



# **Oregon Office of State Fire Marshal**

# **Youth with Fire in Oregon**

# **2013**

Prepared by the Analytics & Intelligence Unit of the Office of State Fire Marshal.  
Includes incident data for 2013 as reported by Oregon fire agencies as of April 1, 2014.

# YOUTH INVOLVED WITH FIRE

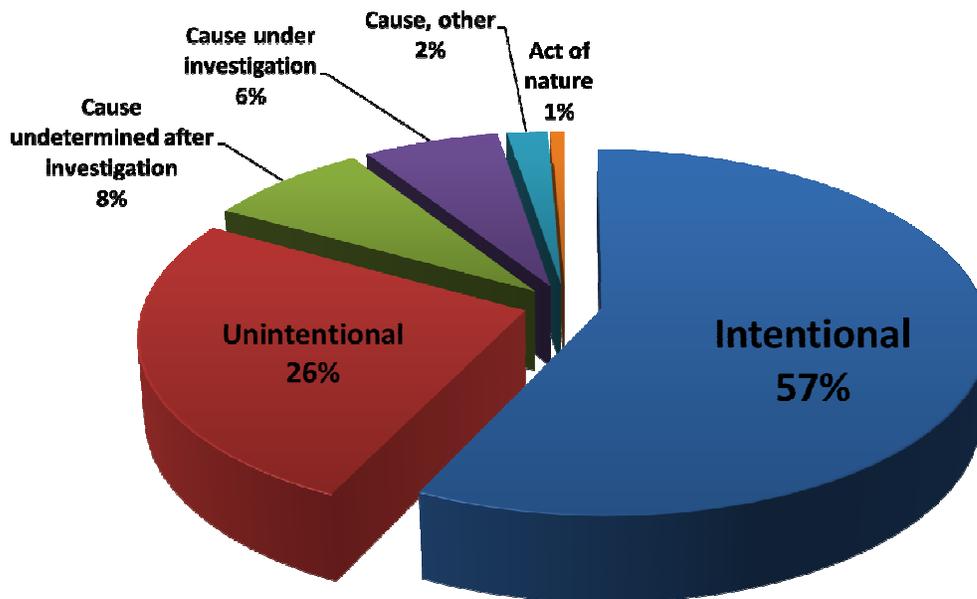
This report pertains to youth involved with fire. Youth are defined as persons under the age of 18. Information pertaining to youth involved with fire incidents are based on NFIRS incident data submitted by local fire agencies. In 2013, there were 154 fires identified as having youth involvement reported to the Office of State Fire Marshal (OSFM).

The following is a year to year comparison of key characteristics of youth involved fires in Oregon.

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Total Fires	134	141	156	154
Civilian Deaths	2	2	0	0
Civilian Injuries	2	3	3	7
Property damage in millions	\$0.24	\$1.11	\$2.37	\$1.04

In 2013, over half (57%) of all fires involving youths were determined to be intentionally set fires.

