



MEDFORD BUREAU OF FIRE PREVENTION

A Division of the Medford Fire Department
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2008 Fire Marshal Report

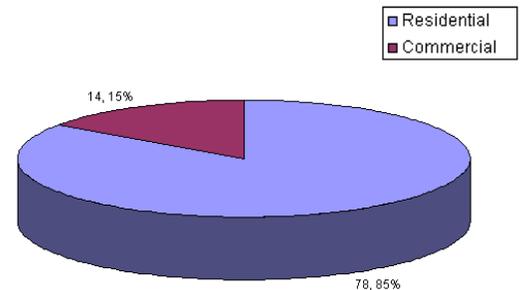
The Medford Bureau of Fire Prevention serves a population approaching 90,000 people that reside within a geographic area covering over 55 square miles. The Bureau is responsible for conducting business fire and life safety compliance inspections, performing origin and cause fire investigations, educating the public regarding fire and life safety issues, and conducting plan review and inspections for new development, fire suppression, detection and fire code related permits. The following is a summary about the community and the Bureau's activities in the community that occurred during the 2008 calendar year.

2008 in Retrospect

Fires

The Medford Fire Department responded to 333 fire incidents in 2008 within this jurisdiction, accounting for 3.7% of our call volume. Medford experienced 92 fire incidents involving structures causing \$2,128,752 in total losses. Of the structure fires that occurred, 85% occurred in residential occupancies (63% in single family dwellings

and 17% in multi-family dwellings) and 15% occurred in commercial occupancies. Medford was fortunate in 2008 to experience zero fatalities in these fires. The Bureau investigated 35 of these fires in 2008.



2008 Medford Structure Fires-
By Residential/Commercial

Residential Structure Fire Statistics

Number of Fires: 78

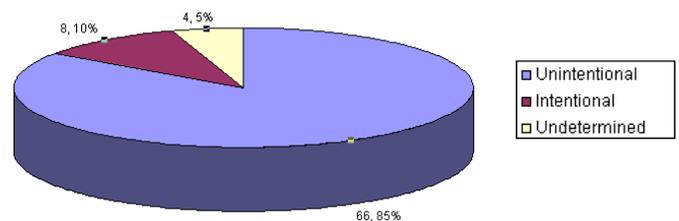
Total \$ Loss: \$1,838,952

Areas of Origin:

- 39% kitchens (highest interior percentage)
- 9% common rooms (living room, den, family room)
- 9% exterior origins

Causes:

- 85% unintentional
- 10 intentional
- 5% undetermined



2008 Medford Residential Structure Fires-
By Cause of Ignition

Initial Ignition Heat Sources:

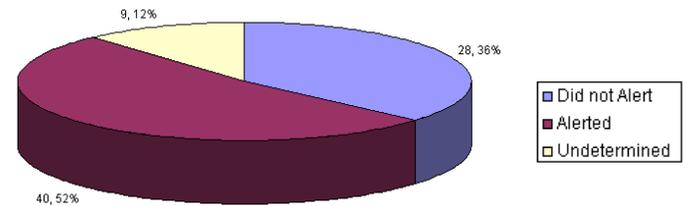
- 28% radiated/conducted heat from operating equipment (highest ranked percentage)
- 14% electrical heat sources
- 14% heat from open flame or smoking material

Time of Alarm:

- 61% of fires occurred between noon and midnight
- 32% of fires occurred between 4:00 PM and 8:00 PM

Smoke alarms:

- 52% present and alerted the residents
- 36% did not alert or were not present



2008 Medford Residential Structure Fires-
By Smoke Alarm Alert

Although national surveys have shown that 96% of all households have at least one smoke alarm, it is troubling that of smoke alarms did not alert or were not present in over a third of Medford’s residential fires. One explanation for this is that, in some cases, the smoke alarms may not have been a factor in the fire (chimney/flue fires, exterior fires, etc.). While Medford’s statistics in this area are not out of the ordinary, (NFPA reported that “Smoke alarms sounded in roughly half of the home fires reported to U.S. departments”), we know that having a smoke alarm in the home reduces the risk of dying in a house fire by 50%. National statistics also show that smoke alarms are missing in 2/3 of fatal residential fires. Having an early warning in a house fire is essential for effective evacuation; increasing the possibility that someone may make it out alive. In 2007 the Medford Fire Department implemented a program where smoke alarms were checked during any incident (including medicals) involving a residence. In 2008, 291 smoke alarms were checked during incidents. Of these, 48 were missing or failed to operate and personnel took action to ensure these residences had a working smoke alarm. We will continue to target this area and also promote home evacuation planning and residential fire sprinklers. The chance of surviving a residential fire approaches 100% when smoke alarms and a residential fire sprinkler system are installed in a home.

