deaths.
 b. Official estimates:

Number of deaths.....	2
Number of cases.....	392

Case death rate 5.1 per 1,000 cases of the disease. The death rate for persons living was .26 per 100,000 persons living and the per cent. of total deaths, .05.

SMALLPOX.**SEASONAL CURVE.**

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Cities.....	1	2	8	8	19+3+3 (22)
Towns and villages.....	6	1	2	4	6	3	6	3	5	..	4	4	44+11 (55)
Rural municipalities	4	29	83	14	14	65	41	18	4	..	1	3	276+36 +3 from cities (315)
Provincial.....	10	30	86	20	28	76	47	21	9	..	5	7	339+53 (392)

RURAL MUNICIPALITIES.**PROVINCIAL.****CITIES.****TOWNS AND VILLAGES.**

MEASLES.

No. of cases

Jan.	4
Feb.	18
Mar.	27
April	79
May	133
June	25
July	10
Aug.	5
Sept.	0
Oct.	2
Nov.	1
Dec.	3

CITIES.

307 cases + 5 no date.

TOWNS AND VILLAGES.

No. of cases

Jan.	21
Feb.	9
Mar.	11
April	10
May	28
June	16
July	6
Aug.	5
Sept.	0
Oct.	9
Nov.	2
Dec.	1

118 cases + 77 no date.

MEASLES—Continued.

RURAL MUNICIPALITIES.

No. of cases

Jan.	2
Feb.	4
Mar.	23
April	44
May	51
June	15
July	51
Aug.	7
Sept.	0
Oct.	0
Nov.	1
Dec.	3

201 cases + 129 no date.

PROVINCIAL.

No. of cases.

Jan.	27
Feb.	31
Mar.	61
April	133
May	212
June	56
July	67
Aug.	17
Sept.	0
Oct.	11
Nov.	4
Dec.	7

626 cases + 211 no date.

CHICKENPOX.

Number of known cases in the province, 685:

There must have been very many more, but the chief significance of this disease is to have it differentiated from smallpox; the similarity between the two diseases in Saskatchewan is often considerable, owing to the form taken by smallpox in this country. The history, age of persons affected, and behaviour of the disease are important in diagnosis.

Cities, 462.—Regina, 140; Saskatoon, 115; Moose Jaw, 74; Prince Albert, 55; North Battleford, 70; Weyburn, 8.

Towns and villages, 126.—Indian Head, 13; Biggar, Old Battleford, Young, Wynyard, Drinkwater, Watrous, 6 each; Elbow, Qu'Appelle, 5 each; Morse, Yorkton, Perdue, 4 each. 28 towns and villages are represented.

Rural municipalities, 97.—R. M. No. 336 and R. M. No. 6, 9 each; R. M. No. 376 and R. M. No. 195, 8 each; R. M. No. 165, R. M. No. 4 and R. M. No. 186, 7 each; R. M. No. 110, R. M. No. 152 and R. M. No. 33, 6 each. 26 rural municipalities show the disease.

There were not officially notified, 17: Cities, 0; towns and villages, 12; rural municipalities, 5. These figures are very far from correct, as the information at hand of unreported cases for other diseases is not available for chickenpox.

Season.—Although as a rule the season for chickenpox closely approximates smallpox, it may occasionally be a guide in differentiating the two diseases.

While for the province smallpox in 1914 had two maxima in March and June and a very low rate in the beginning and end of the year, chickenpox showed a special prevalence at the end of the year, the highest marks being reached in November and December in cities, towns and country alike. There was also a very decided rise in March and April.

Cities.—Chickenpox highest in March, April, November and December. Smallpox highest in May and June.

Towns and villages.—Chickenpox highest in March and December. Smallpox varies little throughout the whole year, but reaches its highest marks in January, May, July, September and November.

Rural municipalities.—Chickenpox highest in February and October. Smallpox highest in March and June.

Death Rate.—Chickenpox, 0.

