Case Study – Public Housing

“Stove-top Cooking Fires Eliminated at Toronto Community Housing”

Toronto Community Housing (TCH) is the largest social housing provider in Canada and the second largest in North America. TCH is home to about 164,000 low and moderate-income tenants in 58,500 households (seniors, families, singles, refugees, recent immigrants to Canada and people with special needs) – 6% of the city’s population.

The mandate of Toronto Community Housing is to provide quality housing for low and moderate income households and to create community conditions that minimize risk and promote resiliency.

The Problem

Stove top cooking is the “Number One cause of household fire” in North America. Cooking left unattended is the number one reason for these fires.

According to the Canadian Fire Safety Association cooking equipment was identified as the leading ignition source attributed to preventable home fires in Ontario, averaging 1,494 fires annually or 24% of all preventable home fires.

But some of the most shocking statistics reveal that 43.4% of all stovetop fires occur in multi-unit residences and that 63.2% of stovetop fires are in subsidized units (The Office of the Ontario Fire Marshal).

The cause of these fires is typically related to unattended cooking, that is the cook turns on the stove and leaves the room or the housing unit while cooking.

Oil left unattended can quickly ignite and result in a grease fire. These grease fires tend to accelerate quickly spreading beyond the vicinity of the stove (cabinets, curtains, floors etc.).

<table>
<thead>
<tr>
<th>Toronto Community Housing Cooking Fires 2005-10</th>
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<tbody>
<tr>
<td>Year</td>
<td># of cooking fires</td>
</tr>
<tr>
<td>2010 (as of July/10)</td>
<td>19</td>
</tr>
<tr>
<td>2009</td>
<td>28</td>
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<tr>
<td>2008</td>
<td>23</td>
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<tr>
<td>2007</td>
<td>17</td>
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<tr>
<td>2006</td>
<td>24</td>
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<tr>
<td>2005</td>
<td>20</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>131 (as of Jul/10)</strong></td>
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- Unattended cooking is the primary cause of TCH fires.
- Cooking fires primarily occur when pots of cooking oil are left on stovetops in unattended kitchens.
- Approx. 9% of TCH tenants suffer from mental illness
- “In the 131 Cooking fires at TCH I do not recall an instance where a tenant was in the kitchen cooking when the fire began” – Brian Laur (Risk Management)
- TCH experienced one death & several injuries.
As landlord TCH's ability to manage risk on the tenant’s side of the apartment door is limited as is the ability to recover damages from the tenant when fires do occur. Very few of TCH tenants carry any type of insurance coverage.

- TCH has a traditional insurance program. They insure $10B worth of housing properties.
- TCH’s property deductible is $250,000 and as a result they manage 99% of their fire claims in-house. They are basically self-insured.
- TCH Risk Management is given an annual budget of $1.5M to pay below deductible property claims. In 2009 alone the number of claims were 188 totaling $3.1M (28 of these were cooking fires totaling $574K).

The Solution: The Safe-T-element® cooking system

In addition to its ongoing risk management efforts Toronto Community Housing began a Safe-T-element® installation program in 2007 to combat the plague of cooking fires and property claims it was experiencing. TCH began installing Safe-T-elements® in two of its highest profile urban renewal projects – Rivertowne and Regent Park.

These elements were pre-installed before delivery onto electric stoves to limit the element temperature to below the flashpoint of cooking oil, allowing enough heat to cook but not enough to ignite oil.

The Results

The Safe-T-elements® are now installed on over 1,600 ranges throughout the TCH portfolio and over the past two years Toronto Community Housing has eliminated its cooking fires in those housing units that have the Safe-T-element® installed. TCH receives a $40 rebate for each STE equipped range from their insurance underwriter.

As a result of this success TCH has now extended its program beyond new construction and rehabilitation developments and Safe-T-elements® are now standard on all new and replacement stoves meaning that all stoves now come pre-equipped before delivery. TCH intends to equip their entire housing portfolio over time.

“**In the past two years we have had NO cooking fires in any of the housing units where the Safe-T-element is installed. This has been a very effective way of getting past the apartment door to affect behavior and mitigate risk**”

Brian Laur – Manager of Insurance and Risk Management, Toronto Community Housing

**Safe-T-element® Is Now Mandated For All New Ranges**

At Toronto Community Housing.

The Safe-T-element® cooking system is currently installed in over 300 housing authorities throughout North America.

**Protecting Properties, Reducing Energy and Saving Lives.**

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