Commercial Structure Fire Statistics

Number of Fires: 14

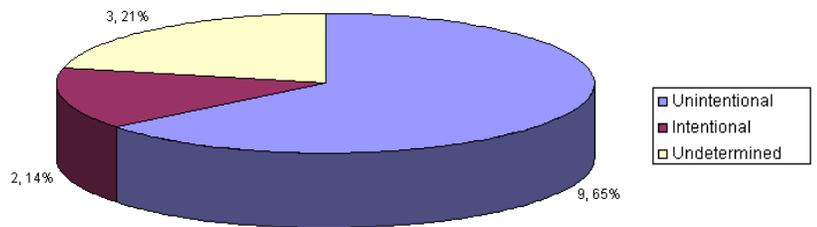
Total \$ Loss: \$289,800

Areas of Origin:

- 22% cooking areas
- 15% exterior areas

Causes:

- 65% unintentional
- 14% intentional
- 21% undetermined



2008 Medford Commercial Structure Fires-
By Cause of Ignition

Initial Ignition Heat Sources:

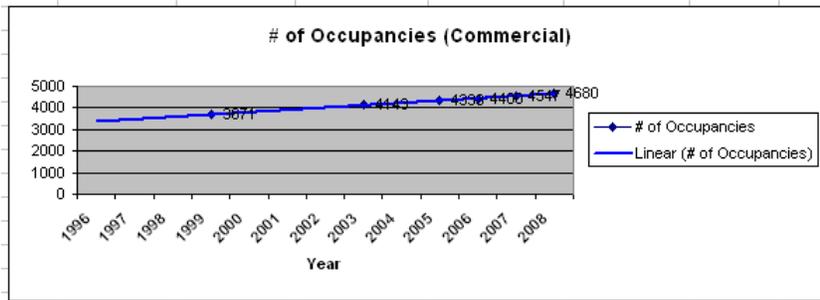
- 30% radiated/conducted heat from operating equipment (highest ranked percentage)
- 14% smoking materials (lighter, cigarette, cigar)

Time of Alarm:

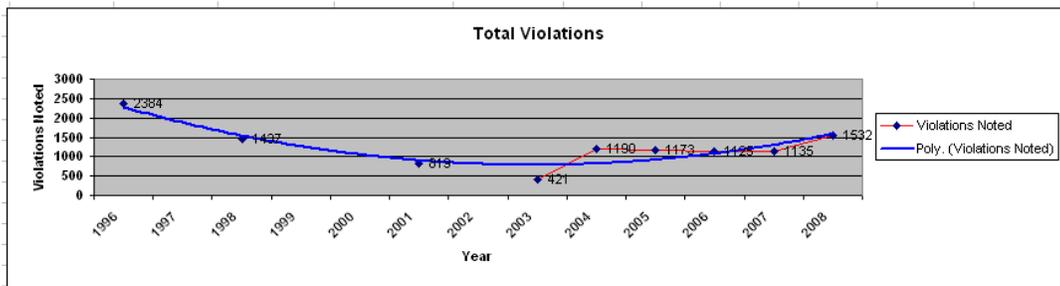
- 86% of fires occurred between noon and midnight
- 43% of fires occurred between 4:00 PM and 8:00 PM

Commercial Inspections and Enforcement

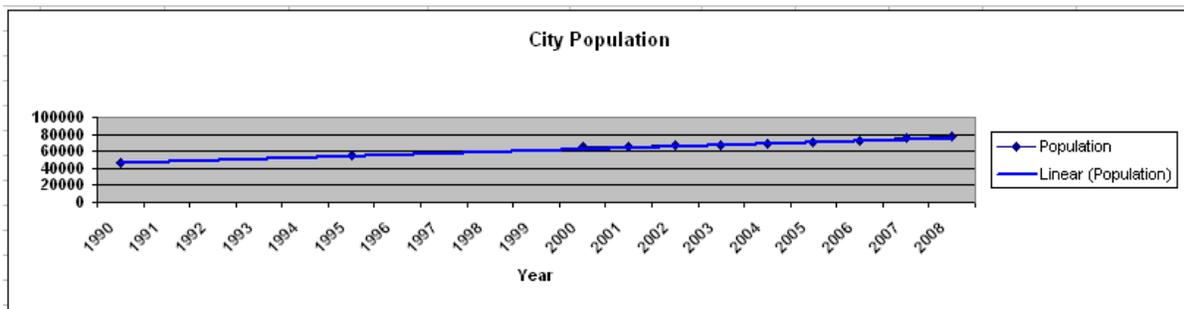
The number of commercial occupancies in the Medford Fire Department’s jurisdiction rose to 4,680 in 2008.



During 2008, the Medford Fire Department conducted 1,549 compliance inspections and 312 permitted inspections. 1532 fire code violations were noted during regular business fire inspections and 285 violations were noted during the permitted inspections.



A self-fire inspection program was set up several years ago. The intent of this program was to educate low hazard businesses about fire code requirements, have them physically check their premises, and provide a safety check for the interim between longer inspection intervals. In 2008, over 600 self-fire inspections were sent out. Of those sent out, 202 were completed and returned. Although the percentage may seem low, the Bureau educated hundreds of people in the process. Many of these forms were submitted on-line, via our webpage.



