

People from any zone in the evacuated area were equally likely to go in any direction and to travel any distance. Families with children, and people with lower incomes did not tend to go farther, or to stay closer, than others. The most influential factor in whether people stayed within 10 kilometers of the accident site was the type of accommodation they selected - private home or hotel versus Evacuation Centre.

For their first destinations, 28% of evacuating households chose to stay within Mississauga, so that approximately 20,800 households had to evacuate themselves again as the boundaries were moved out (Table 5.6).

Table 5.6. First destinations of evacuees

	<u>Percent of sample (N=504)</u>	<u>Total number of households involved</u>
Within Mississauga	28	20,800
Elsewhere in Peel Region	17	12,700
Etobicoke	9	7,200
City of Toronto	13	10,000
Elsewhere in Metro Toronto	19	14,500
Elsewhere in Ontario	13	10,000
Outside Ontario	0.2	150
Outside Canada	<u>0.2</u>	<u>150</u>
Total	99.4%	75,500

The need to evacuate twice was most common among households who went initially to an Evacuation Centre; 80% of these families had to move again compared to 27% for evacuees going to private homes and hotels.

The evacuees' choice of an evacuation base inside Mississauga was influenced by two expectations: that they would only be away for a few hours (Table 5.3); and they did not know that the entire city would eventually be evacuated. Figure 5.7 shows the relationship between the type of accommodation and the reception areas chosen by evacuees.

The most significant differences are between Evacuation Centre users and the rest.¹ Some of the Evacuation Centres were set up within the final boundaries of the evacuated area and others were located just beyond its boundaries. People who used the Centres were therefore obliged to remain fairly close to their homes.

Only 1.5% of evacuees (1130 families) went to second homes. This is related to their expectation that they would be away for only a few hours and to the fact that cottages in Ontario are usually several hours' journey away and are closed up for the winter by November.

