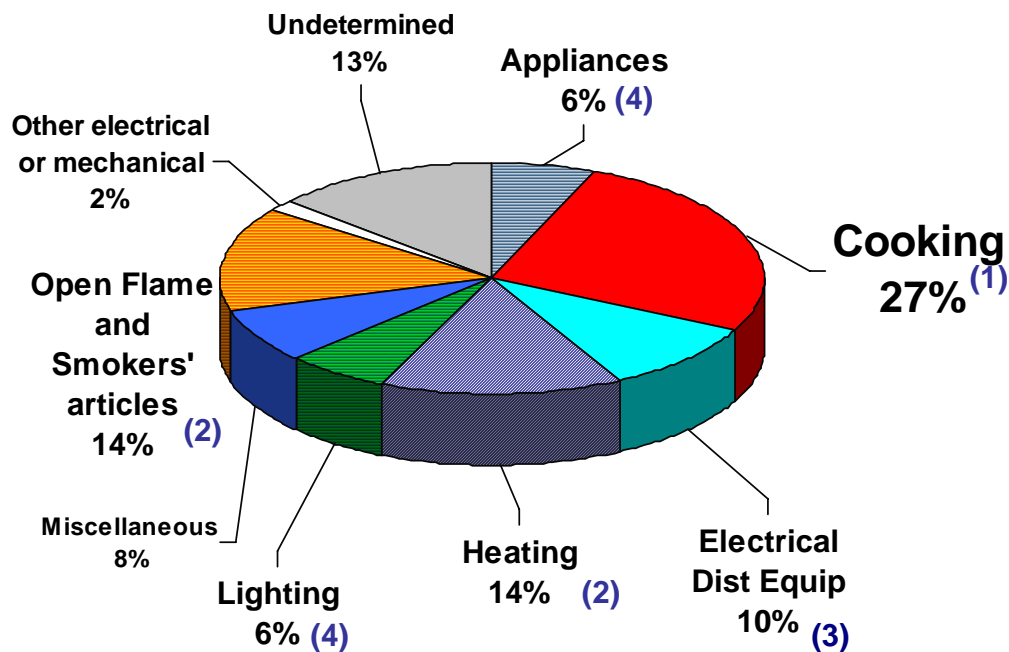


Ontario Stove Top Fire Survey

September 2006



Background: Ontario Preventable Residential fires 1995 to 2004



- Cooking is the #1 ignition source in preventable residential fires – 27% of fires
- 76% of these fires started on the stove top
- Stove top fires have declined 45% from 1,829 loss fires in 1995 to 1,011 in 2004.
- In 2004 there were 151 injuries and 8 deaths in fires ignited on the stove top.
- These fires resulted in an estimated loss of \$16.5 Million or \$16,286 avg per fire.

2005 – 2006 OFM Stove Top Fire Survey

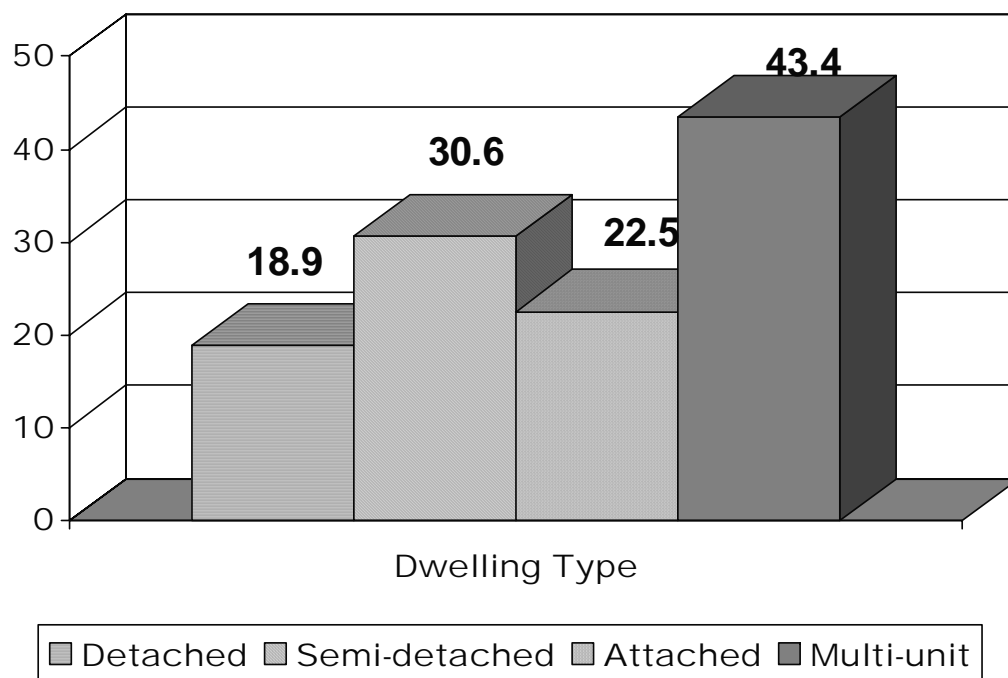
- A survey was conducted from August 1, 2005 to July 31, 2006 to collect detailed information on each stove top fire.
- Ontario fire departments were requested to complete the survey for every stove top fire they attended in a residential property during this period
- **1244 surveys** were completed – providing a comprehensive view of all stove top fires (attended by fire departments) **reporting 205 injuries and an estimated loss of \$10.2 million**