Public Education

The Bureau took part in 73 public education events/sessions, reaching more than 2,850 individuals in 2008. The Medford Fire Department continues to be the lead agency in Southern Oregon Safe Kids Coalition. Medford also takes a prime role in the Juvenile Firesetter's Program. Last year 29 juveniles attended 41 sessions. In addition, Medford takes an active role in several public education programs throughout the year, including the following:

- The Hazard House program-over 1,500 4th grade students in 17 schools were taught about smoke alarms, home fire safety, and home escape planning
- The Safe Kids Fair
- Fire Prevention Week Open House
- Child Safety Seat clinics
- Adult Foster Care Provider Classes

Permits and Development

The Bureau was responsible for 150 fire code operational and construction permits in 2008, overseeing 115 fire protection/detection permits. A total of 278 total plan reviews were conducted during this period, including 83 fire suppression systems, 32 fire alarm systems, and 163 site development reviews.

Staffing and Personnel

In 2008, The Bureau consisted of a Fire Marshal and four Fire Inspectors during the first half of the year. With a retirement, a promotion, and an unfilled vacancy, it consisted of a Fire Marshal and three Fire Inspectors the second half of the year. A temporary Inspector assignment was added utilizing line personnel beginning in October for a six month period to supplement some low hazard business inspections.

The professional achievements and qualifications that Bureau personnel have obtained continues to be impressive. Bureau qualifications include:

- All personnel were Fire Code Certified
- Three personnel possessed Oregon State Fire Marshal competency recognition
- Three personnel were IAAI Certified Fire Investigators (CFI)
- Two personnel were certified as Fire Plans Examiners/Building Plans Examiners

In 2008, personnel within the Bureau received 353 hours of training.

2009

In 2009 we will continue to work hard to educate the public about fire and life safety issues and target occupancies for inspections based on their hazard. Also, we will continue to take an active role in new development and construction, ensuring new buildings have adequate access, water supply, required fire suppression and detection systems, and the code required life safety systems and features in place. Our goal is to protect people by being actively involved in reducing the possibility for tragedies, with the result of making this one of the safest communities to live and work in.

See the attached supplemental pages for further statistics and information.

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2008 Annual Report

<i>Enforcement Programs</i>	<i>Number</i>	<i>Hazards Noted</i>
Regular Inspections		
Inspectors	661	1213
Company	888	319
Permitted Inspections	312	285
<i>Totals</i>	<i>1861</i>	<i>1817</i>

Self-Fire Inspection Program

Sent Out	600+
Completed and Returned	202

Fire Code Permits

	<i>Number</i>
Fire Alarms	32
Fire Sprinklers	60
Kitchen Hood Suppression Systems	17
Fire Suppression-Clean Agent Systems	1
Fire Suppression-Paint Booth Systems	5
Fireworks Display	2
Liquid Petroleum Gas	1
Mall Use	4
Flammable & Combustible Storage Tanks	2
Tank Removal	2
Tents	24
<i>Totals</i>	<i>150</i>

Other Permits Issued

	<i>Number</i>
Agricultural Burns	27
Residential Burns (Approximate)	3,000
Recreational Fires	20
<i>Totals</i>	<i>3,047</i>

Plan Reviews

	<i>Number</i>
Fire Alarm Systems	32
Fire Suppression Systems	83
Site Development	163
<i>Totals</i>	<i>278</i>

Bureau Conducted Fire Investigations

	<i>Number</i>	<i>Fatalities</i>
Unintentional	16	0
Intentional	12	0
Undetermined	7	0
<i>Totals</i>	<i>35</i>	<i>0</i>

Public Education Events

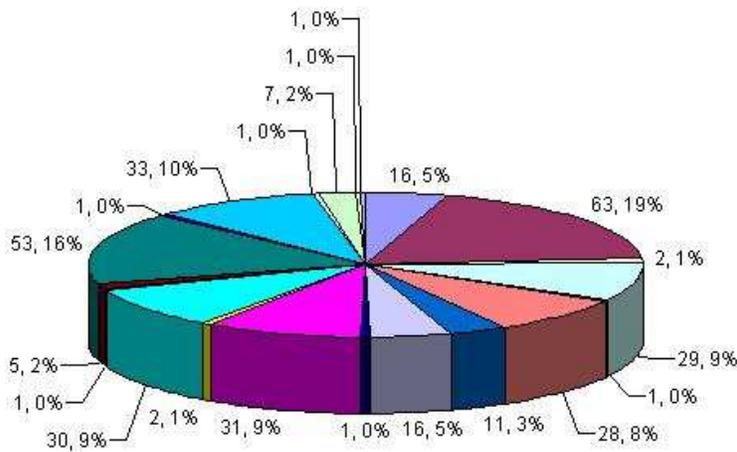
	<i>Number of Sessions/Classes</i>	<i>Attendance</i>
Public Education	73	2,850
Juvenile Counseling	12	38

