

January – December

2003 - 2005

Prepared: February 2006

# STATE OF MARYLAND

## OFFICE OF THE STATE FIRE MARSHAL

# FIRE DEATHS IN MARYLAND

# January – December 2005

During CY 2005, there were 61 fatal fires that resulted in 73 deaths in 17 Maryland counties and Baltimore City. Those deaths represent a 17 percent decline from the 88 fire deaths report in 2004, a three (3) percent increase over the 71 fire deaths in 2003, and a three (3) percent decrease from the 75 fire deaths reported during 2002.

Seventeen (17) fatal fires claimed 20 lives in Baltimore City in 2005, which represents a 31 percent drop from the 30 deaths in 21 fatal fires reported in 2004, and a 29 percent decline from the 28 deaths in 20 fires during 2003. It is the lowest number of fire deaths reported by the City since 1999. There were just two (2) multiple-death fires in which five (5) people died in 2005. One smoking-related fire killed two (2) adults, while three (3) young children died in the other fire, whose cause is still being investigated. There were 15 fatal fires in residential structures in the City, including four (4) smoking-related fires, a fatal fire in a makeshift shelter, and a fatal warehouse fire that resulted from combustibles too close to a heat source.

Baltimore County reported seven (7) deaths resulting from five (5) fires during 2005, one more than the six (6) deaths in 2004, and two (2) less than the nine (9) fire deaths reported in 2003. Three (3) separate vehicle accident fires each killed one adult. Four (4) people died in two (2) residential fires, including two (2) children and their mother in a townhouse fire, and a single adult in a fire that started in the kitchen. The exact causes of those fires are still under investigation.

Fifteen (15) fire victims died in 11 fires reported in Prince George's County during 2005. This is a welcome decrease from the 19 fire deaths in 16 fires in 2004, but still more than double the seven (7) deaths reported in 2003. Nine (9) residential structure fires took 13 lives, including six (6) smoking-related fire deaths, as well as, three (3) victims of arson or arson-suicide fires. One (1) person died in a vehicle fire also attributed to arson, and another young man died outside as a result of suicide by fire.

Montgomery County reported seven (7) deaths in six (6) fires, including four (4) elderly victims who died in three (3) smoking-related fires. A kitchen fire attributed to combustibles too close to the stove claimed another elderly victim, while a young man and an elderly woman set themselves on fire in separate incidents.

Four (4) people died in two (2) fires in Washington County, including three (3) teenaged victims of one fire attributed to careless smoking. In Carroll County, three (3) people died in separate fires including a smoking-related fire, and a cooking-related fire.

Anne Arundel County reported a dramatic decline in fire deaths in 2005. Two (2) lives were lost in separate smoking-related fires in 2005, compared to 2004 when nine (9) fires killed 12 people. Dorchester, Frederick, St. Mary's and Somerset counties each reported two (2) fire deaths, while Allegany, Charles, Garrett, Harford, Kent, Queen Anne's, and Worcester counties each reported one (1) fire death during the year. Six (6) counties survived the year with no fire deaths.

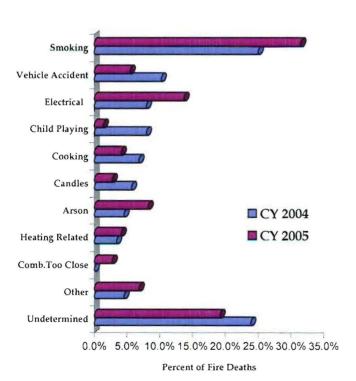
Following is a summary of the fire deaths reported to the State Fire Marshal during January through December 2005. Also included are summary tables of fire deaths for 2003 through 2005. The numbers of fire deaths in Maryland, by county, for the five-year period 2001 through 2005 are listed on Page 10.