## 2013 Youth Related Fire Causes

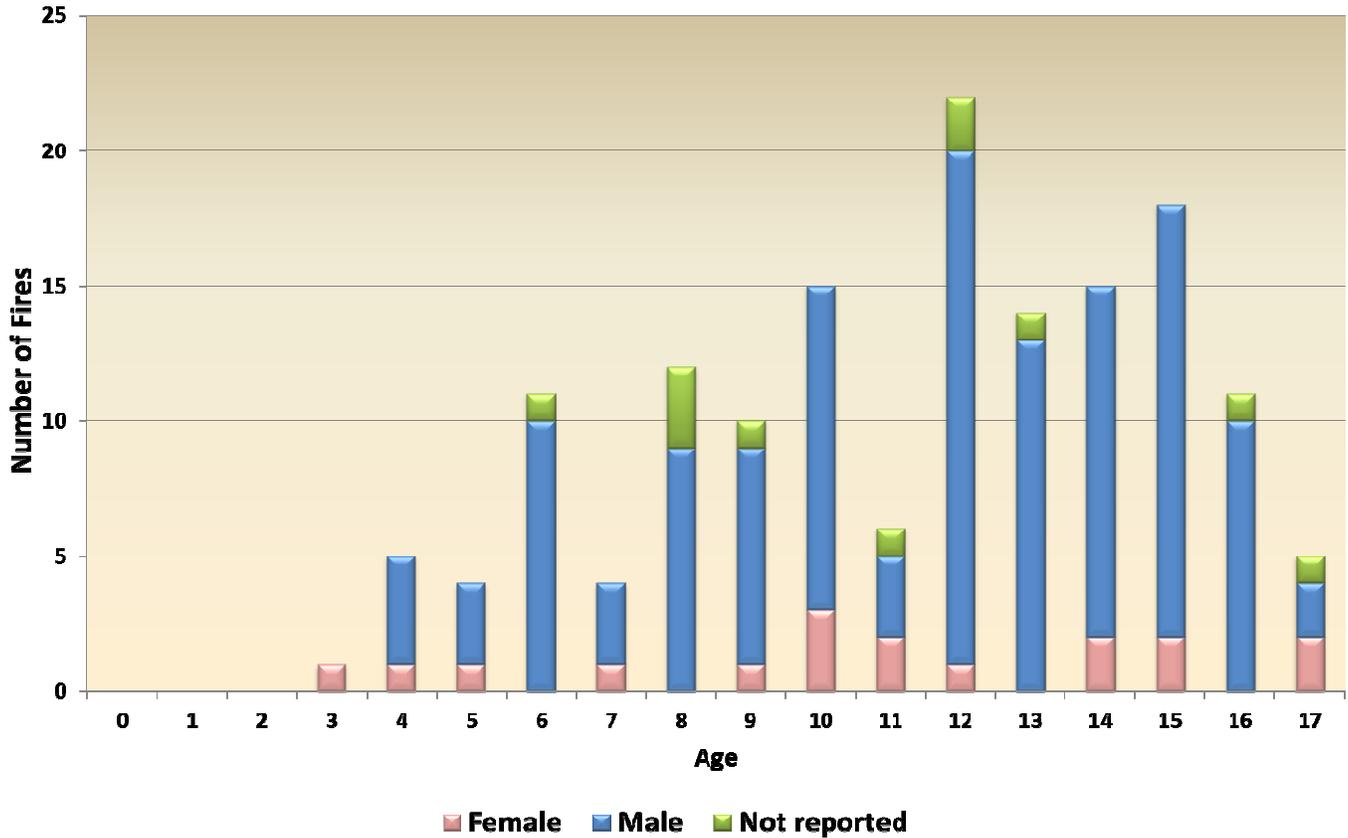


Cause	Total
Intentional	88
Unintentional	40
Cause undetermined after investigation	12
Cause under investigation	10
Cause, other	3
Act of nature	1
<b>Total</b>	<b>154</b>

# Youth Involved With Fire - Incidents

As identified in the chart below, youths between the ages 10 and 15, accounted for the majority (58%) of youth involved fires. Males were involved in 81% of the fires, while females accounted for 11%. No gender was reported for the remaining 8%.

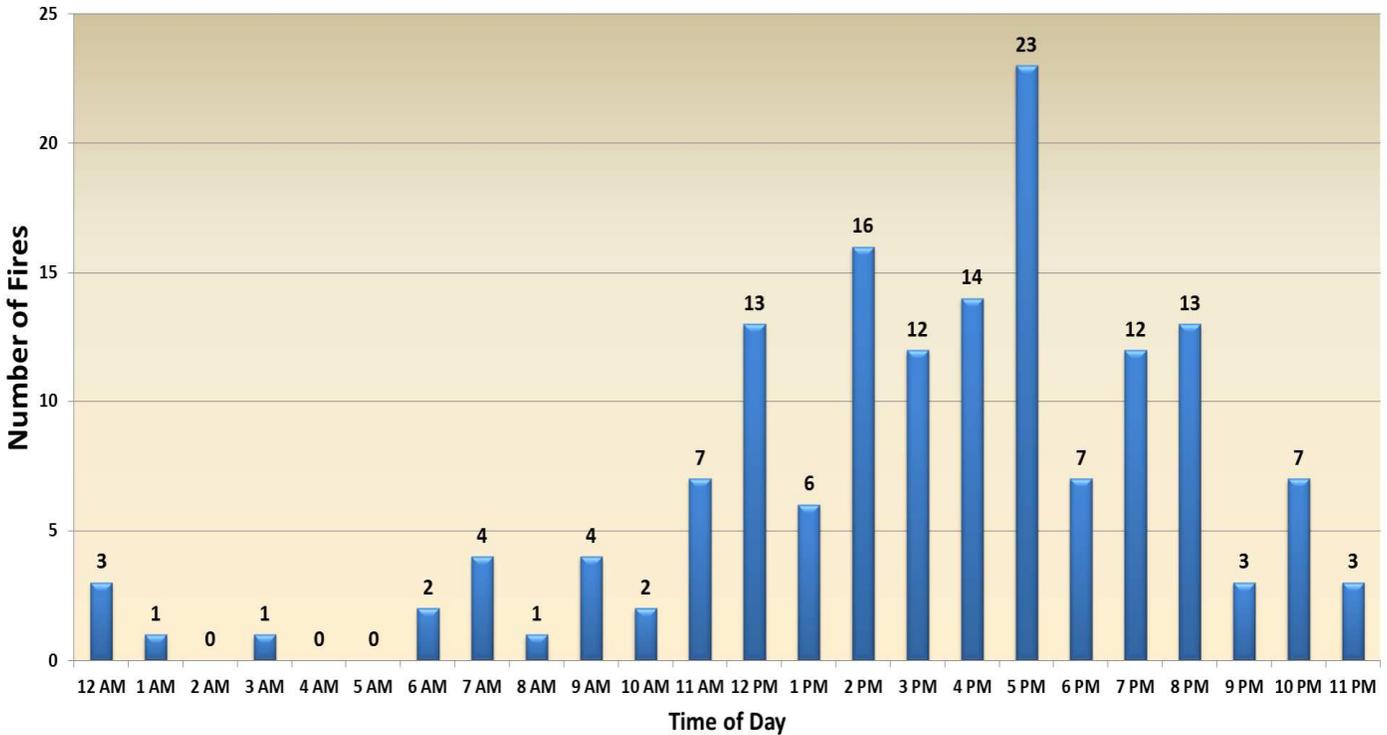
**2013 Ages and Gender of Youth Involved with Fire**



Gender\Age	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Not reported	Total
Female				1	1	1		1		1	3	2	1		2	2		2		17
Male					4	3	10	3	9	8	12	3	19	13	13	16	10	2		125
Not reported							1		3	1		1	2	1			1	1	1	12
Total	0	0	0	1	5	4	11	4	12	10	15	6	22	14	15	18	11	5	1	154

# Youth Involved With Fire - Incidents

The hours between 2 pm and 8 pm account for more than half (63%) of all youth involved fires, with a peak occurring in the 5 pm hour.