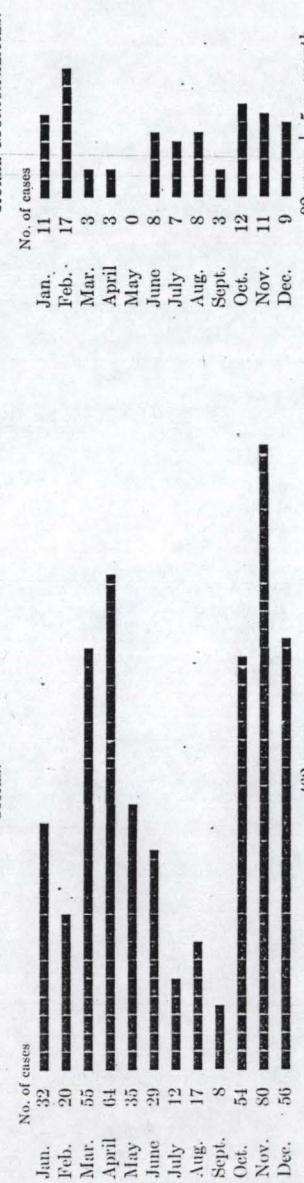
CHICKENPOX.

SEASONAL CURVE.

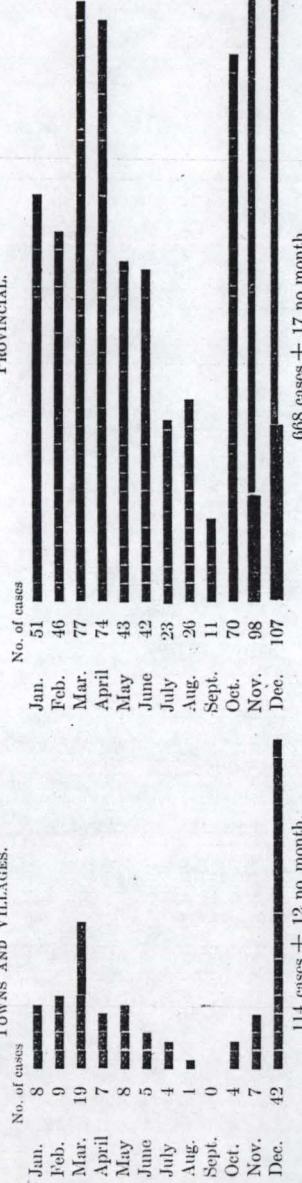
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Cities.....	32	20	55	64	35	29	12	17	8	54	80	56	462
Towns and villages.....	8	9	19	7	8	5	4	1	...	4	7	42	114+12
Rural municipalities.....	11	17	3	3	..	8	7	8	3	12	11	9	92+5
	51	46	77	74	43	42	23	26	11	70	98	107	668+17

CHICKENPOX.

CITIES.



PROVINCIAL.



WHOOPING COUGH.

There were for the province, known cases, 241:

Cities, 139.—Regina, 101; Saskatoon, 6; Moose Jaw, 3; North Battleford, 28; Weyburn, 1.

Towns and villages, 79.—Morse, 26; Kincaid, 14; Loreburn, 8; Edam, 8; Fenwood, 5.

Rural municipalities, 23.—R. M. No. 166, R. M. No. 224 and R. M. No. 156, each 4.

There must have been innumerable other cases, but for this ordinarily slight disease comparatively few are either officially notified or other information obtained.

Season.—The disease is prevalent all the year round, commencing with 9 cases in January, continuing on a level to 11 in March, thence a more or less rapid rise to 40 in May, the highest point, slowly declines to 32 in July and thence to 10 in August and follows thereafter an irregular course with a maximum again of 19 in December.

Death Rate.—Official number of deaths, 27. Rate per 100,000, 3.60. Percentage of total deaths, .68. Any calculation for the case rate would be of no value on account of the scanty information.