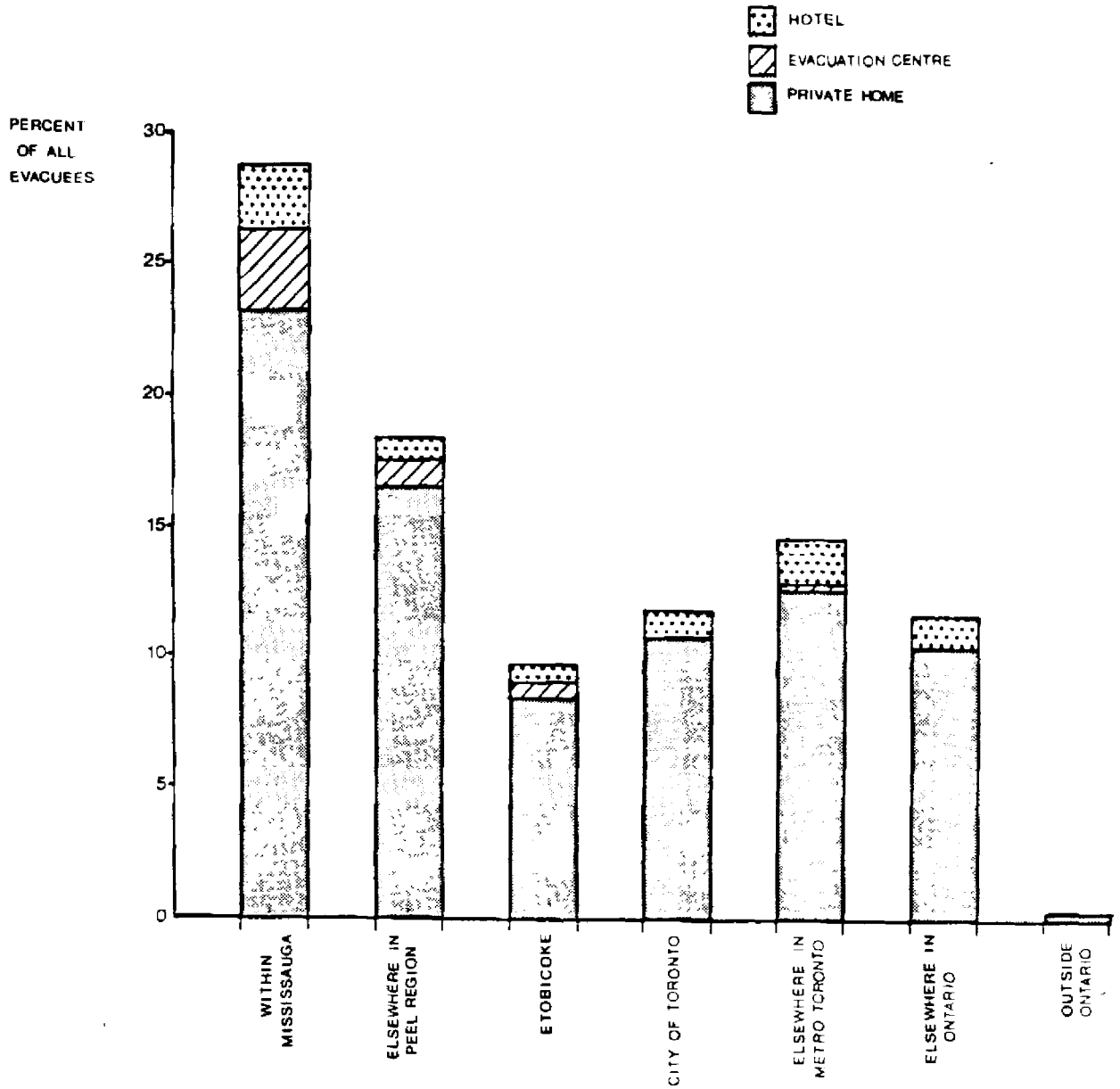
5.3.3. Subsequent destinations

Thirty percent of the evacuating households (22,650 families) did not remain at their first destinations throughout the emergency, but moved on to second destinations. Eight percent went to a third, and a few people went to four destinations.

In all evacuation moves, private homes were the most frequent choice of accommodation. However, in second and

¹ See Appendix 1 regarding the sample limitations of households who went to Evacuation Centres.

FIGURE 5.7 RECEPTION AREAS FOR EVACUEES STAYING IN PRIVATE HOMES, HOTELS AND OFFICIAL SHELTERS (first destinations)



third moves, there was a tendency for people to move out of private homes and Evacuation Centres and into hotels (Table 5.7).

Table 5.7. Types of accommodation used in first, second and third destinations

	<u>First move</u>	<u>Second move</u>	<u>Third move</u>
	%	%	%
Private home	87	20	4
Hotel	6	3	2
Evacuation Centre	4	2	0.5
Second home	<u>3</u>	<u>3</u>	<u>0.5</u>
	100%	29%	7%

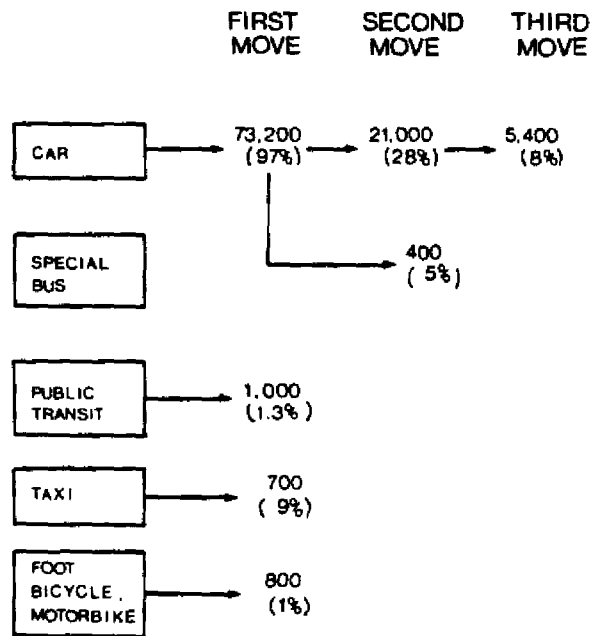
Percentages are of total number of evacuees; thus, 29% of all evacuees moved to at least two destinations, and 7% to three or more.

