



Presentation Title: Multi-Family
Occupancies: Tragedy Leads to Success

Presented by: Marius Laursen, Fire Marshal
Mitchell, South Dakota

I. Formative Evaluation – Planning

Multi-family occupancies have long been a high-risk population for both injury and death as the result of the fire. The Mitchell Fire Department, along with many other departments across the country, has tried solving this problem with fire and life safety inspections.

The City of Mitchell is a rural city situated in the heart of the Midwest and is located along Interstate 90 in Davison County, South Dakota. The county covers 436.9 square miles and is home to 19,769 people. Of those, approximately 2,000 are post-secondary students who attend either Mitchell Technical Institute (MTI) or Dakota Wesleyan University (DWU).

In September of 2014, the City was devastated by the fire-related death of a young MTI student. This death occurred within an R-2 occupancy that had been converted from a single family home to a multi-family occupancy. At the time there was no adopted code or regulation to enforce fire safety within multi-family residences with less than sixteen (16) living units.

The problem continued to surface each year when college students would return to Mitchell to start the new academic year. On average, the Fire Marshal's office would receive six to eight complaints each year about life safety concerns with these structures. Such complaints would include a lack of working smoke alarms, no secondary egress, and extension cord abuse. Since no fire code had been officially adopted by the City prior to October of 2014, the fire department was often left with no enforcement ability. In fact, the parents of the students that were involved in the fatal fire of September 2014 had asked their kids not to live in that occupancy for the exact reasons listed above.

The risk analysis of the city identified that over 45% of the city's occupancies fall into the maximum or high-risk categories. Additionally, the majority (85.7%) of the city's structure fires occur in single family and multi-family residential structures. An inventory of the city's commercial occupancies revealed that the over 46% of the occupancies traditionally inspected account for 0% of the structure fire responses over the past five years.

A risk analysis of all multi-family occupancy fires showed that the renters themselves caused 95% of the fires, not the owners targeted by inspections. In order to reach our desired demographics, the fire and police departments teamed up to teach fire and life safety classes. These classes are geared towards changing the "it won't happen to me" mentality.

II. Process Evaluation – Implementation

The fire code adoption was met with resistance from the City Attorney's office for two years prior to the adoption of the International Fire Code (IFC). After the tragic fatality, they began to embrace the adoption of the latest version of the IFC. Furthermore, they added language that allowed the fire department easier access to these multi-family structures including no "grandfathering" of current occupancies and decreasing the number of living units to two or more that are subject to inspection.

After the adoption of the code and amendments, the fire department realized a distinctive inspection program for these new occupancy classifications was needed. This inspection program was created using the National Fire Academy Executive Fire Officer (EFO) Program's Advanced Research Project. Several issues were identified during the research period including determining the actual locations and a total number of multi-family occupancies and a means to get these structures inspected and enforced in a timely manner with minimum staff.

The fire and police department taught 12 fire and life safety classes to incoming freshmen at both our technical school and private college.

The local Housing and Urban Development (HUD) formed a Landlord Association with the Fire Marshal to help educate not only on HUD standards but also building and fire codes.

III. Impact Evaluation – Short-Term Results

The multi-family properties were identified and 100% were inspected and brought into compliance. One inspector conducted these inspections and re-inspections over 18 months.

IV. Outcome Evaluation – Long-Term Results

There has been no change in the number of fires before and after the program. However, given the low number of occurrences in our city, it is difficult to get an accurate gauge of the situation. Since the program started, 100% of occupants have been alerted by a working smoke alarm during a fire and there have been no fire fatalities.

Recommendations for others:

Working with the occupants, the landlords, and building maintenance is important.

Conclusions:

All too often, we in the fire service are a reactive group of leaders. We wait until something tragic happens before we start to make a change. Our department is no different from many of you in that it took a fire fatality before we started to facilitate change. Our hope is that we truly look at what Community Risk Reduction (CRR) is about and start being proactive in solving problems within the fire service.