	12 AM	1 AM	3 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM
<b>Total</b>	3	1	1	2	4	1	4	2	7	13	6
<b>Pct.</b>	1.9%	0.6%	0.6%	1.3%	2.6%	0.6%	2.6%	1.3%	4.5%	8.4%	3.9%

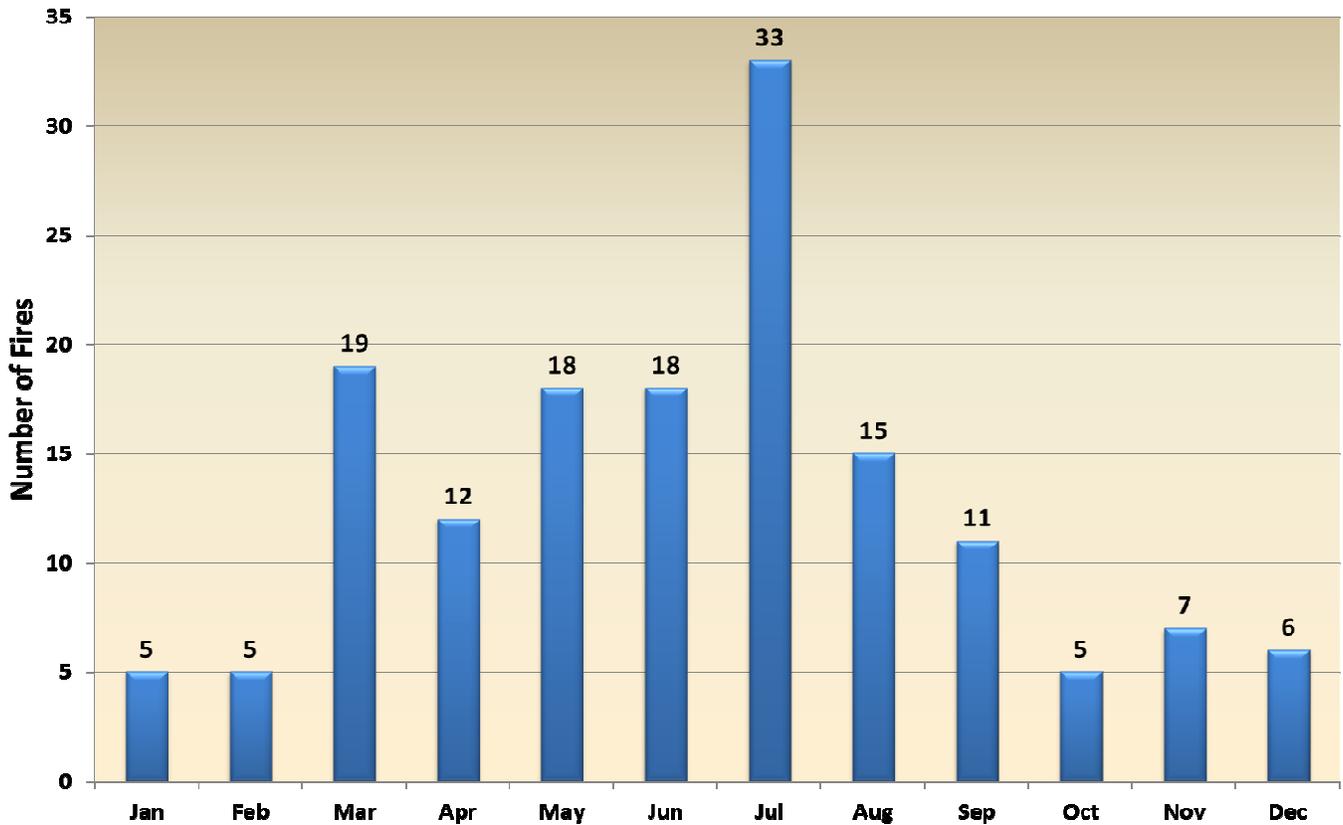
  

	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	Total
<b>Total</b>	16	12	14	23	7	12	13	3	7	3	<b>154</b>
<b>Pct.</b>	10.4%	7.8%	9.1%	14.9%	4.5%	7.8%	8.4%	1.9%	4.5%	1.9%	<b>100.0%</b>

## Youth Involved With Fire - Incidents

The months of May, June, and July account for the largest percentage (45%) of fires involving youths.