The vehicles used in subsequent moves also predominantly private cars. About 2,500 households went to their first destinations by public transit, taxi or on foot, bicycle or motorbike, and in subsequent journeys, an estimated 400 households (1500 people) were bussed from Evacuation Centres (Figure 5.8).

Of the people who initially went to an Evacuation Centre, 32% moved again, as against 29% for all evacuees. Some of these people chose to find their own accommodation elsewhere and stayed only a few hours in a Centre. Other people were moved to Centres farther away when the early Centres were themselves evacuated. About 1,600 evacuees in the Centres were also transferred to private homes or

FIGURE 5.8

NUMBER OF HOUSEHOLDS TRAVELLING FIRST,
SECOND AND THIRD DESTINATIONS



PERCENTAGES ARE OF TOTAL NUMBER OF HOUSEHOLDS TRAVELLING TO FIRST DESTINATION 25% OF ALL EVACUATED HOUSEHOLDS MOVED TO A SECOND DESTINATION

PERCENTAGES MAY NOT AGREE WITH TABLE 5.7 DUE TO ROUNDING

hotels. Fourteen percent moved a third time and nearly 6% moved again to a fourth temporary accommodation.

Table 5.8 shows the type of vehicles used in these subsequent journeys.

Table 5.8. Vehicles used to travel to and from evacuation destinations by people who went first to an evacuation centre.

	First Destination		Second Destination		Third Destination		Fourth Destination	
	Arrive/Depart		Arrive/Depart		Arrive/Depart		Arrive/Depart	
	%	%	%	%	%	%	%	%
Car	84	77	20	24	9	9	3	4
Truck	3	2	-	-	1	1	1	-
Bus	8	15	11	6	4	3	2	1
Public Transit	2	4	-	1	-	1	-	-
Taxi	1	-	-	-	-	-	-	-
Other	3	3	1	1	-	-	-	1

Percentages are of number of evacuees travelling to a first destination.

Again, the most important means of transportation for all journeys was the private car. Families had to leave their cars at the first Evacuation Centre and move on to other Centres or hotels in special buses. They report regret and frustration when this happened because they were no longer mobile during the day. They suffered an increased sense of isolation from their normal activities and imprisonment in the Centres. They could no longer easily visit shops and

cinemas or go to work. Some evacuees objected strongly to being obliged to go to hotels in the special buses provided on Wednesday and, after checking in, they went back on the buses to retrieve their cars at the Centres.

When people no longer have access to their homes, it would seem to be desirable to allow them to keep their cars with them whenever possible. This reduces the amount of inconvenience and frustration they experience during an evacuation.

5.4. THE RETURN HOME

The evacuees were away from home for periods of 1-9 days. Most were away for at least 3 days and 90% had returned within 6 days (Figure 5.9). Evacuees going first to a Centre had, on average, a longer period away from their homes and returned later in the week (Table 5.9). Fifty percent of users were away for 5 days or more, compared to only 3 days or more for all evacuees (Figure 5.9). Those evacuees who moved again spent only one or two days at their first destination.

The main groups of returning evacuees arrived home on Tuesday, 13 November (51%) and Friday, 16 November (33%). Of the Evacuation Centre people, 27% went home on Tuesday, and 47% went home on Friday (Table 5.9).

On Tuesday, 13 November, about 144,500 people were allowed back into the outer zones (Figure 2.6). The re-entry announcements were made between 15:10 and 16:50 on Tuesday afternoon so that some families did not go home until Wednesday. Confusion about which zones were re-opened and a belief among evacuees that their family could return, led

