



# Indian and Northern Affairs Canada

## Fire Loss Report

2003

**January 2005**

*Prepared for:  
Indian and Northern Affairs Canada*

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Travaux publics et  
Services gouvernementaux  
Canada

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Government Services  
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Cette publication est aussi disponible  
en français sous le titre:

Affaires indiennes et du Nord Canada  
Rapport 2003 des pertes  
causées par les incendies

## 1.0 INTRODUCTION

This report provides fire loss statistics in First Nation communities for the 2003 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 on information reported by participating First Nations and, as a consequence, the report may not represent a complete picture. Assessing the proportion of First Nations reporting is difficult but, over the years, the level of participation has improved in some areas but not in others.

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.

In summary, the 2003 statistics were as indicated in the following table:

<b>Category</b>	<b>Number</b>	<b>% Change over last year</b>	<b>10 year average</b>	<b>% Change over 10 year average</b>
<b>Deaths</b>	12	0 %	17	-29 %
<b>Injuries</b>	24	-54 %	30	-20 %
<b>Value of losses</b>	\$19.9 million	-29 %	\$14.4 million	+38 %

The number of deaths caused by fire in 2003 was the same as the previous year. Compared to the 10-year average, the death and injury totals were significantly lower.

While arson appears to be becoming an increasing problem, there are also a large number of fires of suspicious and undetermined origin.

There is an increasing propensity, on and off reserve, for local fire services to become involved as 'emergency responders' answering calls to assist with medical emergencies, car accidents, and the like. This leads to the reporting of fires becoming only a portion of the fire services responsibility and is reflected in the high number of 'reported responses' when compared with the number of reported fires.

## 2.0 DEATHS AND INJURIES

In 2003, 12 reserve residents (11 adults and 1 child) died in fires. This total remained unchanged from 2002 (0 children and 12 adults). Reported fire injuries decreased to 24 (3 children and 21 adults) from the 52 (15 children and 37 adults) reported in 2002.

The 2003 fire death rate in First Nation communities, expressed as the number of deaths per 100,000 population, was 3.0. The rate has generally been declining, except for sharp increases in 1988 and 1993. The 2003 rate shows a slight decline but is still higher than the 1998 figure of 1.7. The rate is 2.4 times higher than the 1999 Canadian national average of 1.27 (the latest available figure), which is considered high among first world countries. The Canadian 10 year national average death rate is 1.36 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 fire deaths occur in dwellings, meaning dwelling fires are more likely to result in death than other fires.

Figure 1 shows the annual fire death rate over the last 26 years. During this period, the death rate has fluctuated but, on average, it has decreased by approximately 8% per year.