### 2013 Fire Incidents Involving Youth by Month

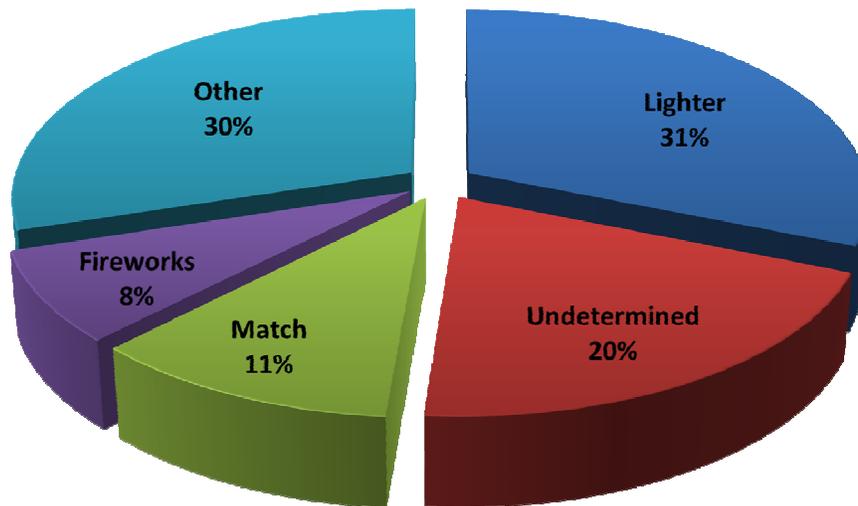


Month	Total	Pct
January	5	3.2%
February	5	3.2%
March	19	12.3%
April	12	7.8%
May	18	11.7%
June	18	11.7%
July	33	21.4%
August	15	9.7%
September	11	7.1%
October	5	3.2%
November	7	4.5%
December	6	3.9%
<b>Total</b>	<b>154</b>	

## Youth Involved With Fire - Incidents

The following charts show the heat sources and top items first ignited by youths. The heat sources and items first ignited are determined by on-scene fire officers or investigators.

### 2013 Top Heat Sources of Youth Involved Fires



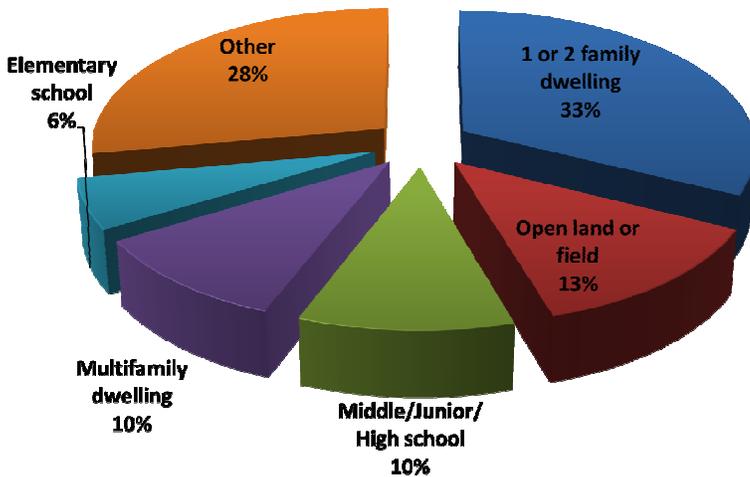
Heat Source	Total
Lighter	48
Undetermined	31
Match	17
Fireworks	12
Other	46
<b>Total</b>	<b>154</b>

Items First Ignited	Total	Pct.
Light vegetation - not crop	38	24.7%
Rubbish, trash, waste	20	13.0%
Undetermined	17	11.0%
Magazine, newspaper, writing paper	13	8.4%
Bedding; blanket, sheet, comforter	7	4.5%
Organic materials	6	3.9%
Heavy vegetation - not crop	5	3.2%
Rolled, wound material (paper, fabrics)	5	3.2%
Box, carton, bag, basket, barrel	4	2.6%
Chips, including wood chips	3	1.9%
Other	36	23.4%
<b>Total</b>	<b>154</b>	

## Youth Involved With Fire - Incidents

The majority (42%) of all fires involving youths were on residential property. The following chart shows the property uses on which fires involving youths started.

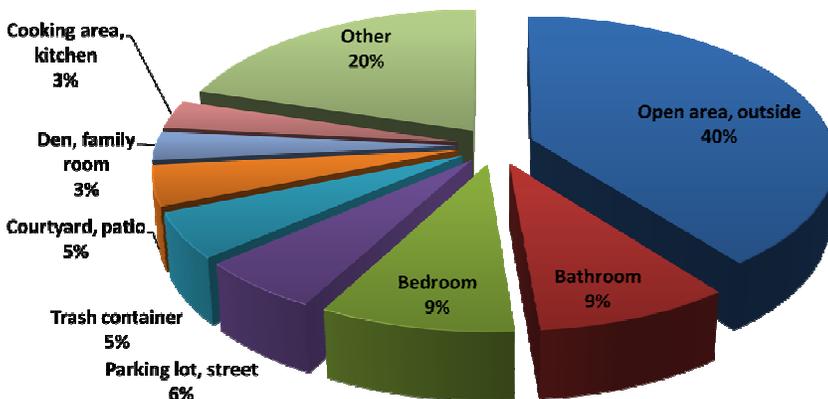
### 2013 Fires Involving Youth by Property Use



Property Use	Total
1 or 2 family dwelling	50
Open land or field	20
Middle/Junior/High school	16
Multifamily dwelling	16
Elementary school	9
Other	43
<b>Total</b>	<b>154</b>

Half of all fires involving youths start in outdoor areas, such as fields, forest areas, playgrounds, and courtyards. As indicated in the chart below, the highest percentage of indoor fires originate in outdoor areas.