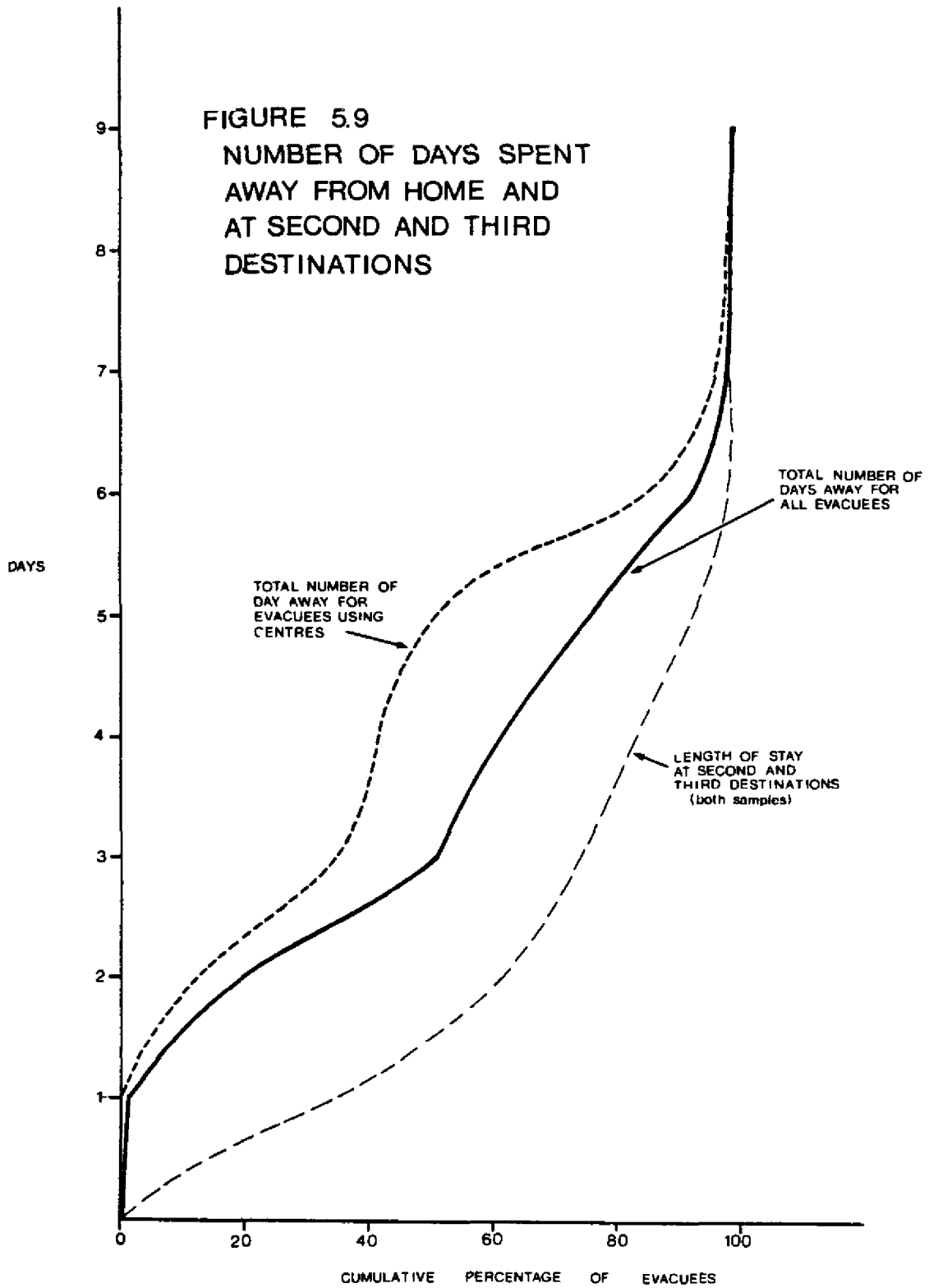


Table 5.9. Days on which people returned to their homes

Returned on:	All evacuees	Those using evacuation centres
	(N=545)	(N=175)
	%	%
Monday November 12	0.4	1.6
Tuesday November 13	37	27
Wednesday November 14	13	5
Thursday November 15	3	3
Friday November 16	33	47
Saturday November 17	11	13
Later than November 17	<u>2</u>	<u>3</u>
Total	99.4%	99.6%

to major traffic congestion at the Trafalgar Road exit from the Queen Elizabeth Way and elsewhere.