**Figure 1. Fire Death Rate in FN Communities**

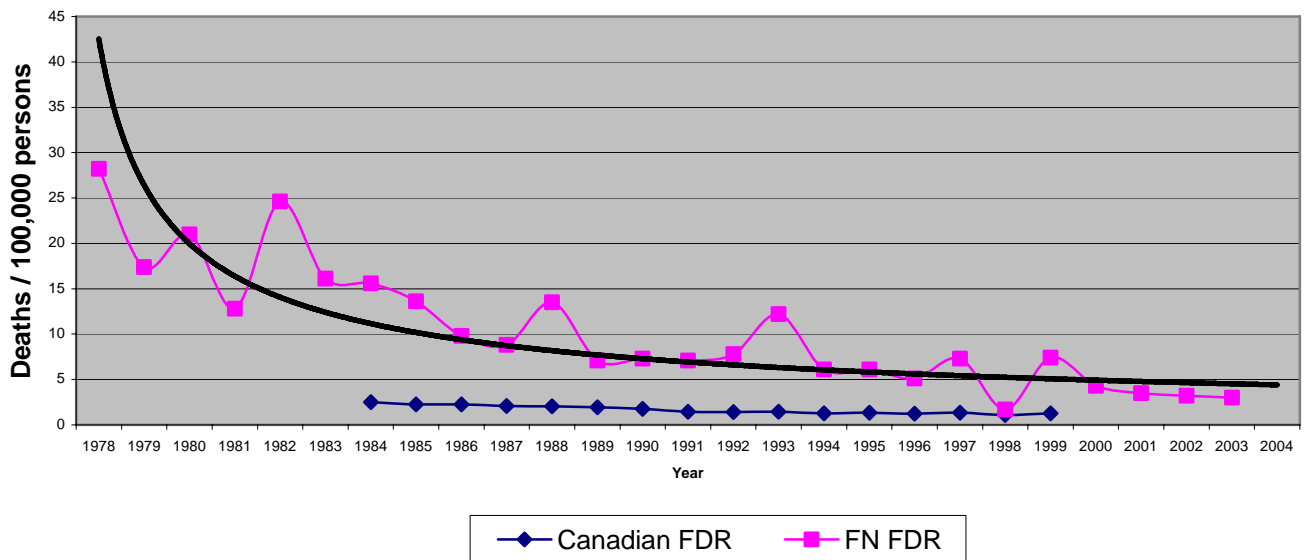


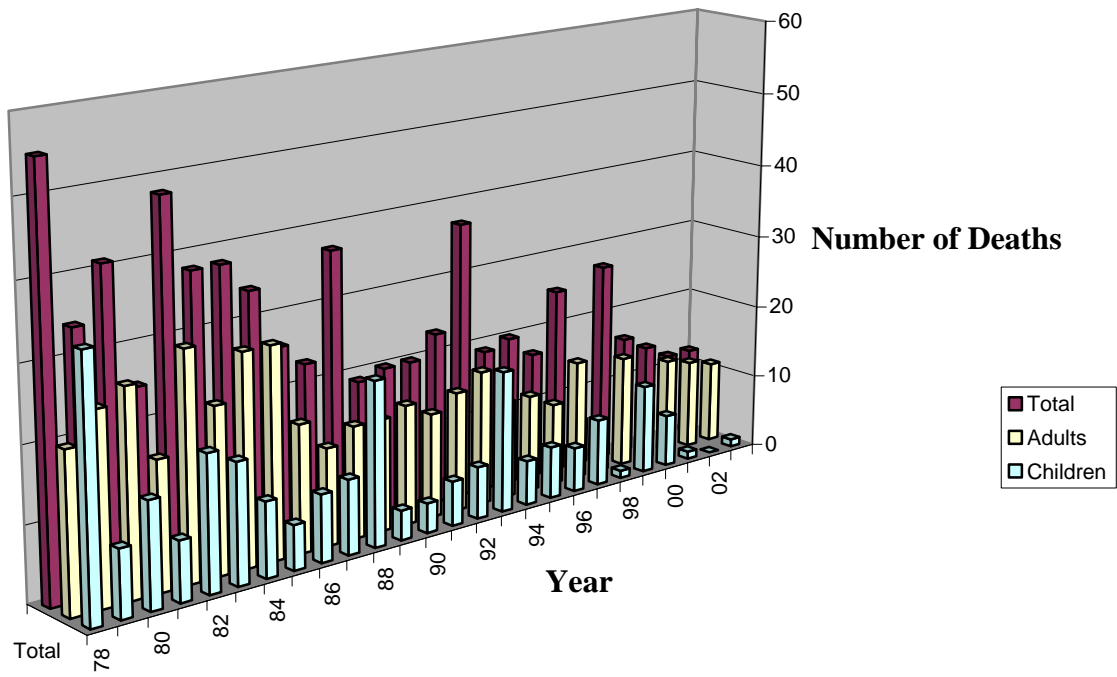
Table 1 provides breakdowns by year, showing the number of reported fire related deaths and reported fire injuries for children and adults, over the period 1978 to 2003.