### 2013 Fires Involving Youth by Area of Origin



Ignition Fire Origin	Total
Open area, outside	61
Bathroom	14
Bedroom	14
Parking lot, street	9
Trash container	8
Courtyard, patio	7
Den, family room	5
Cooking area, kitchen	5
Other	31
<b>Total</b>	<b>154</b>

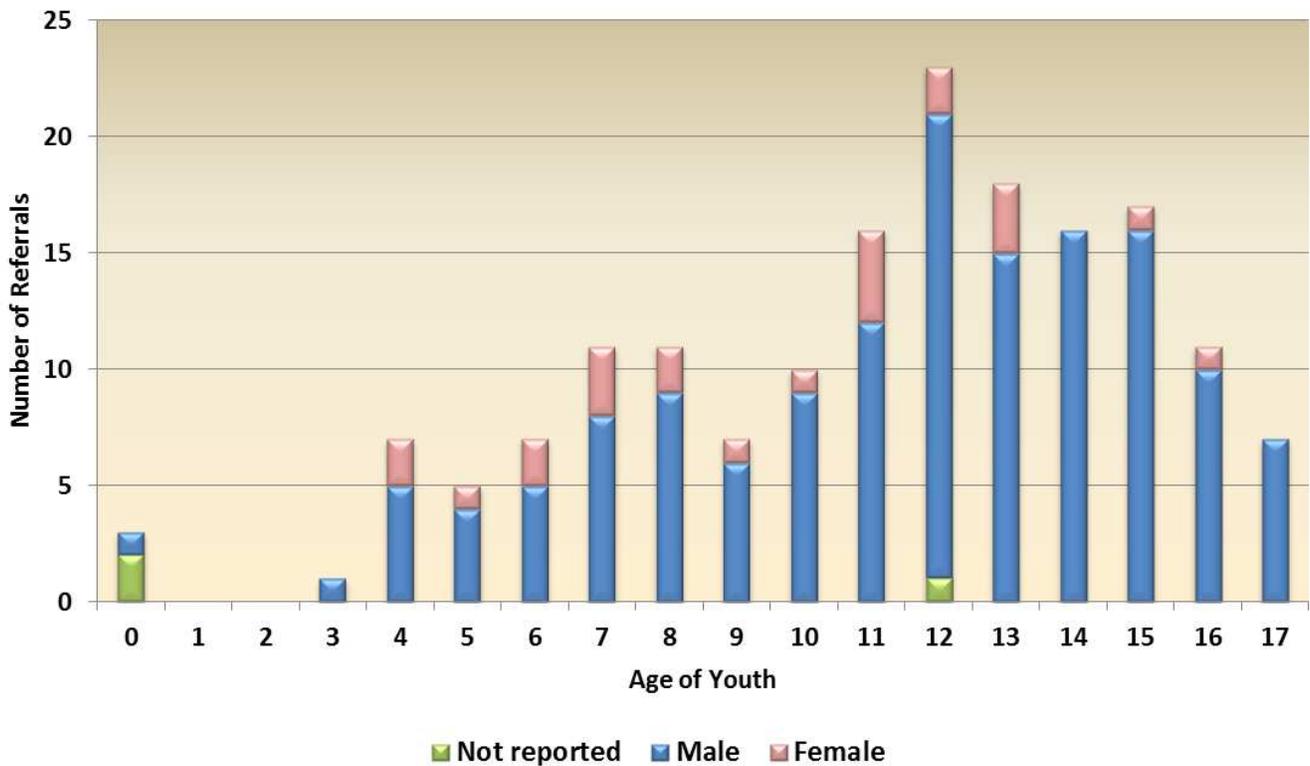
# Youth Involved With Fire - Interventions

In 2013, 170 interventions involving youth were reported to the OSFM. It is important to note that not every fire involving a youth necessarily results in an intervention. Conversely, interventions may occur without a response from a local fire agency.

OSFM's transition to a new online reporting system resulted in a decrease of fire agencies and other entities reporting youth misusing fire to the state office. Strategies to address this have been identified and are being implemented.

The following information includes data exclusively from the youth involved with fire module in the Oregon Fire Bridge™.

