Indian and Northern Affaires indiennes Affairs Canada et du Nord Canada



## **Indian and Northern Affairs Canada**

# **Fire Loss Report**

1999



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Affaires indiennes et du Nord Canada Rapport 1999 des pertes causées par les incendies

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The front cover shows the 2nd.place prize winner in the 2000 National Fire Protection Poster Contest for children grade 7 and up by April Rollinmud, Grade 10/11, Morley Community School, P.O. Box 238, Morley, Alberta.

EA-HQ-01-01

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Prepared for: Indian and Northern Affairs Canada by: Real Property Services for INAC, Headquarters Public Works and Government Services Canada



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## **1.0 INTRODUCTION**

This report provides fire loss statistics in First Nation communities for the 1999 calendar year along with comparative information from previous years. Data has been interpreted and analysed in a manner consistent with previous years' reporting methods. It should be emphasized that the data is based only on information reported by participating First Nations.

Statistical information is presented in graph and tabular form and comparisons are made with fire loss statistics of earlier years to show trends. Fire losses associated with the forestry, mining, oil and gas industries are excluded from this report.

Category	Number	% Change over last year	% Change over last 10 year average		
Deaths	27	+ 350 %	+31%		
Injuries	35	+6 %	+39%		
Value of losses	\$10,882,992	- 5 %	+2%		

In summary, the 1999 statistics were as indicated in the following table:

There was a significant increase in the number of deaths caused by fire in 1999 over previous years, this may be a temporary aberration or a return to death rate levels of past years.

## 2.0 DEATHS AND INJURIES

In 1999, 27 reserve residents (12 children and 15 adults) died in fires. This total was up significantly from 6 in 1998 (1 child and 5 adults). Reported fire injuries increased to 35 (11 children and 24 adults) from the 33 (7 children and 26 adults) reported in 1998.

The 1999 fire death rate in First Nation communities, expressed as the number of deaths per 100,000 population, was 7.39. The rate has generally been declining, except for sharp increases in 1988 and 1993. The 1999 rate is more in line with the figures recorded from 1989 to 1992 but is a large increase over the 1998 figure of 1.7. The rate is 6.7 times higher than the 1998 Canadian national average of 1.1, which is considered high among first world countries. The Canadian 10 year national average death rate is 1.43 deaths per 100,000 population.

Over the past 20 years there has been a reduction in the fire death rate in First Nation communities. There is, however, a gradual levelling off in the rate. As in previous years most deaths occur in dwellings.

Figure 1 shows the annual fire death rate over the last 20 years. During this period, the death rate has fluctuated but, on average, it has decreased by approximately 7% per year.

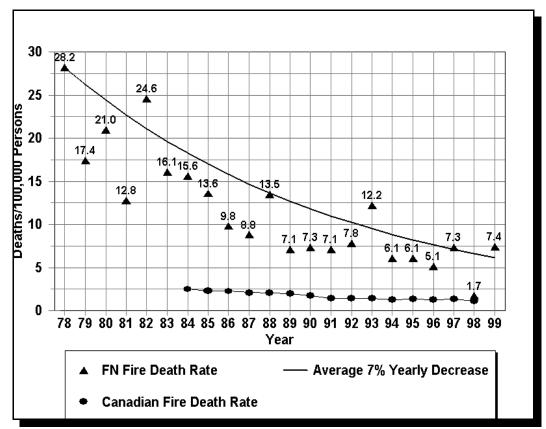


Figure 1. Fire Death Rate in FN Communities (1978-99).

Table 1 provides breakdowns by year, showing the number of reported fire related deaths and reported fire injuries for children and adults, over the period 1978 to 1999.

Fire Deaths				<b>Fire Injuries</b>			
Year	Adults	Children	Total	Adults	Children	Total	
1978	21	34	55	14	3	17	
1979	25	9	34	15	5	20	
1980	27	14	41	9	7	16	
1981	17	8	25	7	3	10	
1982	30	18	48	17	10	27	
1983	22	16	38	13	2	15	
1984	28	10	38	10	4	14	
1985	28	6	34	8	4	12	
1986	17	9	26	8	6	14	
1987	13	10	23	18	1	19	
1988	15	22	37	22	13	35	
1989	15	4	19	17	7	24	
1990	16	4	20	24	7	31	
1991	14	6	20	11	4	15	
1992	16	7	23	19	4	23	
1993	18	19	37	11	9	20	
1994	13	6	19	14	6	20	
1995	13	7	20	22	5	27	
1996	11	6	17	9	5	14	
1997	16	9	25	38	7	45	
1998	5	1	6	26	7	33	
1999	15	12	27	27	11	35	

Table 1. Reported FN Fire Deaths and Injuries

Figures 2 and 3 display this same information in bar graph form.