Seventy-three people died in Maryland during CY 2005 as the result of 61 fatal fires. Those deaths represent a 17 percent drop from the 88 fire deaths in 69 fires in 2004, a 3 percent increase over the 71 fire deaths in 57 fires reported in 2003, a 3 percent decrease from the 75 fire deaths reported in 2002, and a significant 22 percent decline from the 94 deaths in 2001.



Fire deaths in the State have remained below 100 each year, except one, for the past 17 years, as illustrated in the above graph. During that time, there has been an average of 84 fire deaths a year, while fire fatalities in Maryland averaged 130 a year from 1975 to 1988. In recent years, the numbers of fire fatalities reported to the State Fire Marshal's Office have continued to decline; fire deaths averaged less than 78 a year from 1996 through 2005.

# **CAUSES OF FATAL FIRES**

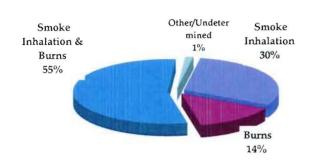


Once again in 2005, fatal fires that resulted from careless smoking led to more fire deaths than fires resulting from other causes. Twenty-three (23) fire victims, ranging in age from 17 to 93 years, died in 16 smoking-related fires, all of which were in residential structures. Smoking-related fire deaths accounted for over 31 percent of all fire deaths, compared to 22 such deaths in 2004 that accounted for 25 percent of the deaths that year. In 2005, the majority of the fatal smoking-related fires occurred in the bedroom or living or family room areas of the home. Twelve (12) victims died as the result of seven such fires that started in the bedroom, and nine (9) in fires that originated in the living or family room areas.

Ten (10) fires resulting from various electrical malfunctions led to as many deaths, compared to seven (7) deaths in six (6) such fires in 2004.

Five (5) arson, or arson-suicide fires claimed the lives of six (6) individuals, including one victim of an arson-suicide fire who was just 18 months old. Four (4) other people died in separate fires attributed to sucide by fire, including a 17 year old young man, and a 77 year old woman. The causes of 10 fatal fires that killed 14 people are not yet determined.

# CAUSE OF DEATH OF FIRE VICTIMS



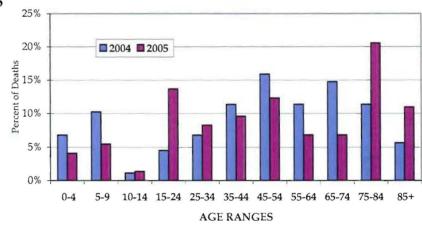
Unlike most previous years, the cause of death was reported as the combination of smoke inhalation and burns for over half of the fire death victims in 2005, claiming 40 lives.

Smoke inhalation, which is usually the most frequent cause of fire death, was the primary cause of death reported for 22 of the 73 fire fatalities in 2005. Ten (10) fire victims succumbed as the result of burn injuries.

#### AGE OF FIRE DEATH VICTIMS

Eight (8) children died in five (5) fires during 2005. Fire victims younger than 15 years accounted for 11 percent of all fire deaths for the year, compared to 16 young victims who accounted for just over 18 percent of the fire death victims during 2004.

In 2005, two (2) multiple-death fires claimed the lives of five (5) children and one adult.



The exact causes of both of those fires are still under investigation. Another fire killed an 18-month old victim along with her mother, and a three-year old boy perished in a fire attributed to child playing with a lighter.

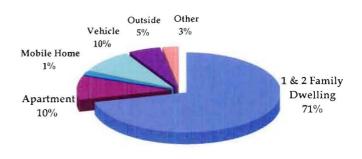
There were 16 fire death victims in the 15 to 34 years age range in 2005, compared to 10 such victims reported in 2004. Victims in that age range accounted for 22 percent of the deaths in 2005, compared to 11 percent of the fire deaths in 2004. Five (5) of the 23 victims of smoking-related fires fell in this age range, including three (3) teenage victims of one fire. Three (3) of the four (4) victims of vehicle accident fires also were in this range.