From Tuesday on, many evacuees tried to return to zones which were still closed and the smooth return of the evacuees was seriously disrupted by an estimated 18,000 additional vehicles that tried to return before they were allowed back. At road blocks still sealing off some areas, frustrated evacuees argued with police about whether they could go home and caused additional traffic problems. Part of the problem was that the public sometimes heard about boundary changes from radio or television before the police on the perimeter did from their commanders.

The re-entry on Friday, 16 November took place in 2 stages: 37,000 people were allowed in from 14:55 hours and the last 35,000 residents, who lived close to the accident site and south of the Queensway, at 19:40 hours, after the rush hour. Many of these people were so anxious to get home that they travelled on Friday evening. Only 13% of all evacuees waited until Saturday, 17 November, to return home.

The major problems returning evacuees reported were the traffic congestion, and frustration among those who were turned back. When they arrived home, most of them (73%) ventilated their houses to make sure that there was no chlorine gas. A few families whose members had specific health problems, such as asthma, had one member go back to do this. They checked on the security of their property and on the welfare of their pets and houseplants. Despite widespread concern while they were away about looting (reported as a concern by 62%), there were 38.5% more break and enters reported during the week prior to the evacuation. For the first few hours in their home, people rested, bathed and changed clothes and set their houses in order.

5.5. PEOPLE USING EVACUATION CENTRES

5.5.1. Who were they?

According to our surveys, 5% of the evacuees, or 3775 families, used the Evacuation Centres. Their average family size was 3.7 people. This gives a figure of nearly 14,000 for the numbers of people cared for in official shelters. Many of these evacuees (38%) stayed only for a few hours and did not sleep overnight in the Centre. They moved on to hotels or to private homes. Therefore, only about 8,700

people spent one or more nights in a centre (Table 5.10).

Table 5.10. Numbers of days stayed by people in Evacuation Centres

<u>Time</u>	<u>% of sample</u>	<u>Approximate number of people</u>
< 24 hours	38	5,320
1 day	17	2,380
2 days	14	1,960
3 days	21	2,940
4 days	3	420
5 days	1	140
6 days	4	560
7 days	<u>2</u>	<u>280</u>
Total	100%	14,000

The people who used the Evacuation Centres were not a random cross section of Mississauga, although they came from all zones within the evacuated area. Significantly more of them were in the lower income categories (28% had annual family incomes of less than \$15,000 compared to only 12% for all evacuees). They also tended to come from the blue collar worker group (Table 5.11). Their mean family size was larger (3.7 compared to 3.2 for all evacuees) and more of them lived in rented accommodation (32% compared to 23% for all evacuees).

There were also significant socio-economic differences within the group using Evacuation Centres. Those families who left after less than 24 hours were most likely to be people in professional and managerial occupations, to own their own houses, and to earn higher incomes. Thus, as the evacuation

Table 5.11. Occupations of heads of evacuated households, comparing all evacuees with those using official shelters

Occupation Group:	<u>All evacuees</u>	<u>Evacuees in Centres</u>	
	(N=504)	All	Those staying 3 or more days
	%	%	%
Professional/managerial	48	31	23
Clerical/sales	16	16	23
Industry/construction	15	27	32
Transport worker	3	5	3
Homemaker	2	2	3
Retired	9	11	12
Self employed	8	8	6

continued, the people staying on in the Evacuation Centres were more and more likely to be from blue collar worker families with lower incomes. After 3 days, some 15% of all the industrial and construction worker families in Mississauga were in Evacuation Centres compared to only 2% of the families of managerial and professional groups.

The socio-economic composition of people in the different Centres also varied. A greater proportion of evacuees in the International Centre and in Streetsville Secondary School had family incomes below \$15,000 and did not own their own homes. Erindale Secondary School received more evacuees over 70 years old (11% compared to 3% for all

A night in the car.....

Mrs. C. was 8-1/2 months pregnant when the derailment happened. She comes from Holland and her husband from England. They met in Holland while her husband was serving with the Armed Forces. Mrs. C.'s uncle phoned from Holland on Sunday morning to ask if they were alright after the accident. That was the first thing they heard about it.