ERYSIPELAS.

Known cases in the province, 47:

Cities, 33. Towns and villages, 9. Rural districts, 5.

Season.—All the year round.

Death Rate.—Number of deaths, 16. Rate per 100,000 persons living, 2.13. Percentage of erysipelas to the total deaths, .40.

MUMPS.

Known cases in the province, 172, although there must have been many more.

Cities, 96.—Regina, 80; Saskatoon, 11; Moose Jaw, 3; Prince Albert, 2.

Towns and villages, 46.

Rural municipalities, 30.

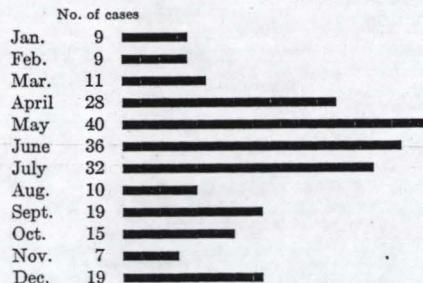
Season.—Highest in March and November and lowest in June, July, August, September, October and December.

Cases not officially notified, 18.

Death Rate., 0.

WHOOPING COUGH, 1914.

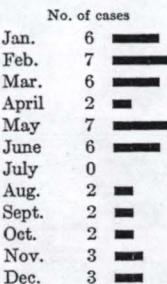
PROVINCIAL.



235 cases + 6 no date.

ERYSIPELAS.

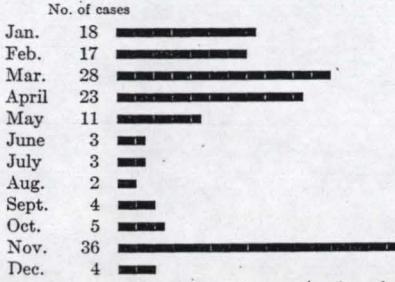
PROVINCIAL.



46 cases.

MUMPS.

PROVINCIAL.



154 cases + 18 no date.

MENINGITIS.

Information in regard to meningitis, is obtained only from vital statistics returns.

There has been marked neglect on the part of medical men and medical health officers in not reporting cases of this disease. Regulations call for reporting cases of both epidemic cerebro-spinal meningitis and tuberculous. It is then incumbent on the medical profession to report to the Bureau of Public Health cases of meningitis, whether epidemic cerebro-spinal or tubercular.

During the year 1914, there were 17 deaths from tubercular meningitis, and 56 deaths from epidemic cerebro-spinal meningitis. Of the total number of 73, only 3 were reported.

As the tubercular type of the disease is invariably fatal, the number of deaths may be taken as very nearly the correct number of cases occurring.

With the epidemic cerebro-spinal meningitis, the death rate is usually stated as being about 80 per cent. We would, therefore, conclude that there have been about 70 cases of this type in Saskatchewan during the past year.

Tubercular meningitis: Cities, 6; towns, 5; rural municipalities, 6; total, 17.

Death rate per 100,000 persons living, 2.2.

Epidemic cerebro-spinal meningitis: Cities, 16; towns, 11; rural municipalities, 29; total, 56.

Death rate per 100,000 persons living, 7.4.

Percentage of total deaths in province, 1.4.

Seasonal Curve.—Tubercular meningitis, reached its maxima in April and August and minima in July and December. The very nature of the disease would suggest its prevalence during any season.

The epidemic type of this disease was prevalent chiefly during the early part of the year and the summer, falling perceptibly during the autumn months with maximum in August, minimum in November.

MENINGITIS (Epidemic Cerebrospinal).

PROVINCIAL.

	No. of cases
Jan.	7
Feb.	5
Mar.	7
April	4
May	2
June	6
July	2
Aug.	8
Sept.	2
Oct.	2
Nov.	1
Dec.	2

48 cases.

MENINGITIS (Tubercular).

PROVINCIAL.