**Table 1. Reported FN Fire Deaths and Injuries**

Year	Fire Deaths			Fire Injuries		
	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	38
2000	9	7	16	27	3	30
2001	12	1	13	20	1	21
2002	12	0	12	37	15	52
2003	11	1	12	21	3	24

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

**Figure 2. Reported Fire Deaths (1978-2003)**



**Figure 3. Reported Fire Injuries (1978-2003)**

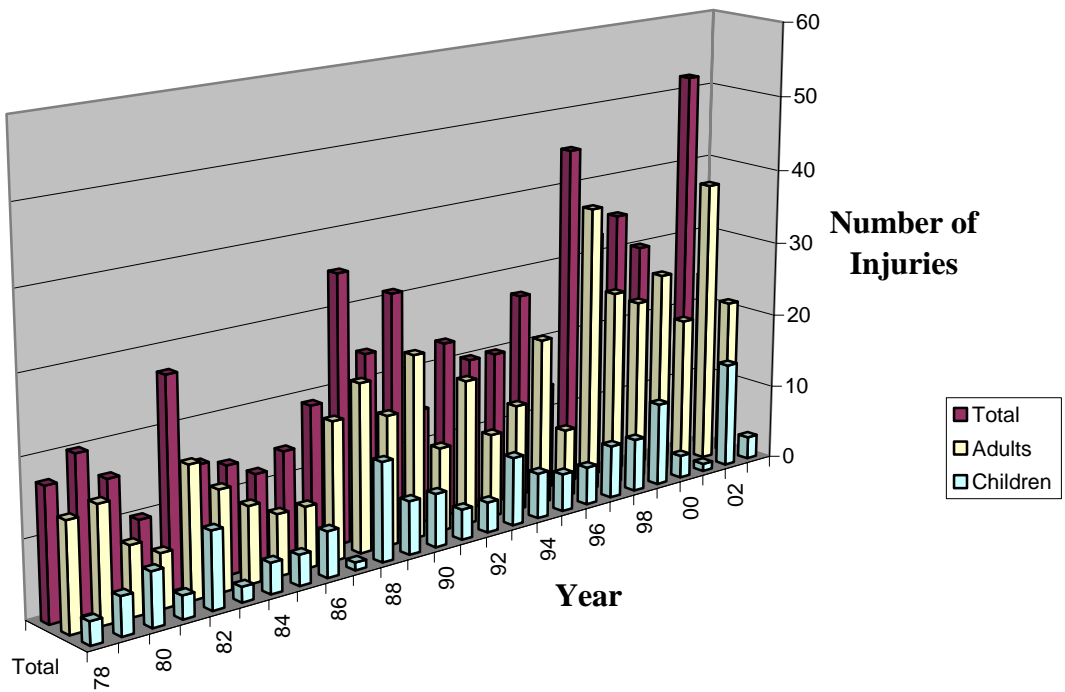


Table 2 provides information on the number of reported responses, the number of reported fires, the estimated property loss, the number of injuries to adults and children, and the number of deaths of adults and children by province for 2003.

**Table 2.**  
**Reported Fire Losses**  
**Summary by Province/Territory.**

Province	No. of reported responses <i>*see note</i>	No. of reported fires	No. of reported fires with financial losses	Estimated value of property losses	Injuries		Deaths	
					Adult	Child	Adult	Child
<i>Newfoundland</i>	0	0	0	0	0	0	0	0
<i>New Brunswick</i>	27	27	27	\$1,124,000	2	0	0	0
<i>Nova Scotia</i>	16	16	16	\$1,113,000	1	0	1	0
<i>PEI</i>	1	0	0	\$100,000	0	0	0	0
<i>Québec</i>	21	21	21	\$490,000	0	0	0	0
<i>Ontario</i>	1040	153	153	\$4,554,206	4	0	5	0
<i>Manitoba</i>	383	383	48	\$3,132,938	1	0	2	0
<i>Saskatchewan</i>	56	56	50	\$2,121,200	1	0	3	1
<i>Alberta **</i>	84	84	61	\$6,167,432	9	2	0	0
<i>British Columbia</i>	82	82	22	\$978,050	2	1	0	0
<i>Yukon</i>	0	1	1	\$100,000	1	0	0	0
<b>TOTALS</b>	<b>1710</b>	<b>823</b>	<b>399</b>	<b>\$19,880,826</b>	<b>21</b>	<b>3</b>	<b>11</b>	<b>1</b>

**\* The level of detail of reporting varies.** A "response" is where a fire department is called out to an incident that may or may not involve a fire or financial loss. 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.