Later on Sunday, they saw neighbours packing and were warned by them to leave soon if they wanted to get a hotel room. They asked some other neighbours where they were going. They said, to the International Centre. So Mr. and Mrs. C. decided to follow them. This was about 7 o'clock on Sunday evening. They thought that they would be away for a few hours and only brought along blankets and pillows for themselves and cat food and water for their cats.

When they arrived at the International Centre, it was being set up. A bingo game had just been cancelled and the cards were still on the tables. The Red Cross were already there and showed some concern about Mrs. C.'s advanced stage of pregnancy.

At first, everything was disorganised but later it got better. Food and hot drinks came in. But when everyone tried to go to sleep, they found that the floor was cold, there was no bedding, and many old people were lying on tables to get off the floor. Mr. and Mrs. C. decided to sleep in their car that night. They got up at 5:00 A.M. and went back into the Centre but returned to the car again to listen to the car radio.

Later on Monday, they went out to buy toothbrushes, and socks and tried to find a hotel, but they could find nothing closer than Niagara Falls. Each hour they thought it would all be over and that they could return home. Everyone at the Centre was like that - just waiting and waiting.

By 6 o'clock on Monday evening, they realised that they were going to be there for another night. Mr. C. got hold of a table for his wife to lie on and arranged their blankets on it. Just then, a

Continued. . .

Red Cross volunteer came over and said that a man from Pickering had come to offer his home as a temporary shelter for someone, but that no one would take him up on it. Would they like to?

Mr. and Mrs. C. went home with their new found friend, ate and went straight to bed. The next day, he went to work and left them with the run of the house. When they heard on Tuesday evening that they could go home, he drove them back to the Centre. Since the evacuation, they have become very good friends.

They often compare what happened in Mississauga with their experiences in Europe. They felt the evacuation was not well organised and that the army should have been asked to run things and to provide cots. They also felt that everyone was greedy about compensation, but they also made claims, because, after all, this is North America.

Mrs. C. never had any concern about her pregnancy (you, you don't know Dutch women!), although her husband was nervous during the evacuation. She gave birth to a boy two weeks later.

Centres). Otherwise, the proportions of age groups in the Centres were similar to that in the general population.

5.5.2. Behaviour in the Centres

Most evacuees behaved quietly and cooperatively in the Centres. Members of the voluntary organisations such as the Red Cross, Salvation Army and St. John Ambulance all report that morale was highest to begin with, and fell rapidly after 3 days. People became bored; children and pets became restless; and the number of volunteer helpers declined as they went back to their normal jobs. The evacuees became mentally and physically tired, and a few showed signs of increasing dependency. Some evacuees helped the volunteers but many remained fairly passive, accepting whatever food or entertainment they were offered. This was especially so in the International Centre and in Streetsville Secondary School.

Older people and those who could not speak English were the most confused and anxious. Young people (some of whom were not evacuees but "free-loaders") tended to make the most noise and to cause difficulties for those in charge. Many people could not sleep at night in the International Centre and Streetsville Secondary School. The greatest number of complaints about the former were about the nuisance from pets.

In retrospect, the majority of evacuees had nothing but praise for the excellent and untiring work put in to the Centres by volunteer workers. At the time of the emergency, these same workers met with some anger and resentment on the part of evacuees who wanted to know when they could go home. It was this uncertainty, rather than the fear of the accident itself, that seemed to make people most unhappy. Lack of information was also a problem for evacuees during their

first 24 hours in the Centres before communication channels and clear lines of authority were properly established.

In two Centres there were reports of problems in keeping order. People tried to enter classrooms and some vandalism was encountered at Streetsville Secondary School. Fighting broke out between youths. Generally, however, people mixed well and made friends, although at the International Centre, it was reported that black families kept mainly separate from the white majority.

About a third of the evacuees who stayed overnight at the Centres spent all the time there. Others made a number of trips outside, mainly to shop or for recreation (such as cinema shows). Only 10% report leaving during the day to go to work and only 5% went to find their friends or other family members (Table 5.12). Although many had access to their cars, they generally remained within walking distance of the Centres.