	No. of cases
Jan.	2
Feb.	2
Mar.	1
April	3
May	1
June	2
July	0
Aug.	3
Sept.	1
Oct.	0
Nov.	2
Dec.	0

17 cases.

TRACHOMA.

There were 712 cases in Saskatchewan for the past two years and during 1914 fresh cases were found in the following places: Regina, 1; Saskatoon, 1; North Battleford, 1; Sedley, 1; Vibank, 2; Holdfast, 1; Morse, 1; Dilke, 1; Odessa, 2; Rush Lake, 1; R. M. No. 216, 1; R. M. No. 461, 1; R. M. No. 124, 1; R. M. No. 158, 1; R. M. No. 112, 1; R. M. No. 142, 2; R. M. No. 172, 4; R. M. No. 231, 2.

Trachoma in the Province of Saskatchewan, Canada, is as elsewhere, beginning to confront us as a most serious problem of the near future. How to control this disease, to say nothing of curing it, is a vital question. The Provincial Bureau of Public Health is endeavouring to prevent the spread of this disease from all infected localities. The Indian Reserves with their numerous cases of trachoma, are under the care and supervision of the Federal Government.

There are many nationalities in the province, and at present the disease is practically confined to aliens who, fortunately, live mostly in settlements, and, as yet, have not become scattered about among the English-speaking people to much extent. We find trachoma most prevalent among the German-speaking Russians, Hungarians, Austrians, Serbians and Roumanians.

The localities where these people live are similar in climatic and topographical conditions. The elevation is about 2,000 feet. The land is level or undulating prairie with no trees; and the soil is a sandy loam of glacial deposit. At certain times of the year, wind storms are prevalent and while sand is not regarded as having any influence in producing trachoma, still, the constant irritation of the mucous membranes lowers their resistance. Rubbing with the fingers often grafts on to a chronic trachoma an acute conjunctivitis. In the winter and spring months, while the snow is lying on the ground, the bright sunlight causes more cases of snow-blindness than are found among uninfected localities. The excessive coldness of our climate in winter also has its ill effects, as many people crowd into small and most insanitary quarters; and it is from these places that multiple acute forms of inflammation appear to spring.

The following table shows the expense by divisions, and also indicates the per capita rate for each phase of the work:

Division	Cost of administration	Per capita rate
Vital Statistics.....	\$32,475.03	4.5 cents
Venerable Disease.....	40,795.03	5.3 cents
Sanitation.....	26,523.89	8.5 cents
Laboratory.....	18,204.55	2.3 cents
Communicable Disease, Child Wel- fare, and Administration.....	42,025.53	5.5 cents
Care of Indigents.....	24,808.80	3.4 cents
Total.....	\$184,832.83	24.3 cents

A considerable proportion of expense on venereal disease, amounting to over ten thousand dollars (\$10,000.00), occurred in the purchase of furniture and equipment. Such expense is likely to occur but once in several years.

Applying the 1921 census figures of seven hundred and fifty-seven thousand five hundred and ten (757,510) to the total expenditures results in a per capita rate for the province of 58.3 cents, of which 34 cents was for hospitals, and 3.4 cents for the "Care of Indigents."

The balance of 20.9 cents may be termed "the per capita rate for prevention and control of disease in Saskatchewan."

These expenditures compare very favourably with other provinces of the Dominion, and to illustrate this the figures for Alberta during the same period are cited:-

Total expenses of Alberta Department of Health.....	\$348,882.20
Population, 1921 census.....	581,995
Total per capita rate.....	60 cents

Hospital grants totalled \$185,724.00, being a rate of 31 cents or 3 cents below that of Saskatchewan.

Official figures do not include "Maintenance of Clinics" in the Public Health figures. These have therefore been added to make comparison.

It will be observed that the *total per capita rate* is one and two-thirds cents higher than Saskatchewan.