2005 – 2006 OFM Stove Top Fire Survey

Questions covered:

- Type of residence
- Extent of fire
- Type of stove and element used
- Type of cooking
- Key factors in ignition/ Person cooking
- Smoke alarm status
- Action taken by occupant
- Injuries

2005 – 2006 OFM Stove Top Fire Survey: Type of Residence



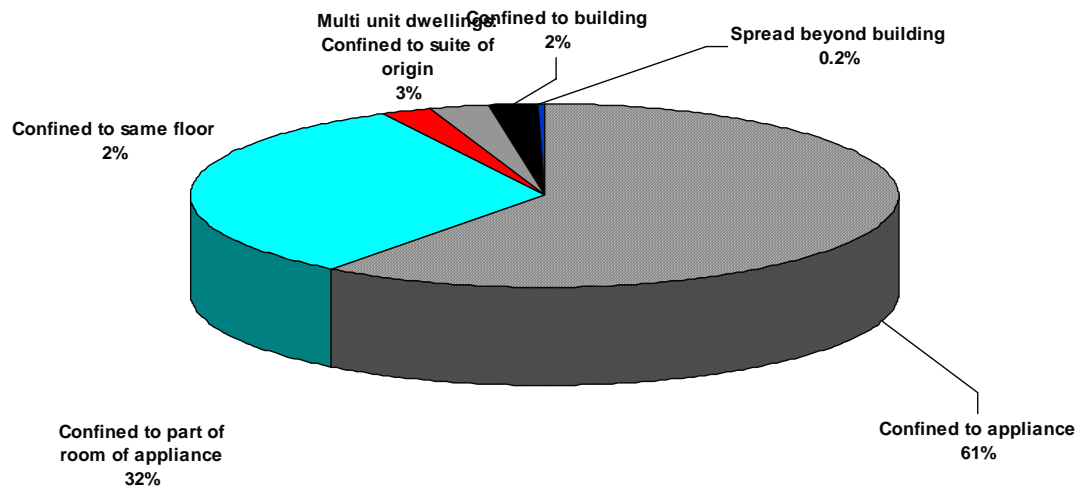
Findings:

The highest incidence of stove top fires was in multi unit dwellings

The highest \$ loss in stove top fires was in detached houses

A significantly higher rate of stove top fires was reported in subsidized dwellings (63 per 100,000) when compared with non subsidized dwellings (22 per 100,000).

2005 – 2006 OFM Stove Top Fire Survey: Extent of fire



Findings:

99% occurred in the kitchen

61% confined to the appliance.

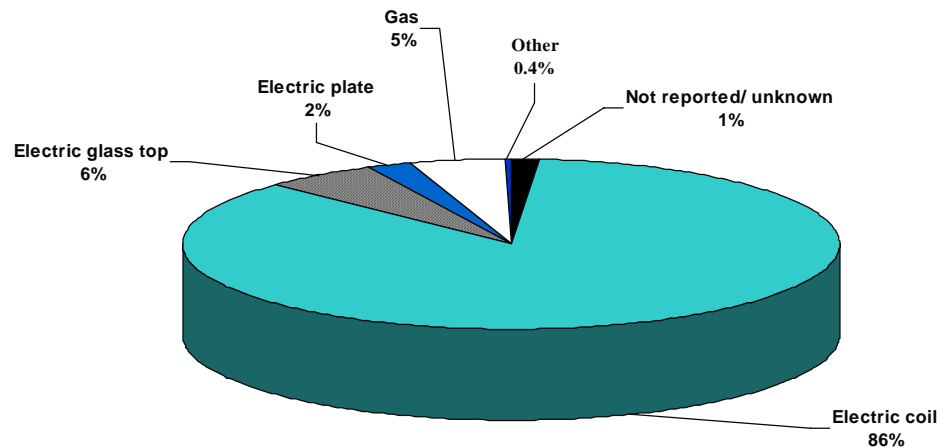
46% extinguished by occupant

21% self extinguished

25% extinguished by fire department

0.2 fires (2) were extinguished by an automatic system.