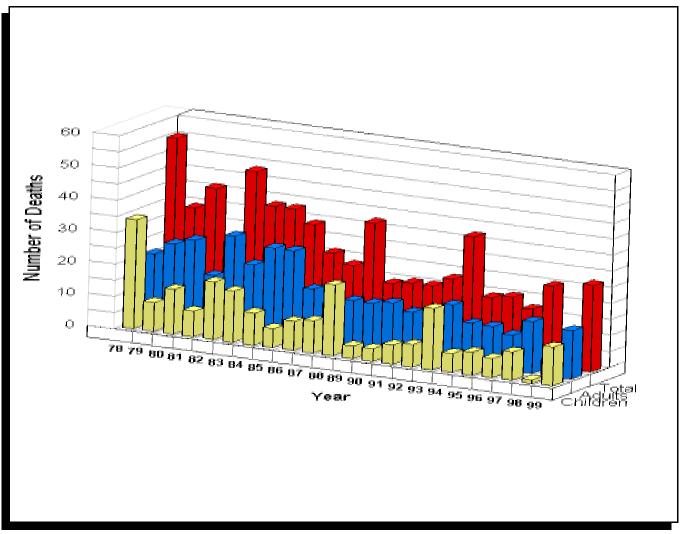


Figure 2. Reported Fire Deaths (1978-99).

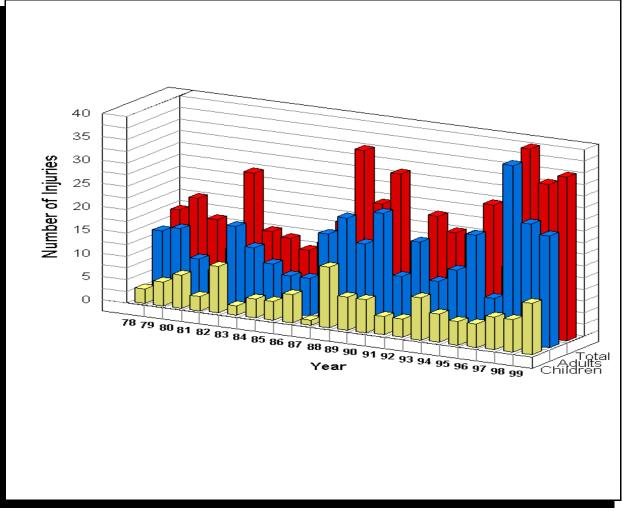


Figure 3. Reported Fire Injuries (1978-99)

Table 2 provides information on the number of responses, the number of fires, the estimated value of property loss, the number of injuries to adults and children, and the number of deaths of adults and children by province for 1999.

During	No. of reported responses *see note	No. of reported fires	No. of reported fires with financial losses	Estimated value of losses	Injuries		Deaths	
Province					Adult	Child	Adult	Child
Newfoundland	1	1	1	\$1,200	0	0	0	0
New Brunswick	41	41	30	\$824,300	5	4	0	0
Nova Scotia	19	19	18	\$312,050	0	1	0	0
PEI	0	0	0	\$0	0	0	0	0
Quebec	7	7	7	\$78,000	0	2	0	0
Ontario	1145	358	52	\$1,333,625	1	0	2	0
Manitoba	230	227	49	\$1,404,301	7	0	5	1
Saskatchewan	42	42	42	\$1,087,000	2	1	1	4
Alberta **	129	129	113	\$5,249,016	4	2	5	7
British Columbia	81	28	11	\$571,500	5	1	2	0
Yukon	2	2	2	\$22,000	0	0	0	0
TOTALS	1697	854	325	\$10,882,992	24	11	15	12

Table 2.Reported Fire LossesSummary by Province/Territory.

\* A "response" is where a fire department is called out to an incident that may or may not involve a fire or financial loss. The level of detail of reporting varies. Some First Nations report all "responses" including false alarms, vehicle accidents, grass fires etc. while others report only fires involving financial loss.

\*\* Fire statistics for Alberta have been supplied by the Fire Commissioner's Office, Alberta Labour. They exclude grass, brush and forest fires.

## **3.0 REPORTED FIRES**

There were 325 reported fires involving financial loss in 1999. Of this total, 245 involved dwellings.