Thus the pattern of behaviour for the evacuees in the Centres was more dependent and more confined than for other people in private homes and hotels. The evacuation experience was farther removed from their everyday lives than for others and led to some different social impacts (Chapter 6).

5.6. THE PEOPLE WHO STAYED BEHIND

5.6.1. Characteristics of the households

Out of the 1089 households questioned in the first and second main surveys, 19 families or 1.7% said that they did not evacuate. Fourteen families were subsequently interviewed to find out why they remained inside the evacuation

Table 5.12. Number and purpose of trips made by evacuees out of the Centres

(a) <u>Number of trips</u> (N=175)	<u>Percentage of evacuees</u>
Left after 0-12 hours: no trips	38
Stayed one or more nights: no trips	31
1 trip	12
2 trips	9
3 trips	3
4 trips	1
5 trips	1
6 trips	2
7 trips	1
8 trips	0
9 trips	<u>2</u>
	100%
(b) <u>Purpose of trip</u>	
To get food	8
To shop	25
To seek other accommodation	15
For recreation	18
To go to work	10
To help in emergency	7
To seek information	2
To find friends, family	5
Other	<u>10</u>
	100%

zone. The small numbers involved do not allow statistical comparisons to be made between those who stayed and those who left, but some inferences can be drawn about their reasons for remaining and their socio-economic characteristics.

They are discussed in some detail because it is important to evacuation planning to be able to predict the numbers and characteristics of those who are likely to refuse to leave. An understanding of their reasons for staying can also better enable authorities to persuade them to leave. In the case of the Mississauga emergency, the knowledge that at least 1200 families had not evacuated could have influenced decisions about how to handle the emptying of the chlorine gas tanker. In any emergency, the response of authorities may be unduly influenced by the few people who refuse to leave; and in turn, influence decisions affecting the 98% who do evacuate.

The heads of households who decided to remain behind were mostly in their fifties and sixties (Table 5.13). They were highly educated people in professional, managerial and sales occupations. Only 3 earned less than \$15,000 per annum and most earned nearer to \$30,000. They were generally families rather than single people and half of them had children, mostly older ones. No one had very young children under 3 years old.

They mostly lived very close to the evacuation zone boundaries, or on the opposite side of the Credit River Valley to the accident. Two families interviewed lived relatively close to the accident site; one lived 3 kilometers to the east and the other household was located 2 kilometers to the west (not across the Credit Valley).

The decision to stay was always made after a family discussion of the pros and cons. Often the discussion was

Table 5.13. Socio-economic characteristics of households
who did not evacuate

(a) <u>Age of head of household</u>	
	<u>Number in sample</u>
20's	4
30's	1
40's	2
50's	7
Over 60	<u>5</u>
TOTAL	19
(b) <u>Occupation of head of household</u>	
Professional/managerial	6
Clerical/sales	5
Industrial worker	2
Transport worker	1
Self-employed	2
Retired	<u>3</u>
TOTAL	19
(c) <u>Household income per annum</u>	
Less than \$15,000	3
\$15,000 - \$30,000	11
More than \$30,000	4
No answer	<u>1</u>
TOTAL	19
(d) <u>Number in household</u>	
1 person	3
2	6
3	5
4	1
5	<u>4</u>
TOTAL	19

led by one family member who wanted to stay, and this person convinced the others. In 3 of the families, not all family members agreed, and the family split up, with some leaving and others staying.

5.6.2. Reasons for not evacuating

The commonest reason for staying was that people did not consider the risk was sufficient justification to leave. They generally were located on the outer edge of the evacuated area and felt far enough away:

The reason we didn't leave our house was the fact that the community of Etobicoke - just on the other side of Etobicoke Creek from us - was not evacuated, and if they were considered safe, then for all practical purposes, so were we.

Those people who stayed who lived on the other side of the Credit Valley reasoned that since chlorine is heavier than air, it would not cross the valley and reach them, but would roll downstream. They also believed that the wind from the direction of the accident did not blow towards them. They included people who had occupational experience of handling chlorine.