Statistics in connection with this report are based on the following census figures for 1921:

Census of Province.	757,510
Census of Cities.	97,833
Census of Towns.	60,970
Census of Villages.	60,155
Census of Rural Municipalities.	538,552

COMMUNIST DYNASTIES PREVAIL IN 1021

HOSPITALS.

The matter of increasing the services rendered by the hospital to the patient, received considerable attention during 1922, and it is very encouraging to find that each hospital is co-operating in an endeavour to be 100 per cent. efficient. More attention is being given such matters as regular staff meetings, at which the work of the hospital is discussed; more complete records of patients are being written up, which is much to the interest of the patient; more X-ray facilities are being furnished, which aids in proper diagnosis and treatment, and more laboratory facilities are being made use of. Forty hospitals, of which 12 are Union hospitals, furnished 2,155 beds in the year 1922. Thirty thousand, seven hundred and two (30,702) patients were admitted to the hospitals, making a total of 523,314 days, the average cost per patient per day being \$3.18 cents. 1,175 obstetrical cases were cared for, and 11,280 general anaesthetics were given. The Government grant paid amounted to \$263,538 for the calendar year. One new hospital was opened during the year, that at Macklin.

During the year licenses were issued to 79 embalmers and 26 undertakers.

In July an examination for embalmers was conducted at Moose Jaw, when four candidates sat and all received diplomas.

Statistics in connection with this report are based on the following census figures for 1922:

Province	785,508
Cities	101,449
Towns	63,244
Villages	62,378
Rural municipalities	558,451

The Commissioner of Public Health administers the following Acts:

1. The Public Health Act.
 2. The Vital Statistics Act.
 3. The Union Hospital Act.
 4. An Act to Regulate Public Aid to Hospitals.
 5. The Venereal Disease Act.

During the fiscal year ended April 30, 1922, the net expenditure of the Bureau of Public Health in the administration of the Acts above mentioned, amounted to \$494,133.46, subdivided as follows:

General administration, control of communicable diseases, sanitation and child welfare	\$ 93,784.30
Venereal disease	21,173.80
Vital statistics	37,801.83
Aid to hospitals	265,502.00
Laboratory	22,537.51
Antitoxin	7,255.00
General expenses and unforeseen	46,079.02

DIVISION OF COMMUNICABLE DISEASES

TABLE III—MORBIDITY FROM COMMON COMMUNICABLE DISEASES IN CITIES—RATE PER 1,000 POPULATION

City	Chickenpox Rate	Diphtheria Rate	Measles Rate	Mumps Rate	Scarlet fever Rate	Smallpox Rate	Typhoid and Para-typhoid Rate	Whooping cough Rate	Others Rate	Total	Total rate	
Moose Jaw	180	8.9	25	1.1	882	41.6	68	3.2	12	.6	2	.01
North Battleford	59	13.1	6	1.3	5	1.1	1	.2	5	1.1	4	.9
Prince Albert	9	1.1	17	2.0	55	6.6	13	1.5	7	.8	3	.4
Regina	277	7.3	52	1.4	410	10.9	416	11.0	87	2.3	1	.03
Saskatoon	132	4.6	42	1.5	140	5.0	10	.4	186	6.9	8	.3
Swift Current	24	6.1	4	1.0	17	4.4	12	.4
Weyburn	6	1.7	4	1.1	6	1.7	4	1.1	1	.3	1	.3
Totals	687	6.4	150	1.4	1,498	13.9	512	4.8	315	3.0	12	.1
											37	.34
											667	6.2
											527	4,405
												40.9

TABLE IV—MONTHLY DISTRIBUTION OF COMMUNICABLE DISEASE.