### 2013 Ages and Gender of Youth Involved with Fire



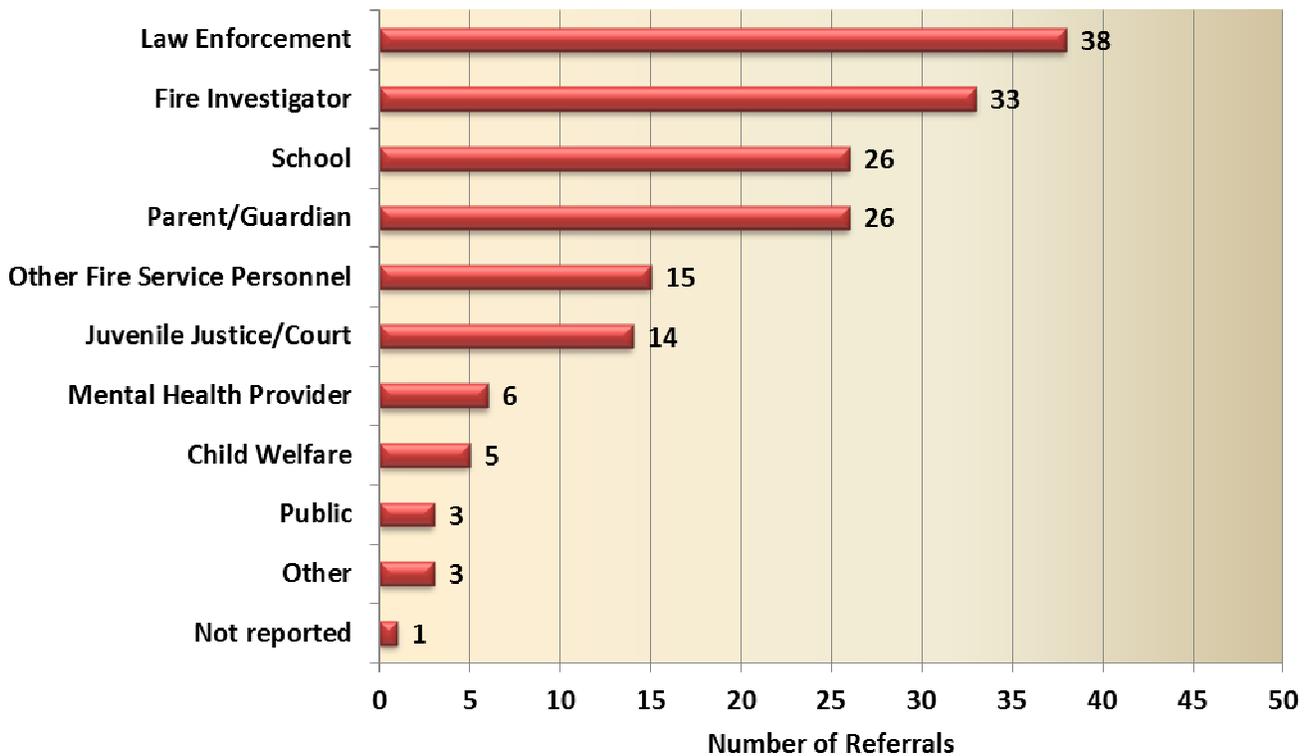
Gender\Age	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
Female				2	1	2	3	2	1	1	4	2	3		1	1			23
Male	1			1	5	4	5	8	9	6	9	12	20	15	16	16	10	7	144
Not reported	2												1						3
<b>Total</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>5</b>	<b>7</b>	<b>11</b>	<b>11</b>	<b>7</b>	<b>10</b>	<b>16</b>	<b>23</b>	<b>18</b>	<b>16</b>	<b>17</b>	<b>11</b>	<b>7</b>	<b>170</b>

This graph indicates the majority of youths involved in misusing fire are ages 11 to 15. Determining their ages helps establish a target group for prevention and intervention programs.

## Youth Involved With Fire - Interventions

Youth misusing fire are referred through a number of community partners or their parents. This graph demonstrates the variety of disciplines involved in ensuring the continuum of care.

### 2013 Sources of Youth Referrals to the Fire Service

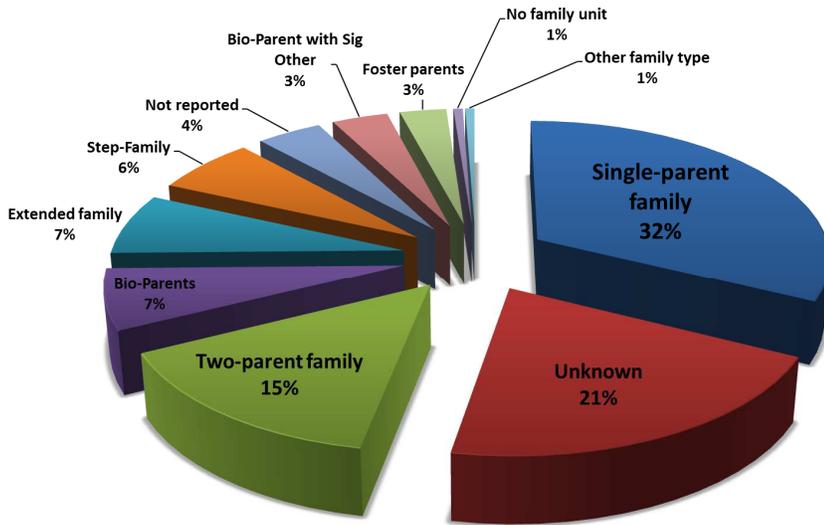


Referral Source	Total	Pct
Law Enforcement	38	22.4%
Fire Investigator	33	19.4%
Parent/Guardian	26	15.3%
School	26	15.3%
Other Fire Service Personnel	15	8.8%
Juvenile Justice/Court	14	8.2%
Mental Health Provider	6	3.5%
Child Welfare	5	2.9%
Other	3	1.8%
Public	3	1.8%
Not reported	1	0.6%
<b>Total</b>	<b>170</b>	

# Youth Involved With Fire - Interventions

There are many combinations of family units in today's society. In 2013, of the 170 reported youth involved with fire, the majority (42%) of youths misusing fire lived in family combinations where two adults were in the home.

