Vision 20/20

Fire is Everyone's Fight™

Model Performance in Fire Prevention

SYMPOSIUM 2016

To Reduce/Eliminate Cooking Fires

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GOALS AND OBJECTIVES

Overall Goal/Vision

- To reduce/eliminate cooking fires.
- Target the highest risk occupancies in the jurisdiction.
- Create measurable loss reduction.
- Solidify a prevention partnership with affordable housing.
- Develop a template for a sustainable replicable process for continued reduction of cooking fires.

Program Goal

Goal:

- To reduce eliminate cooking fires in the target property.
- To change behaviors and educate residents on both safe cooking & home fire safety practices.

Program Solution:

- Incorporate **Temperature Limiting Control** technology on all stovetops to help prevent auto ignition.
- Education for all staff and residents.

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FORMATIVE EVALUATION

The Problem

- 2000 – XXXX Sandusky Fire responded to 400 + kitchen fires.
- 48 were unattended cooking fires at Erie Metropolitan Housing Authority (EMHA)
  - **134 unit sprinkled 10-story high rise**
  - Low income families, seniors, and people with disabilities
- In the five years prior to the program - 18 cooking related incidents:
  - 14 caused the sprinkler system to deploy
  - 4 burnt food events
  - $200,000 loss

The Process

- Risk assessment
  - Identified highest risk property
  - Set bench marks for the program
- Researched solutions to mitigate hazard
- Identified a technology solution that was preventative vs. reactive
- Developed educational component to support technology solution.

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PROCESS EVALUATION

The Process

- Target Property:
  - Started in October 2012
  - 134 housing units
  - Education to all staff and residents on stoves
  - Safety education to all residents
- Additional Installations:
  - Extended with Red Cross grant matched by the EMHA.
  - all multi family units (a total of 239 units).
    - 29 seniors units
    - 76 single family units (Dec 2012).
- 3-year post impact/outcome analysis.
  - *Outcome Evaluation limited to 134 unit target property.*

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IMPACT EVALUATION

Impact of Program on Risk

Target Property:

- 100% installation in 134 target property housing units.
- 100% staff & residents trained on care and use of stoves.
- 100% residents received additional cooking & fire safety training
- Documented results in incidents of fire and burned food.

Additional installations outside of test program (239 in total):

- 29 seniors units
- 76 single family (Dec 2012)

  (Not included in Outcome Evaluation)

Target Property Results (134 units)

5 Yrs Before (2008 – 2012)	3 Yrs After (2013 – 2015)
• 18 cooking fires	✓ ZERO cooking fires
• 4 burnt food events	✓ 4 confirmed fire saves
• 14 sprinkler activations	✓ Energy & water savings
• $200K in losses	✓ Zero dollar losses

- ✓ Cost of test property program approximately $30K.
- ✓ Significant return on investment in addition to fire safety.

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OUTCOME EVALUATION

Fires That Never Happened (MC)

- **0 cooking fires in all 239 housing units**
- EMHA residents are
  - Happy with the technology,
  - Better educated, and
  - Saving $ on electricity and water.
- The elimination of preventable fire calls allows our department to serve in other capacities that have been neglected for years.

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RECOMMENDATIONS

If you have a cooking fire problem

- Promote engineered solutions for cooking ranges that help prevent the fire before it starts.
- Focus on Multi-family dwellings specifically low income & seniors.
- Be aware of and take advantage of new UL standards coming that pertain to auto-ignition control for electric coil ranges.
- Work with your City, County, and housing providers to show the value added in terms of actual dollars savings by preventing these fires before they start as an added incentive.
- Emphasis on benefits to tenant and firefighter safety by virtually eliminating these fires in your most at-risk occupancies.

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RESOURCES

Resources

- Cooking Fire Fact sheet
- Safe-T-element product sheet
- Smart Burner product sheet
- Educational materials
- All items can be obtained from https://www.pioneeringtech.com/