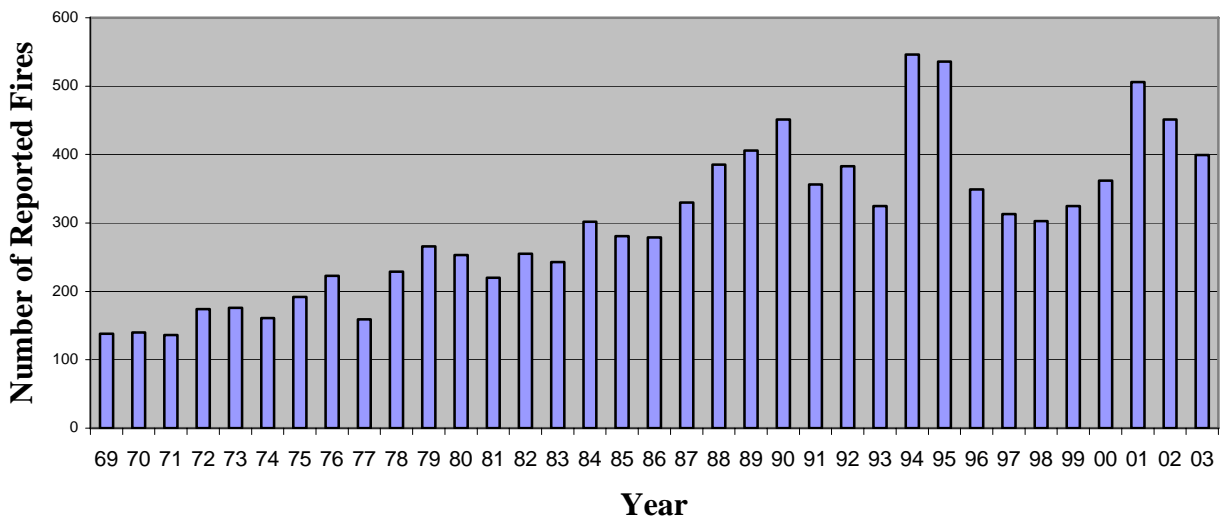
### 3.0 REPORTED FIRES

There were 823 reported fires in 2003, 399 involving financial loss. Of this total, 376 were dwellings.

The method by which fires are reported each year varies with First Nation, 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, and the number of reported fires involving financial loss. Not all First Nations report responses, while others report in insufficient detail to allow an assessment to be made. The number of First Nations reporting is improving in some regions but not in others. It is difficult to assess whether this is because there are no fires or First Nations do not wish to report.

The number of reported fires involving financial loss between 1969 and 2003 is shown graphically in Figure 4. The number decreased from 451 in 2002 and 506 in 2001 to 399 in 2003.