Bureau Training

	<i>Hours</i>
Fire Investigation, Fire Inspection, Plan Review, Public Education	353



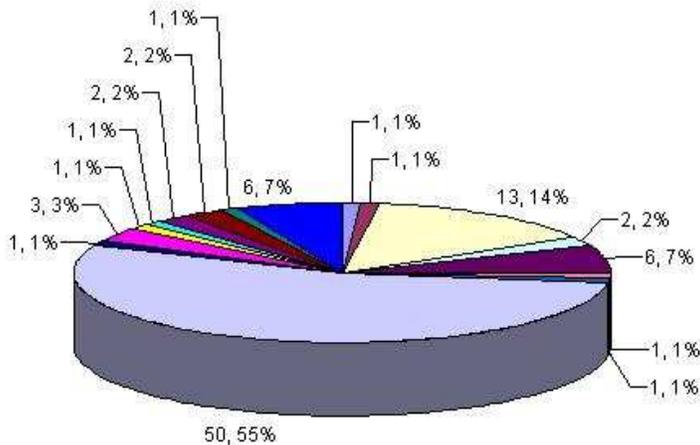
2008 Medford Fires- By Type



- Brush or brush-and-grass mixture fire
- Structure Fire
- Construction or demolition landfill fire
- Cooking fire, confined to container
- Cultivated trees or nursery stock fire
- Cultivated vegetation, crop fire, Other
- Dumpster or other outside trash receptacle
- Fire, Other
- Forest, woods or wildland fire
- Grass fire
- Mobile property (vehicle) fire, Other
- Natural vegetation fire, Other
- Off-road vehicle or heavy equipment fire
- Outside equipment fire
- Outside Trash Fire
- Outside storage fire
- Passenger vehicle fire
- Road freight or transport vehicle fire
- Special outside fire, Other
- Cultivated orchard or vineyard fire



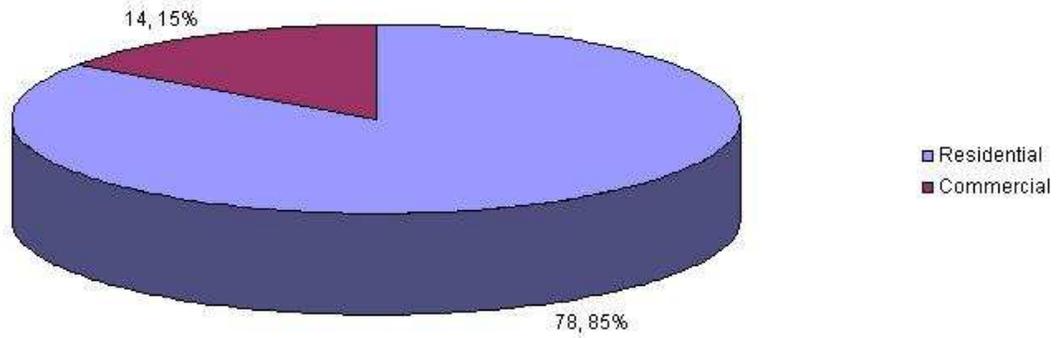
2008 Medford Structure Fires- By Property Use



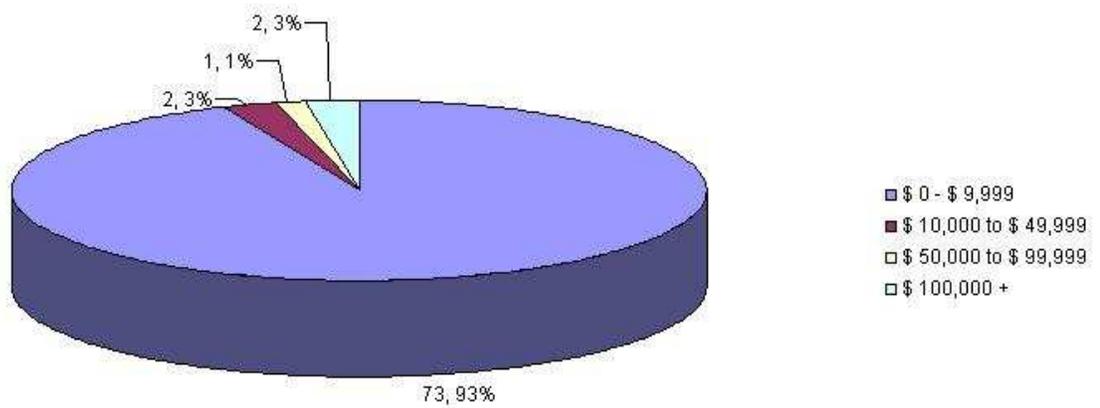
- 24-hour care Nursing homes, 4 or more persc
- Adult Foster Care Home
- Apartment or Multi-Family Dwelling
- Business office
- Duplex
- Elementary school, including kindergarten
- Food and beverage sales, grocery store
- House
- Ind., utility, defense, agriculture, mining, other
- Mercantile, business, Other
- Outbuilding, protective shelter
- Professional supplies, services
- Residential board and care
- Restaurant or cafeteria
- Specialty shop
- Residential, Other