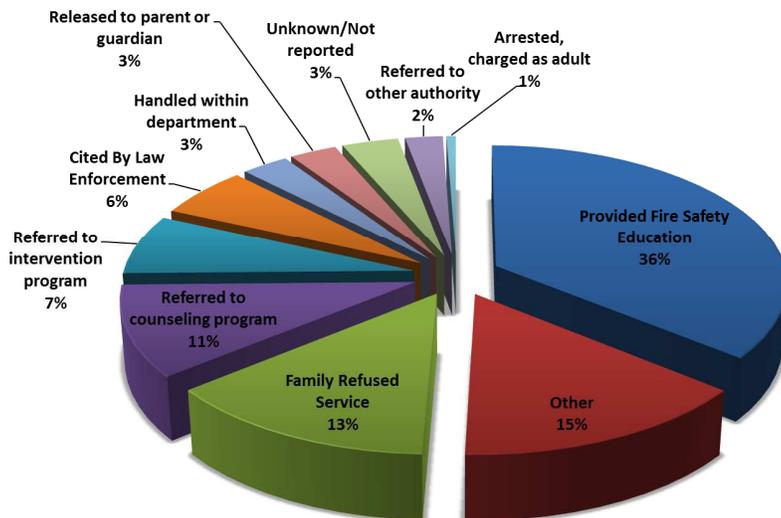
2013 Family Type of Youth Involved with Fire



Family Type	Total
Single-parent family	55
Unknown	35
Two-parent family	25
Bio-Parents	12
Extended family	12
Step-Family	11
Not reported	7
Bio-Parent with Sig Other	6
Foster parents	5
No family unit	1
Other family type	1
<b>Total</b>	<b>170</b>

A youth coming to the attention of a fire department often receives several different interventions. This chart details the number of youths involved with fire that were seen by fire departments and referred for further evaluation and community services.

2013 Intervention Resources Used



Disposition	Total
Provided Fire Safety Education	61
Other	25
Family Refused Service	23
Referred to counseling program	18
Referred to intervention program	12
Cited By Law Enforcement	10
Handled within department	5
Released to parent or guardian	5
Unknown/Not reported	6
Referred to other authority	4
Arrested, charged as adult	1
<b>Total</b>	<b>170</b>

# Youth Involved With Fire - Interventions

By the time a youth is referred to the fire department for intervention, or a fire has gotten out of control, a history of misusing fire has already been established. Thirty four percent of youth interventions in 2013 indicated prior experiences with fire. These youths reported a total of 182 fire experiences.

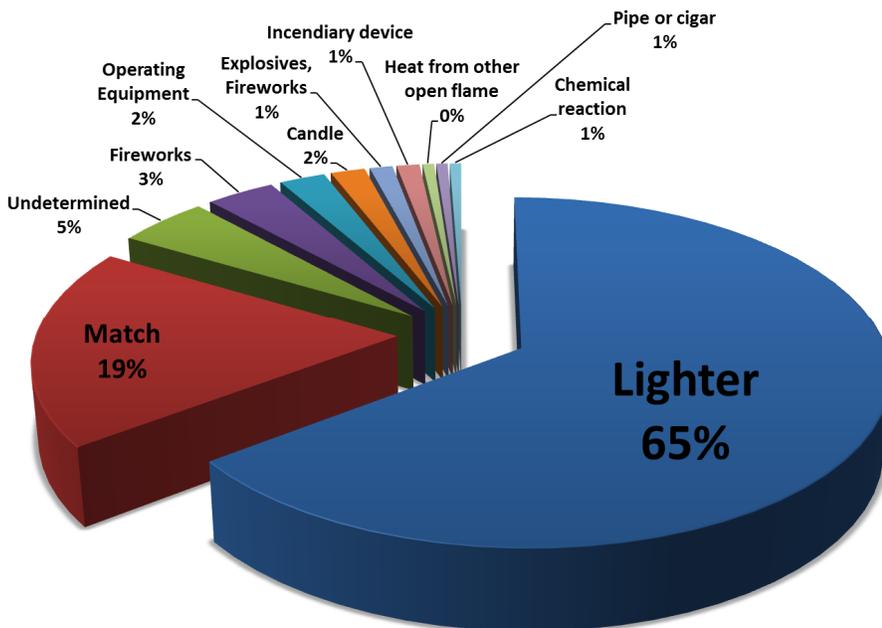
Previous Fires Set	Number of Youth
0	96
1	19
2	11
3	10
4	7
5	6
6	1
7	1
10	1
15	2
Not reported	16
<b>Total</b>	<b>170</b>

There were 22 reported instances in which a youth used an accelerant to start a fire. The following is a breakdown of those accelerants.

Accelerant Used	Total
Gasoline	6
Lighter fluid	5
Axe Product	4
2 cycle engine oil	1
Body Spray/Deodorant	1
Hand Sanitizer	1
Perfume	1
Scotch Gard Leather Protector	1
Unknown	1
WD-40	1
<b>Total</b>	<b>22</b>

In 2013, data shows most youths continue to misuse matches and lighters as their primary sources of ignition.