Disease	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Chickenpox	122	78	117	64	72	106	102	35	22	32	106	90	946
Diphtheria	70	54	31	32	28	57	59	41	41	27	77	64	581
Measles	45	86	21	67	105	164	14	12	7	56	503	839	1,919
Mumps	3	4	31	23	61	65	92	29	34	19	90	147	598
Scarlet Fever	92	98	112	70	39	57	57	28	30	23	59	48	713
Smallpox	1	4	...	1	2	8	...	1	4	25	8	8	62
Typhoid and Para-typhoid Fevers	5	2	3	2	3	16	27	41	40	27	25	32	223
Whooping Cough	16	24	29	44	71	66	125	130	143	62	80	70	860
Tuberculosis (new)	6	7	2	8	2	6	6	5	2	1	3	4	52
Trachoma (new)	2	3	1	211	...	12	1	230
Erysipelas	2	2	4	1	4	1	2	1	1	1	1	1	20
Influenza (epidemic)	2	5	...	1	5	1	1	15
Pneumonia	1	...	2	2	6	1	1	1	1	2	16
Actinomycosis	1	1
Infantile Paralysis	1	6	10	17	2	2	...	38
Cerebro-spinal Meningitis	1	2	1	1	4	...	1	1	1	12
Puerperal Fever	1	1	2
Encephalitis Lethargica	1	3	1	5
Rubella	3	172	11	38	76	376	64	3	3	16	9	27	798
Impetigo Contagiosa	2	1	1	1	...	1	...	7	1	...	1	1	15
Sore Throat (epidemic)	4	4
Scabies	7	7
Rabies	1	1
Total	372	540	365	356	474	929	558	347	573	294	975	1,335	7,118

TABLE IV—MONTHLY DISTRIBUTION OF COMMUNICABLE DISEASE MORBIDITY.

Disease	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Chickenpox	105	104	93	70	134	132	100	56	38	204	255	166	1,457
Diphtheria and Croup	39	43	49	24	28	24	35	26	36	85	58	23	470
Measles	1,393	1,120	1,024	725	533	233	686	58	34	62	42	129	6,139
Mumps	158	93	248	177	180	39	173	16	38	49	69	159	1,399
Scarlet Fever	121	104	103	51	53	34	49	36	25	83	98	65	822
Smallpox	25	34	17	38	30	18	29	31	6	23	59	27	337
Typhoid and Para-typhoid	5	4	3	...	10	9	7	7	15	17	34	4	115
Whooping Cough	75	96	53	54	43	24	30	41	31	44	39	8	538
Tuberculosis (new)	7	9	3	1	1	4	5	1	1	2	21	2	57
Trachoma (new)	1	1	2	17	1	12	34
Erysipelas	3	3	3	1	2	1	...	1	1	...	7	1	23
Influenza (epidemic)	1	10	4	...	1	1	...	17
Pneumonia	8	4	8	6	2	1	...	4	1	...	34
Infantile Paralysis	1	1	1	3
Cerebro-spinal Meningitis	1	3	4
Puerperal Fever	2	2
Encephalitis Lethargica	1	...	2	3
Rubella	17	99	278	346	60	50	24	...	2	1	3	3	883
Impetigo Contagiosa	3	1	1	...	3	...	3	12	...	23
Sore Throat (epidemic)	1	1	1	3
Scabies	1	17	1	19
Bacillary Dysentery	2	2
Leprosy	1	1
Totals	1,958	1,718	1,884	1,503	1,135	637	1,140	277	231	596	717	589	12,385

TABLE V—DIPHTHERIA AND CROUP INCIDENCE.

DISTRIBUTION AND AGE GROUPS.

Age Group	Cities			Towns			Villages			Rural Municipalities			Total			
	Male	Female	Not Stated	Male	Female	Not Stated	Male	Female	Not Stated	Male	Female	Not Stated	Male	Female	Not Stated	Aggregate
1 day to 1 year.....	1	1	1	...	1	2	...	3
1 year and under 6 years	13	18	...	5	5	...	14	8	...	21	20	3	53	51	3	107
6 years and under 10 years	18	21	...	11	6	...	7	11	...	18	26	1	54	64	1	119
10 years and under 15 years	12	24	...	7	5	...	4	7	...	10	21	...	33	60	...	93
15 years and under 20 years	3	9	...	4	5	1	...	4	...	5	7	...	12	25	1	38
20 years and over.....	11	25	...	4	7	...	6	9	...	11	14	...	32	55	...	87
Age not stated.....	3	5	1	2	2	2	...	1	...	1	2	4	6	10	7	23
	60	102	1	33	34	3	31	40	...	67	91	8	191	267	12	470
Totals				163			70			71			166			470