2008 Medford Structure Fires- By Residential/Commercial

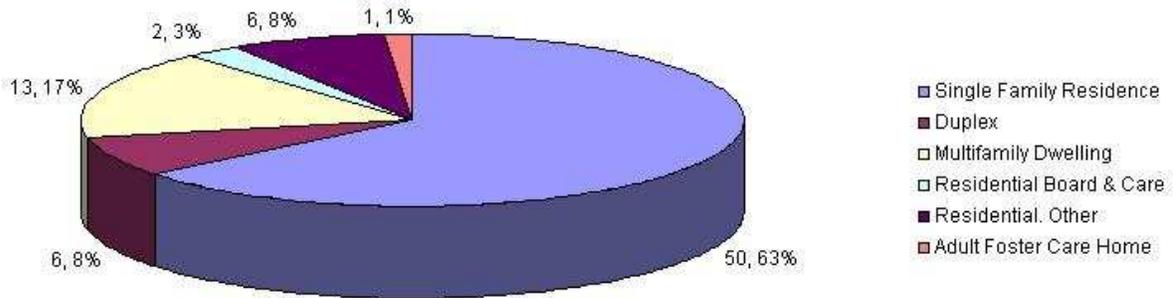


2008 Medford Residential Structure Fires- By Property Loss

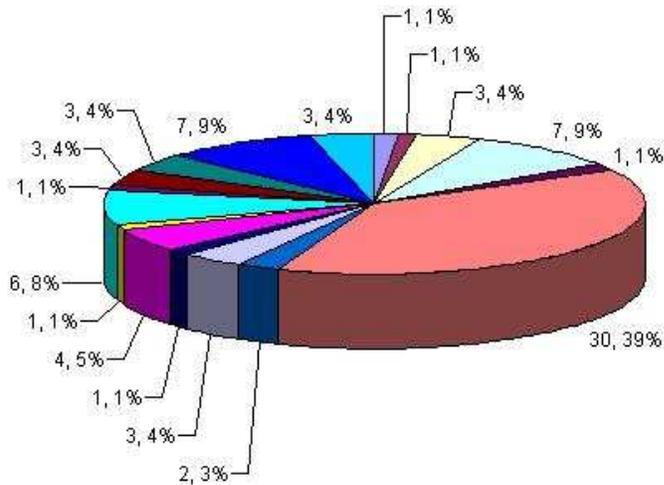




2008 Medford Residential Structure Fires- By Property Use



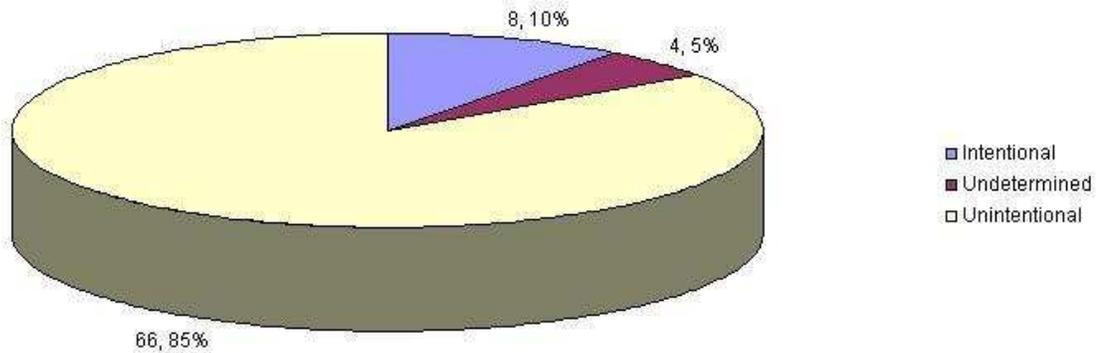
2008 Medford Residential Fires- By Area of Origin