The method by which the number of fires are reported each year varies with FN, Tribal Council, and Region. As a consequence, the reported fire loss summary shows the number of responses, as well as the number of reported fires involving financial loss. Some FN's do not report responses, while others report in insufficient detail to allow an assessment to be made.

The number of reported fires involving financial loss between 1978 and 1999 is shown graphically in Figure 4. The number increased from 303 in 1998 to 325 in 1999, while the number of reported responses was 1786 and 1684, respectively.

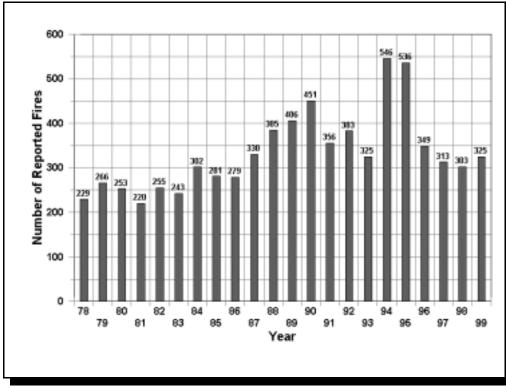


Figure 4. Number of Reported Fires (1978 - 1999).

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## 4.0 **PROPERTY LOSS**

### 4.1 General Remarks

The fire losses in this report include buildings and their contents as well as other band, federal or private capital assets located in First Nation communities.

The total reported property loss due to fire in 1999 was estimated at \$10.9 million, approximately the same as for 1998. Nationally there were fewer major fire loss incidents this year. The value of dwelling losses reported during 1999 represented a 8% increase over the 1998 losses.

Figure 5 shows the trend in fire related property losses in constant 1999 dollars for the period 1989 to 1999. A breakdown of the 1999 reported fire losses by province can be found in Table 2 on page 7.

### 4.2 Dwellings

In 1999, 245 dwellings were reported to be damaged or destroyed by fire. This represents a decrease of 26 dwelling units from 1998. The estimated value of reported dwelling losses totalled \$7.86 million, representing a 8% increase. The value of the reported dwelling losses over the past 10 years are shown in Figure 6.

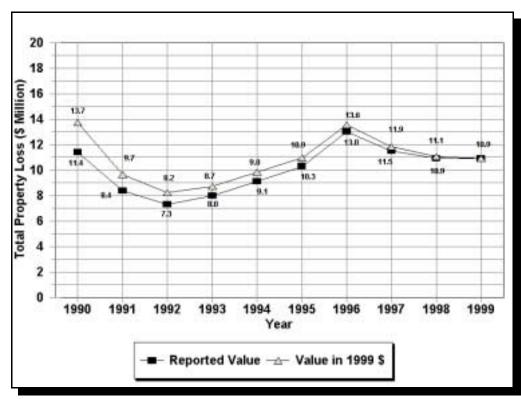


Figure 5. Total Reported Property Losses (1990 - 1999).

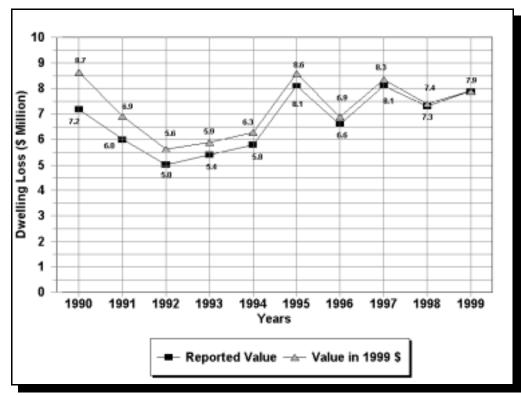


Figure 6. Total Reported Dwelling Losses (1990 - 1999).

## 4.3 Band and Federal Property

The reported band and federal property fire losses in 1999 are categorised as major and minor fires as follows:

## Major fires (\$250,000 and above)

No. of Incidents	<b>Description</b>
1	School
1	Grain Elevator

## Minor fires (\$250,000 and below)

No. of Incidents	<b>Description</b>
3	School
2	Band office
2	Church
1	Community centre
1	Nursing station
1	Police Station
1	Amusement Centre
1	Bingo hall

## 5.0 CAUSES OF FIRE

The predominant causes of fires in First Nation communities during 1999 were: grass, brush, and shrub fires; followed by arson and suspected arson; child related; electrical; heating; and cooking. There were a large number of fires with unknown causes.

It must be emphasised that the level and detail of reporting varies greatly, which hinders a better understanding of the differences between causes, and results in large annual disparities. Variations in reporting may also account for the large difference in the number of grass/brush/shrub fires from year to year.