PRE-SCHOOL AND SCHOOL AGE GROUPS

Under 6 years 110 = 23.5%
 6 years and under 15 years 212 = 45.0%

TABLE III.—MORBIDITY FROM COMMON COMMUNICABLE DISEASES IN CITIES—RATE PER 1,000 POPULATION, 1927.

	Chickenpox	Rate	Diphtheria and croup	Rate	Measles	Mumps	Scarlet fever	Smallpox	Typhoid and para-typhoid fever	Whooping cough	Others	Total	Rate
Moose Jaw.....	126	6.0	54	2.6	15	386	53	64	5	29	13	745	36.5
North Battleford.....	0	0.2	1	0.2	1	25	3	0	0	1	0	31	6.2
Prince Albert.....	27	3.3	11	1.4	139	17.1	28	35	4	2	1	221	27.3
Regina.....	459	11.7	32	0.8	56	1.5	331	8.5	8	0.2	17	1,250	30.2
Saskatoon.....	264	8.2	32	1.0	155	5.0	857	27.0	30	1.0	45	1,569	49.9
Swift Current.....	8	1.8	6	1.4	0	...	3	0.7	7	1.6	0	72	16.7
Weyburn.....	No reports rendered.												
Totals.....	884	7.8	136	1.2	366	3.2	1,630	14.4	467	4.1	122	1,112	34.4

TABLE IV.—MONTHLY DISTRIBUTION OF COMMUNICABLE DISEASE MORBIDITY.

Disease	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Chickenpox.....	236	117	69	54	45	90	194	54	45	93	85	167	1,249
Diphtheria and Croup.....	57	33	25	17	24	22	34	23	26	37	43	28	369
Measles.....	55	80	49	230	52	35	81	16	11	48	35	22	714
Mumps.....	389	305	181	219	177	94	379	37	43	83	112	105	2,124
Scarlet fever.....	124	126	145	97	40	79	63	52	31	76	78	102	1,013
Smallpox.....	20	19	5	9	20	18	22	24	73	24	37	69	310
Trachoma (new).....	1	5	.	2	.	.	15	23
Tuberculosis (new).....	7	5	2	1	2	1	15	1	9	5	1	2	51
Typhoid fever.....	4	1	1	8	5	3	9	8	26	19	4	3	91
Whooping cough.....	15	20	45	25	12	35	34	14	34	40	31	44	349
Cerebro-spinal meningitis.....	1	3	4	.	.	.	1	.	.	.	2	1	12
Pneumonia.....	3	5	7	1	1	5	2	2	27
Erysipelas.....	5	3	2	1	4	1	3	4	27
Infantile paralysis.....	.	.	.	1	.	.	.	1	3	3	1	.	8
Anthrax.....	1
Encephalitis lethargica.....	1	1	2
Rubella.....	6	1	5	5	5	2	.	1	1	1	3	4	30
Influenza—epidemic.....	5	25	5	5	.	2	.	.	3	.	.	.	45
Puerperal fever.....	4	1	5
Sore throat—epidemic.....	.	.	4	.	.	1	2	.	2	1	2	.	11
Diphtheria carrier.....	1	1	8	.	10
Impetigo contagiosa.....	1	33	1	.	4	6	4	3	3	7	11	.	73
Scabies.....	1	24	4	.	.	2	6	3	.	7	15	.	62
Conjunctivitis—acute infectious.....	1	1	.	.	2
	930	800	552	673	392	396	852	238	316	449	479	571	6,648

A comparison of the reports of typhoid fever for 1910 with the previous year 1909 is somewhat disappointing. There was a decrease of 244 cases reported, but in spite of this fact there was an increase of fifty-six deaths.