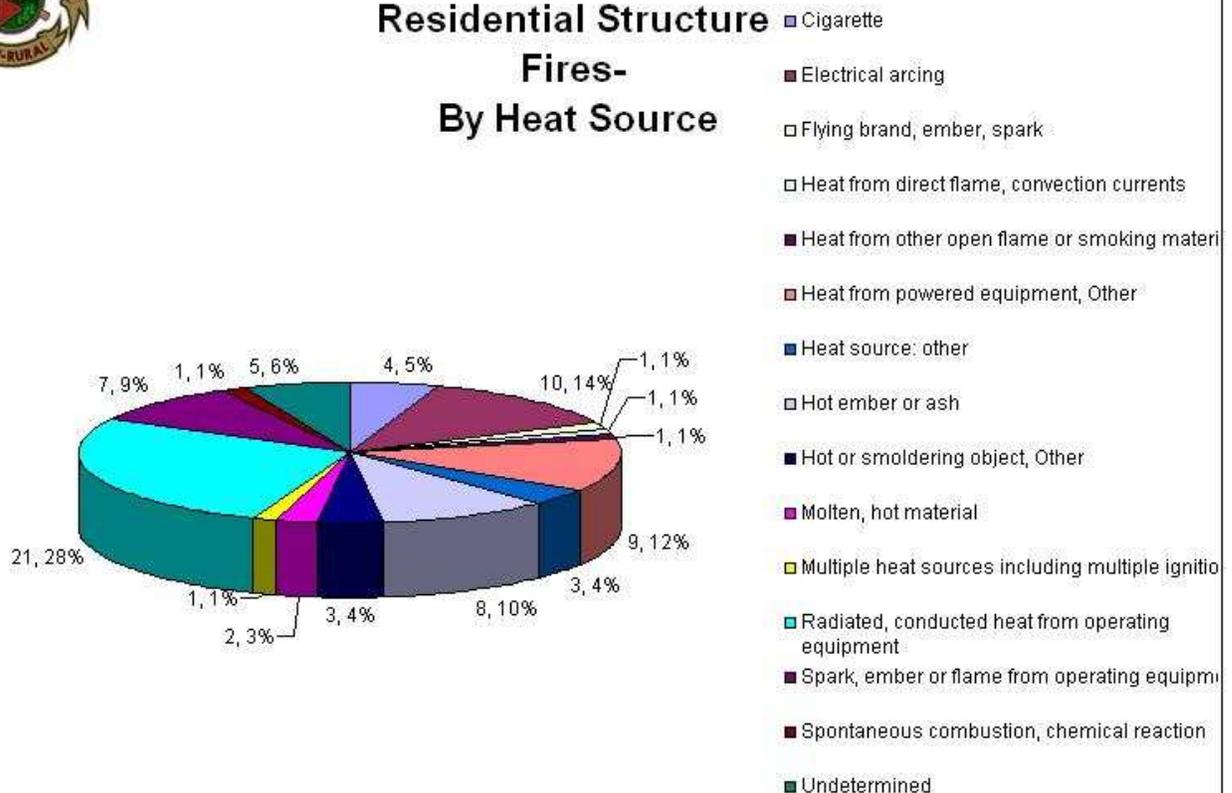
- Attic: vacant, crawl space above top story, cupo
- Bathroom, checkroom, lavatory, locker room
- Bedroom - < 5 persons; included are jail or pri
- Common room, den, family room, living room, lounge
- Conduit, pipe, utility, or ventilation shaft
- Cooking area, kitchen
- Courtyard, patio, porch, terrace
- Function areas, other
- Heating room or area, water heater area
- Laundry area, wash house (laundry)
- Storage area, Other
- Structural area, Other
- Undetermined
- Vehicle storage area; garage, carport
- Wall assembly, concealed wall space
- Exterior