2005 – 2006 OFM Stove Top Fire Survey: Type of Stove



Findings:

Fires were lower than market rates in gas fuelled stove tops – 5% of fires

78% of the stoves had controls at the back of the stove, but this was not a factor reported in the 4 cases where wearing apparel was ignited

51% of the fires involved front burners, 34% back burners (14% unknown or not reported, 1% other)

Market Saturation:

**88.1% electric / 11.6% gas
(Statcan 2003)**

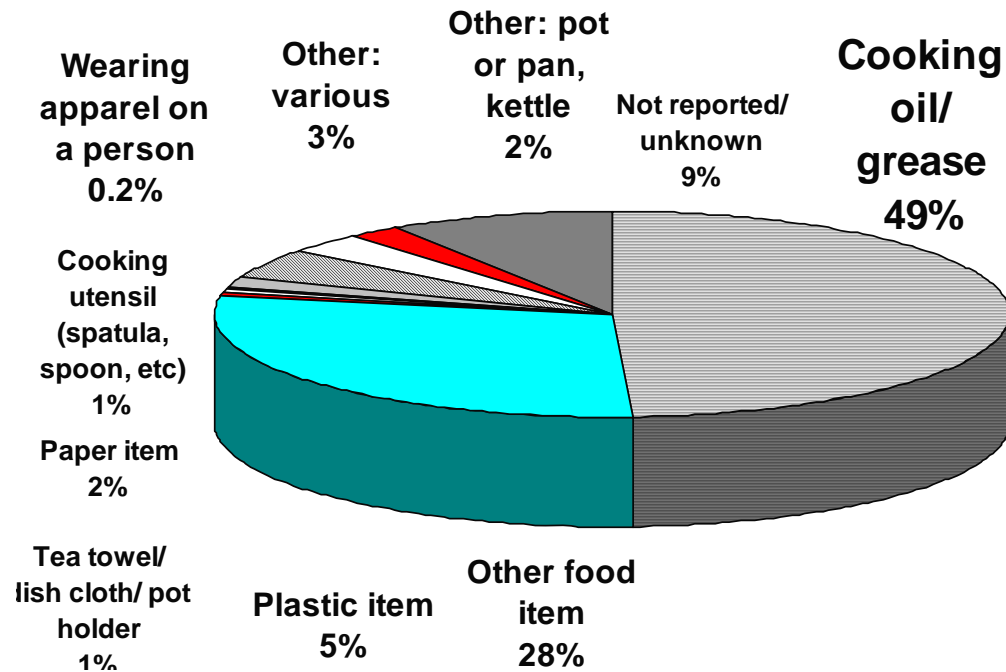
2004 Sales:

**21% conventional electric
57% smooth top electric
22% gas**

2005 Forecast:

**18%
61%
21%**

Stove Top Fires: Type of cooking

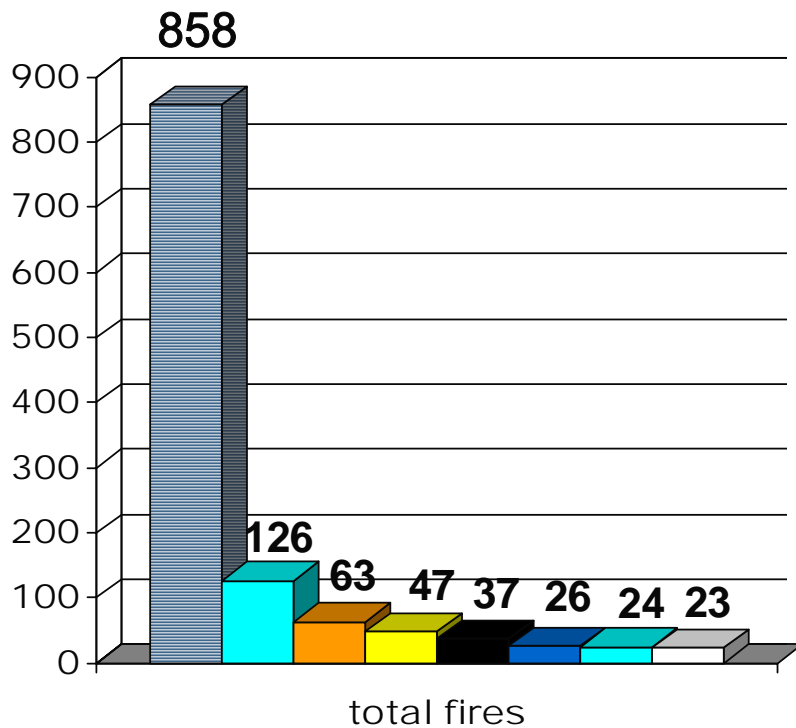


Findings

- 44% element was on high
- 27% pan frying
- 23% deep fat frying
- 23% simmering
- 11% boiling water
- 86% of items were ignited on burner
- 49% cooking oil/grease first object ignited, 28% other food items
- Non food items ignited on the stove top 14% including plastic item (5%) pot, pan or kettle (2%), paper (2%)
- Secondary objects ignited: 63% none, 27% cabinetry

Stove Top Fires: Key Factors/ Person cooking

Responses



- Cooking left unattended
- Not reported/ unknown
- Burner left on (after cooking)
- Object placed too close to the element
- Other: Grease or oil related spill while cooking
- Other: not cleaned
- Other: turned wrong burner on
- Other: various

69%

54% were in another room

20% were away from home

9% were outside – on the premises

7% were in the kitchen.

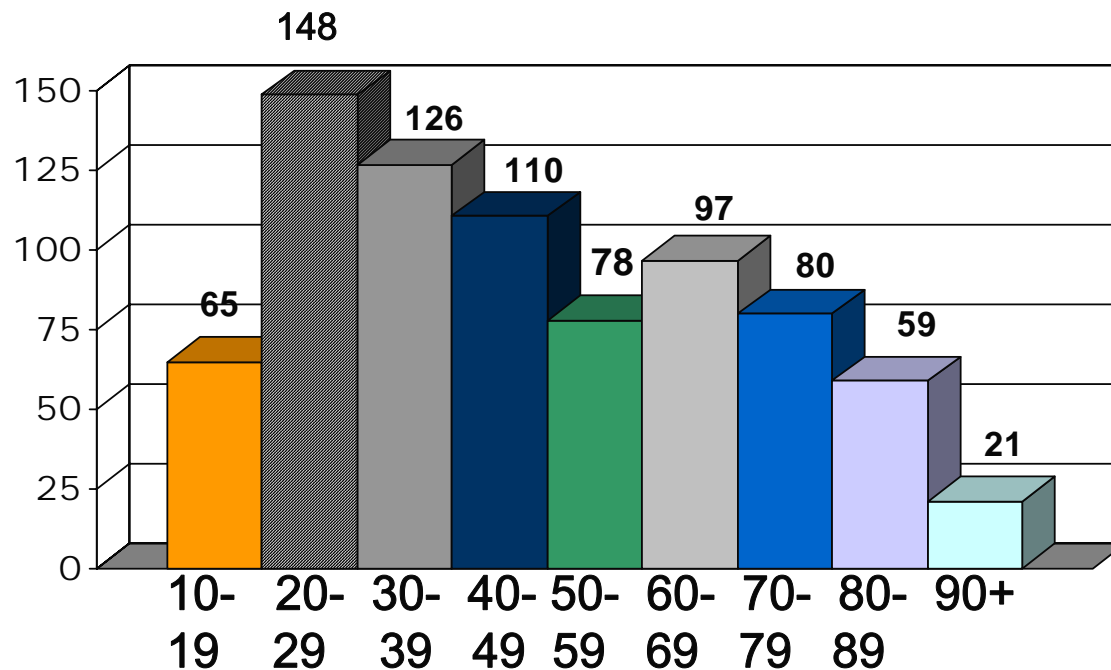
Stove Top Fires: Key Factors/ Person cooking

Findings:

- Distracted/forgot: 51% (635)**
- Person asleep: 10% (126)**
- Unaware of hazard: 21% (259)**
- Possible Impairment, Alcohol: 5% (62)**
- Mental Disability: 2% (18)**
- Possible Impairment, Drugs: 1% (16)**
- Physical Disability: 0.4% (5)**