**Figure 4. Number of Reported Fires with Financial Losses (1969-2003)**





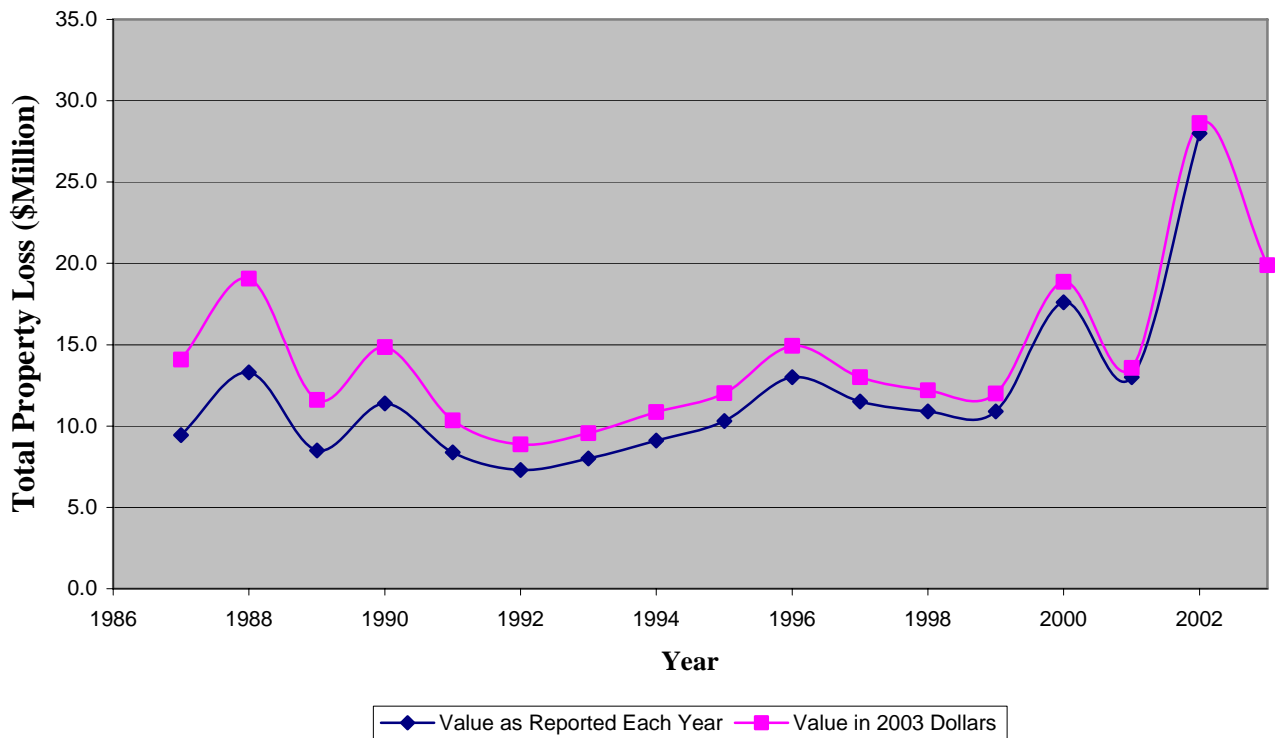
## 4.0 PROPERTY LOSS

### 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 2003 was estimated at \$19.9 million, a significant increase over the 10-year average value of \$14.4 million. The value of the reported property losses over the past 17 years is shown in Figure 5.

**Figure 5. Total Reported Property Losses (1987 - 2003)**



## 4.2 Dwellings

As shown in Table 3, 376 dwellings were reported to be damaged or destroyed by fire. This represents an increase of 86 dwelling units from 2002. The estimated value of reported dwelling losses totalled \$14 million, representing a 44% increase over last year.

**Table 3**  
**Reported Dwelling Losses by Region**

<b>Province</b>	<b>Number of dwellings damaged or destroyed</b>	<b>Estimated value of dwelling losses</b>
Newfoundland	0	\$0
New Brunswick	13	\$742,000
Nova Scotia	10	\$890,000
PEI	1	\$100,000
Québec	21	\$490,000
Ontario	123	\$3,791,922
Manitoba	80	\$2,732,082
Saskatchewan	48	\$1,921,200
Alberta	54	\$2,408,029
British Columbia	25	\$856,900
Yukon	1	\$100,000
<b>TOTALS</b>	<b>376</b>	<b>\$14,032,133</b>

## 4.3 Band, Federal and other Property

The reported fire losses categorized as major fires in 2003 are detailed below. It has not been possible to distinguish between First Nation property losses and “private” property losses at this level of reporting.

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

#### Manitoba Region

Norway House – Forest Fire with \$340,345 in damages

Opaskwayak – Dwelling with \$1.8 million in damages

## **British Columbia Region**

Tl'etinqox-t'in Government Office – Office Building estimated value \$300,000

## **Alberta**

Chateh IR – Old Dene Tha Community School estimated value \$2,000,000.

## **5.0 CAUSES OF FIRE**

The predominant causes of fires in First Nation communities during 2003 were: grass, brush, and shrub fires; followed by arson and suspected arson; child related; electrical; heating; and cooking. Arson and suspected arson appears to be the cause of many fire losses. There were also many fires with unknown or unreported causes.

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