2008 Medford Residential Structure Fires- By Cause of Ignition

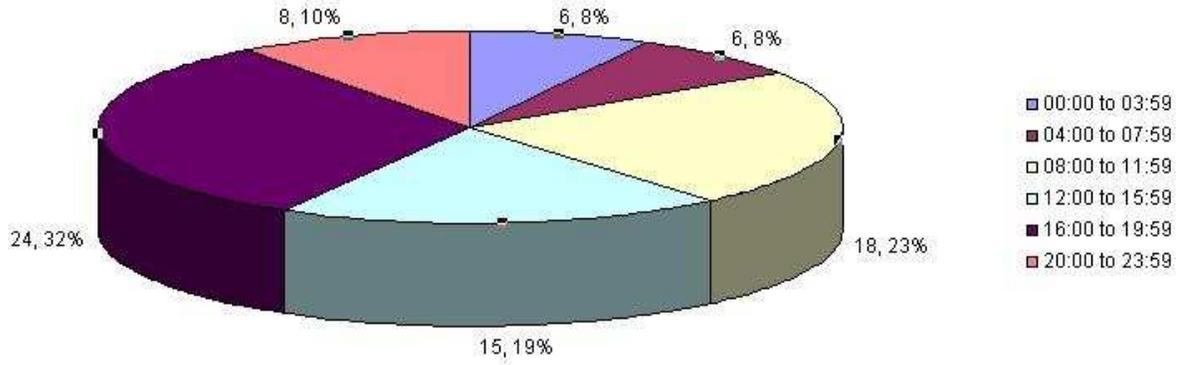


2008 Medford Residential Structure Fires- By Heat Source

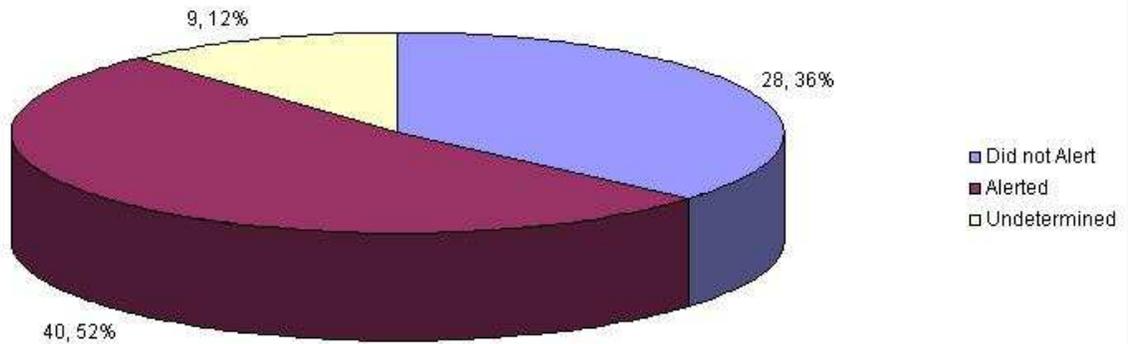




2008 Medford Residential Structure Fires- By Time of Alarm

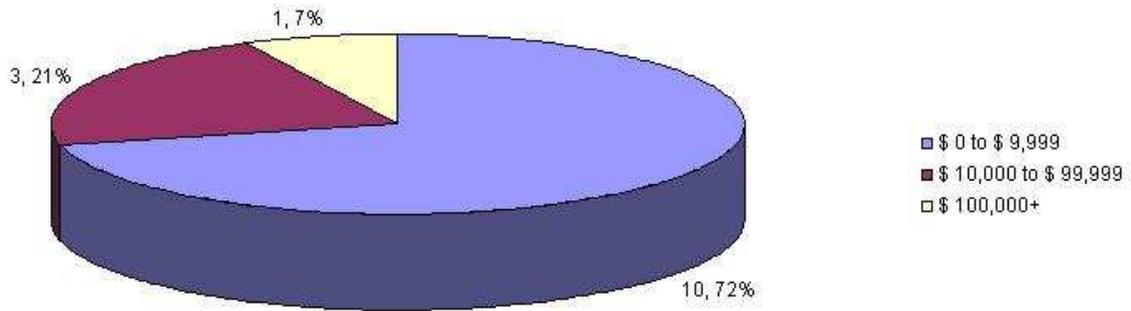


2008 Medford Residential Structure Fires- By Smoke Alarm Alert

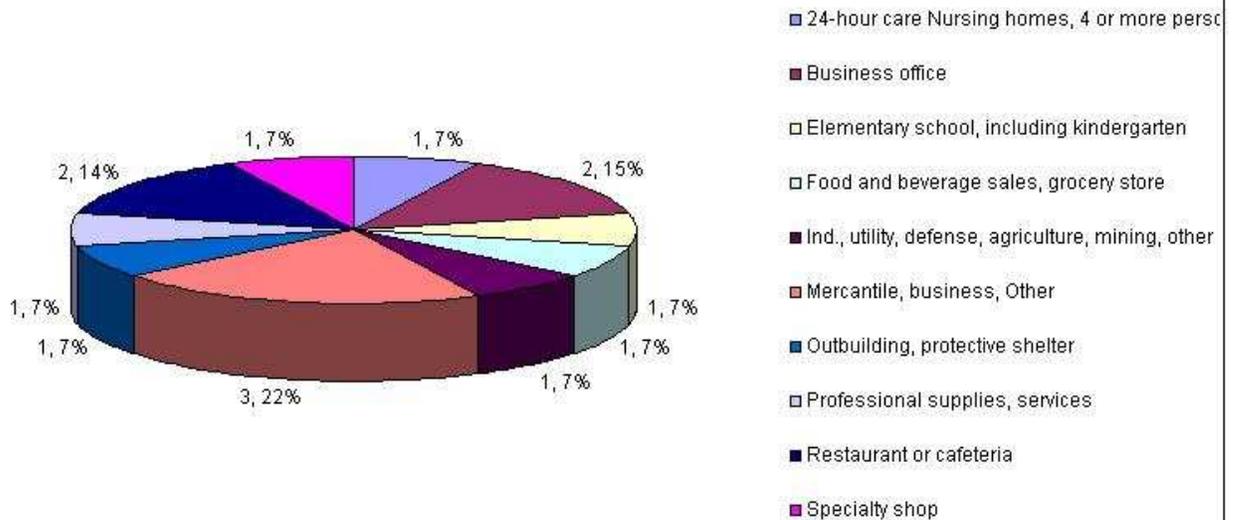




2008 Medford Commercial Structure Fires- By Property Loss