## Ignition Source of Youth Involved with Fire

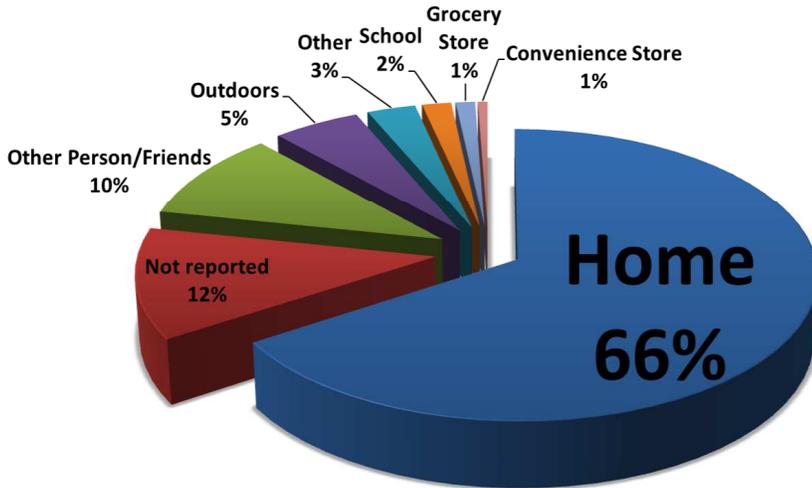


Ignition Source	Total
Lighter	110
Match	32
Undetermined	8
Fireworks	6
Operating Equipment	4
Candle	3
Explosives, Fireworks	2
Incendiary device	2
Heat from other open flame	1
Pipe or cigar	1
Chemical reaction	1
<b>Total</b>	<b>170</b>

# Youth Involved With Fire - Interventions

Two-thirds of the youths reported obtaining the ignition source at home. This has consistently been the leading place where youth have obtained ignition sources in previous years.

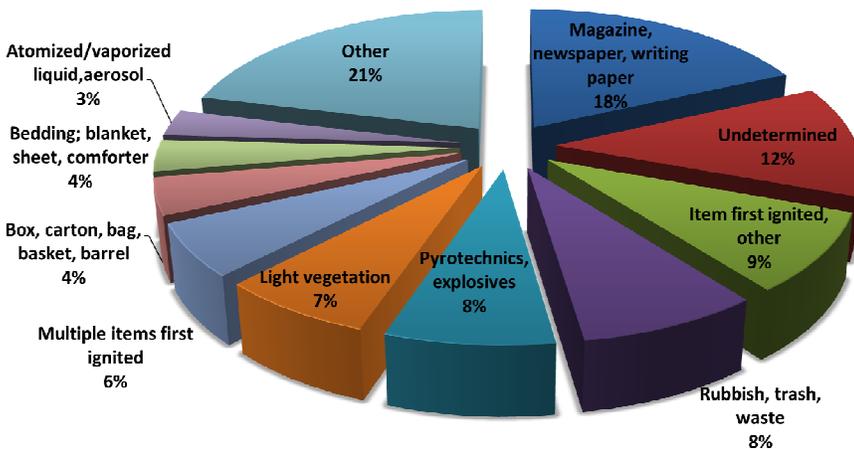
## Where Ignition Source Was Obtained



Source Obtained	Total
Home	112
Not reported	21
Other Person/Friends	17
Outdoors	9
Other	5
School	3
Grocery Store	2
Convenience Store	1
<b>Total</b>	<b>170</b>

The first material ignited tends to be a functional opportunity. Children use readily available materials as shown in the accompanying chart. These items do not represent a large fire loss, which could be a reason small fires may not get investigated thoroughly.

## Items Ignited by Youth Involved with Fire



Item First Ignited	Total
Magazine, newspaper, paper	31
Undetermined	21
Item first ignited, other	15
Rubbish, trash, waste	14
Pyrotechnics, explosives	13
Light vegetation	12
Multiple items first ignited	10
Box, carton, bag, basket	7
Bedding; blanket, sheet,	6
Atomized liquid, aerosol	5
Other	36
<b>Total</b>	<b>170</b>

## Youth Involved With Fire - Interventions

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Youth involved with fire data is based on information provided by 21 of Oregon's 317 fire agencies:

ALBANY FIRE DEPARTMENT  
ASTORIA FIRE DEPARTMENT  
BAKER CITY FIRE DEPARTMENT  
BEND FIRE DEPARTMENT  
CROOK COUNTY FIRE & RESCUE  
FOREST GROVE FIRE & RESCUE  
GEARHART VOL FIRE DEPARTMENT  
HILLSBORO FIRE DEPARTMENT  
JACKSON COUNTY FIRE DISTRICT #3  
JEFFERSON COUNTY RFPD #1  
KLAMATH COUNTY FIRE DIST #1  
LA GRANDE FIRE DEPARTMENT  
LEWIS & CLARK RFPD  
MEDFORD FIRE & RESCUE  
POLK COUNTY FIRE DISTRICT NO 1  
REDMOND FIRE & RESCUE  
SALEM FIRE DEPARTMENT  
TRI CITY FIRE DISTRICT #4  
TUALATIN VALLEY FIRE & RESCUE  
WARRENTON FIRE DEPARTMENT  
WOODBURN FIRE DISTRICT

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By the

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