Stove Top Fires: Key factors/ Person cooking

Rate of fires per million population by age group



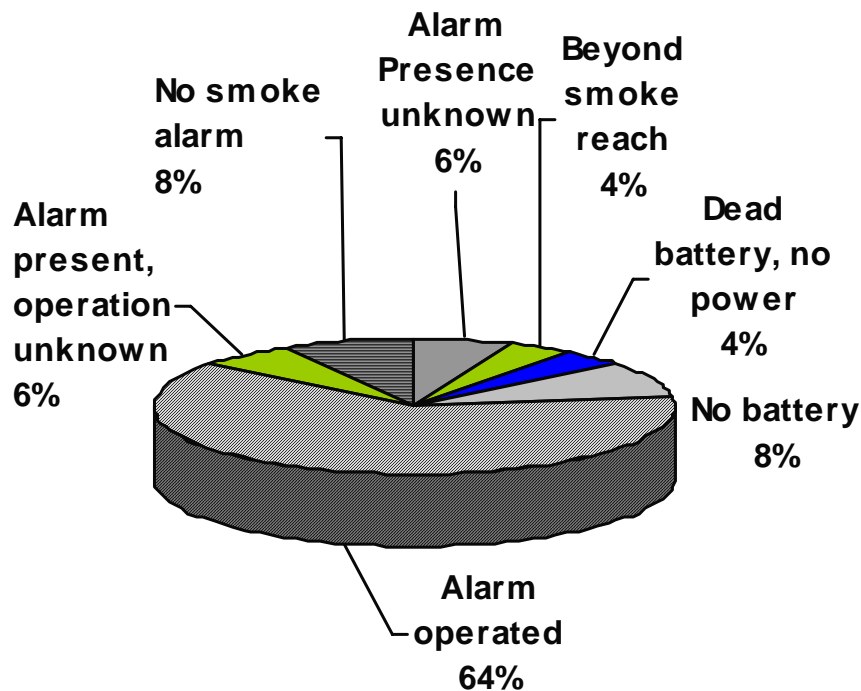
Findings:

Gender of person cooking at the time of the fire:

56% female; 39% male

Age group 20-29 were reported with the highest incidence of stove top fires 148 per 1M population, 30-39 the second highest at 126, declining to below 100 for older age groups.

Stove Top Fires: Smoke alarm status



Findings:

**Occupant first alerted to fire:
30% saw fire/smoke, 16% smelled smoke**

25% smoke alarm alerted them

Alarm operation:

64% of these fires the smoke alarm operated

4% smoke did not reach alarm

12% no battery in the alarm, dead battery no power

8% no smoke alarm

Battery removed due to nuisance alarms: 2% of all fires

Stove Top Fires: Occupant Actions

- **Occupant(s) attempted to extinguish the fire: 61% (755)** →
- **Did not attempt to extinguish fire: 8% (97)**
- **Evacuated: 15% (191)**
- **Unknown: 5% (70)**

- **Other: Away from home 10% (120)**
 - **self extinguished 0.5% (7)**
 - **neighbour extinguished 0.8% (11)**
 - **removed pot or turned off stove 0.6% (8)**

Attempted to Extinguish fire using:

Pot/pan lid: 10% (125)

Fire extinguisher: 10% (126)

Water: 18% (219)

Other:

Moved pot 11% (142)

Smothered with baking soda, salt or flour 3% (43)

Smothered with cloth 3% (36)

Shut off burner 2% (30)

Note: more than one action could be reported

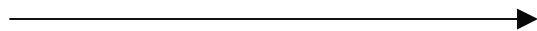
Stove Top Fires: Injuries

Findings:

**106 fires, 205 injuries: Overall
9% of stove top fires resulted in
injuries**

**In 8% of fires where no attempt
to extinguish the fire was made
there were injuries reported
compared to:**

**17% of fires where an attempt to
extinguish the fire was made and
there were injuries reported**



**While attempting to extinguish the fire may
have prevented additional injuries, the survey
results show there were:**

**22% of the injuries (45): moved the pot or pan
from stove**

**21% of the injuries (44): water used to
extinguish fire**

**12% of the injuries (26): smothered fire with
lid, cloth, baking soda, salt, flour**

**9% of the injuries (18): person used fire
extinguisher**