A comparison of case reports from the cities

Year	Regina	Moose Jaw	Saskatoon	Prince Albert	Total
1909 -----	87	243	111	126	567
1910 -----	48	141	153	54	396
	39	102	42	72	171

During the year urban typhoid fever has decreased 171 cases. Saskatoon has an increase of 42 cases. It is a well known fact, however, that many cities have a very high rate of infectious cases and deaths in comparison to neighbouring cities, simply because the health department of that city put forward greater effort to gather in all the cases accurately.

Two factors play a great part in the cause of urban typhoid:

- (1) Water supply.
- (2) Sewage Disposal.

In the report of 1909 emphasis was placed upon the fact, "that cities should do away with backyard closets and connection with sewers should be made obligatory." Again this must be emphasised. Not only should cities see that they have such a bylaw to carry this clause into effect, but they should also give every possible assistance to their medical health officer and his health department to enforce such a bylaw.

In connection with the importance of a bountiful supply of good water in reducing the typhoid rate of a city, the following extract from the report of W. J. Francis, the expert employed by the City of Moose Jaw to investigate and report upon a water supply for that city, is of interest:

TYPHOID FEVER.

"The purity of the domestic supply of a municipality is measured, in a sense, by the amount of typhoid fever present.

It seems impossible to obtain anything approaching complete records of typhoid fever cases in Moose Jaw.

The table below shows the cases of typhoid fever in Moose Jaw by months for the past four years. The numbers of cases were supplied at our request by Mr. Heal, city clerk, who obtained them from the matron of the Moose Jaw hospital. The matron stated that these figures are only for patients giving Moose Jaw as their post office.

While on the one hand many of these hospital cases were doubtless from the surrounding country it is equally certain that there were many cases in the city itself treated privately and not included in these records.

List of Typhoid Fever Cases during years 1907, 1908, 1909, 1910, 1911.

	1907	1908	1909	1910	1911
January -----	1	--	2	3	3
February -----	2	--	--	--	1
March -----	--	--	1	--	1
April -----	1	--	1	6	5
May -----	1	3	--	--	--
June -----	--	1	3	5	
July -----	5	2	4	10	
August -----	16	19	52	51	
September -----	16	17	36	52	
October -----	7	5	12	20	
November -----	4	5	12	19	
December -----	--	2	5	4	
Total number of cases-----	53	54	128	170	
Population (approximate) -----	7,000	9,000	12,000	15,000	
Cases per 1,000-----	7.6	6.6	10.67	11.35	
Cases per 100,000-----	760	600	1,067	1,135	

The above table presents some appalling figures. In the absence of any report as to the actual number of deaths we are unable to make exact comparisons with other places but an approximation may be arrived at by reference to similar conditions elsewhere.

In most typhoid fever epidemics about 60 per cent. of all the cases occur in the months of August and September and October. This is well borne out in the case of Moose Jaw, where these three months are by far the heaviest. The reason for this is most likely due to the lowering of the water supply and its increased pollution.

The rate of mortality in typhoid epidemics varies from 5 per cent. to 12 per cent. in private practice and from about 7 per cent. to 18 per cent. in hospital practice the higher figures for the hospitals being due to the more complicated cases and those requiring operations being usually found in them. A fair average for all may be placed at about eight per cent.

Neglecting all possible private cases and assuming a death rate of eight per cent. for the hospital cases listed above, the following figures show the estimated death rate for Moose Jaw per 100,000 of population:

1907-----	61	1909-----	85
1908-----	48	1910-----	91

Even if these figures may be double of the actual death rate, the results are still awful. The most recent authentic figures available on the death rate from typhoid fever are shown for several countries in the following table.