One household consisted of an elderly couple in which the wife was confined to a wheelchair. They made the decision to stay explicitly on account of her health; they decided it was safer not to move her.

The factors that contributed to these families' decision not to evacuate included:

- (a) their belief that there was no real danger to them based on:
 - (i) their location or
 - (ii) their knowledge of chlorine;

Staying behind.....

Mr. P. had spent 30 years out west as a farmer and cowboy. He had learnt to become self-sufficient and not to scare easily. Now he is an industrial relations consultant in his sixties, living with his wife in a comfortable home, less than a mile from the accident site.

He was woken up by his wife who heard the blast. Then their neighbours called them and said to come over to see the fire from their upper storey window. Later he returned to bed and slept until 7:30 A.M. on Sunday.

At 4 P.M. on Sunday afternoon, a very young policeman came to the door and said that they had to leave. Mr. P's wife wanted to go, although he was reluctant. They made a reservation at a hotel and began to pack the car with valuables that he didn't want to leave behind.

Travelling east along Dundas, they were stopped by the O.P.P. An officer told them that they could not go any farther. Mr. P. protested and pointed out that he was evacuating as requested, and heading for Toronto. The officer told him to go around by the 401. With that, Mr. P. said "I have a good mind to go home". The policeman laughed and said "That's a good idea". It was all Mr. P. needed. He wheeled the car right around and turned back.

For the next week, Mr. P. and his wife remained in their home. He patrolled the area with a high-powered flashlight each night. Several times during the week he met police officers who asked him questions and checked his identification. Some thanked him for doing his rounds; others told him that he was a prime suspect for looting. A helicopter overhead would also shine its searchlight on them and Mrs. P. was scared it would "pluck them up".

Mrs. P. was more nervous. She often thought that she could smell chlorine gas and she had a few things packed in the car for overnight. She became less worried as the week went on. Their son kept phoning from Guelph asking them to come to his place. Mrs. P. managed to do all her Christmas baking uninterrupted. They had plenty of supplies.

On Thursday, a neighbour who was going on a holiday to the Caribbean, called Mrs. P. and asked her to start packing her suitcases for her. They already had the house key. Later that day, the neighbour came back under escort, and picked up the suitcases. Another neighbour

Continued. . .

stopped by on Friday and had a drink with them. He had had to leave his driving licence with the police officer at the roadblock.

Also on Friday, another neighbour's son and a friend had come across the Credit River and were in their house next door. They told Mr. P. about another neighbour, across the street, who had not left either. Mr. P. hadn't even noticed them.

Mr. P. enjoyed the solitude of the evacuation. It reminded him of his days on the farm with miles and miles between him and the next person; "nothing but myself, my dog, my horses and the coyotes".

- (b) their belief that if the situation changed, they were prepared because:
 - (i) they would be warned because they were constantly monitoring the radio,
 - (ii) (for some) the police knew where they were and would tell them,
 - (iii) they could leave quickly because they had a car ready and suitcases packed; and no traffic would impede them;
- (c) their need to stay to look after a large number of plants or animals (2 households);
- (d) their attitudes about the rights of individuals versus those of authorities;
- (e) they had not been asked to individually by the police although they heard the loud hailers in the street;
- (f) they could not think of any friends or relatives to stay with;
- (g) their previous experience with emergencies which made them downplay the danger in Mississauga and resist evacuation. These experiences included:
 - (i) London blitz during World War II,
 - (ii) living in Germany, Poland, Russia, England or Ireland during World War II,
 - (iii) London smog emergency of 1952.

The people who cited their previous experience with emergencies were all immigrants to Canada from Europe. They tended to feel that Canadians defer too easily to authority and overreact to emergencies. Those who had been evacuated during wartime had unpleasant memories of the experience. It is interesting, if not significant, that in 10 of the 14 families interviewed, at least one adult had been in Europe during the Second World War, although not all of them thought that this had necessarily influenced their decision to stay behind in Mississauga.