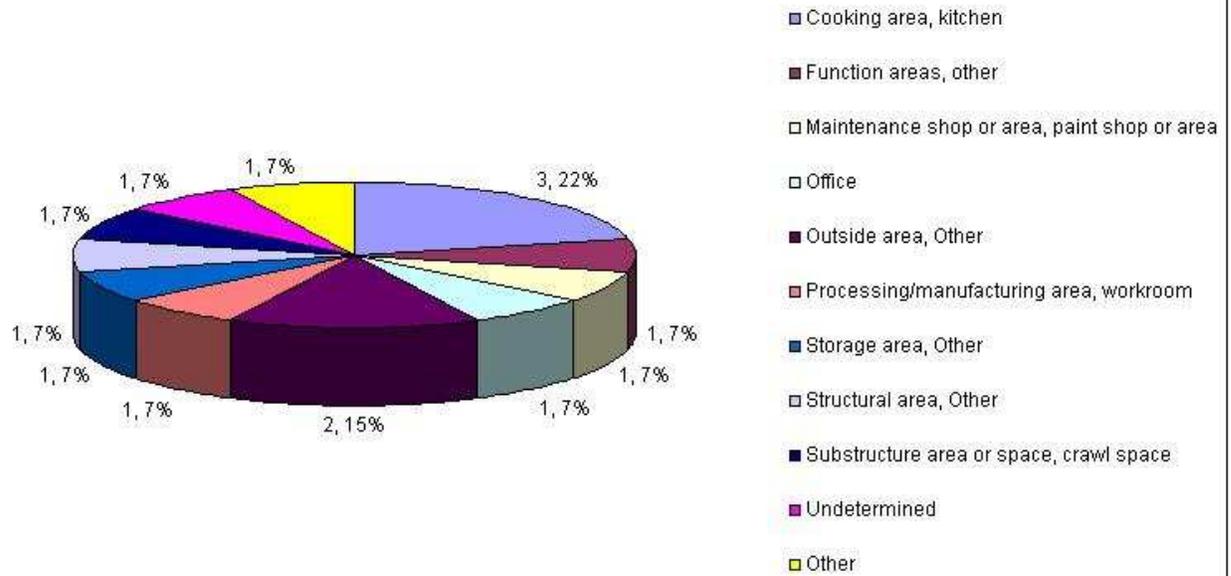


2008 Medford Commercial Structure Fires- By Property Use

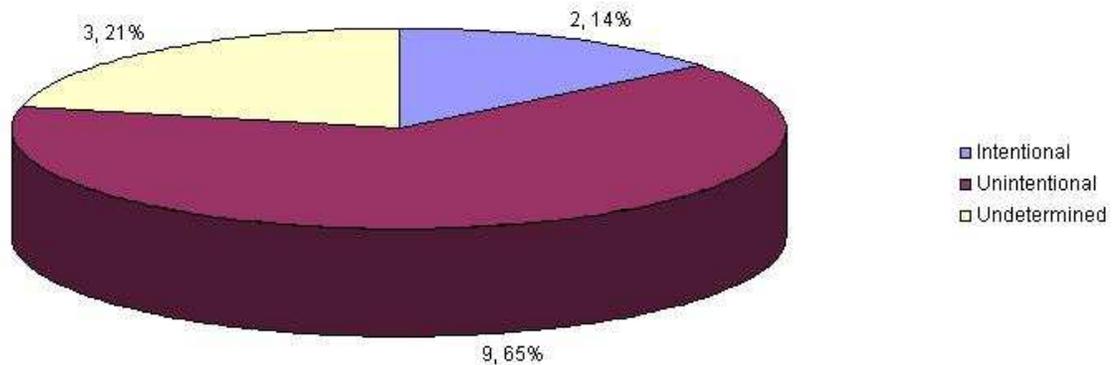




2008 Medford Commercial Structure Fires- By Area of Origin

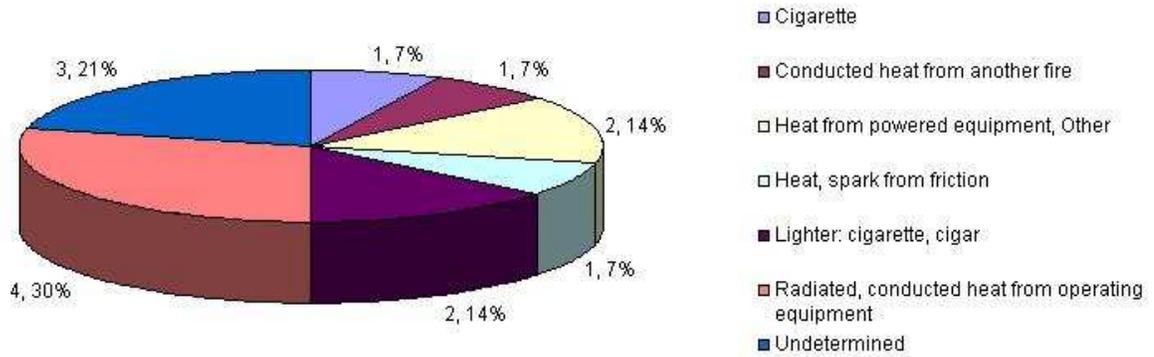


2008 Medford Commercial Structure Fires- By Cause of Ignition





2008 Medford Commercial Structure Fires- By Heat Source



2008 Medford Commercial Structure Fires- By Time of Alarm