The number of fire death victims in the 35 to 64 years age range declined in 2005 compared to 2004. Twenty-one (21) victims in that age range accounted for 29 percent of the fire deaths in 2005, compared to 34 victims who represented 39 percent of the fire fatalities in 2004. Seven (7) of the victims of fires caused by careless smoking fell in this age range, as did three (3) of the victims of arson fires.

Those victims 65 years and older accounted for 38 percent of the fire deaths during the year, compared to 32 percent of the fire deaths in 2004. While there were 28 elderly victims of fatal fires in both 2004 and 2005, the 23 victims 75 and older accounted for almost 32 percent of all victims in 2005, compared to just 17 percent in that age group in 2004. In 2005, 11 elderly victims accounted for almost half of the 23 lives claimed by smoking-related fires, and all three (3) of the heating-related fire victims were over 65 years old, as were all three (3) of the cooking-related fire fatalities.

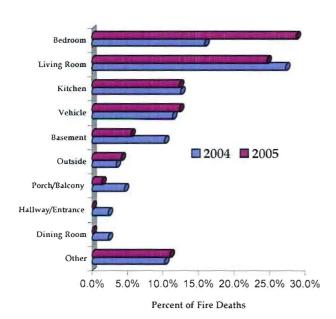
#### LOCATION OF FATAL FIRES

In 2005, as in other years, most fire deaths occurred in residential structures. Almost 82 percent of the fire deaths were the result of residential fires, including 52 deaths in one and two family dwellings, seven (7) victims of apartment fires, and one (1) person who died in a mobile home fire.



The four (4) fire deaths in the Outside category include three (3) people who were suicide victims, including a man who set himself on fire in a cemetery.

## AREA OF FIRE ORIGIN



Twenty-one (21) victims died in 14 fires that originated in the bedroom during 2005, a 50 percent increase over the 14 such deaths reported in 2004. Careless smoking resulted in seven (7) fires in the bedroom that claimed the lives of 12 adults. Electrical fires resulted in the loss of four (4) lives. and three (3) fatal bedroom fires are still under investigation, including one that killed three (3) children.

Eighteen (18) deaths resulted from 16 fires that started in the living room or family room area of the home in 2005, an 18 percent decline from the 22 such deaths in 2004. Seven (7) people died in five (5) fires caused by careless smoking, while two (2) people died in separate heating-related fires. The causes of four (4) living room fires, each claiming one life, are still under investigation.

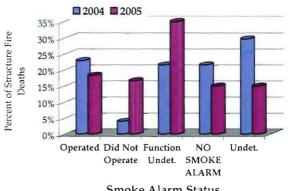
Nine (9) people died in as many fires that originated in the kitchen area during 2005, a continuing decline from the 11 deaths in 2004, and the 16 such fire deaths in 2003. Cooking-related fires accounted for just three (3) of the kitchen fire deaths in 2005.

## **SMOKE ALARM PERFORMANCE**

Ten (10) fatal residential structure fires occurred where the smoke alarm was known to function properly, but the fires still claimed the lives of 11 individuals.

There were no smoke alarms present in six (6) fatal structure fires that killed nine (9) Maryland residents in 2005. Those deaths represent a 44 percent decline from the 16 such deaths reported in the previous year.

Another 21 people died in 15 structure fires where the smoke alarms were present, but whether or not they operated was not determined.



Smoke Alarm Status

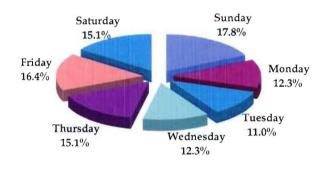
# TIME OF FATAL FIRES

The late night and early morning hours continued to prove deadly during CY 2005. Fires that started between the hours of 12 midnight and 8 a.m. resulted in almost 51percent of the 73 fire deaths in 2005, compared to almost 52 percent of the 87 fire deaths in 2004.

Thirty-seven (37) victims died in 30 fatal fires during this time, including four (4) multiple-death fires. Seven (7) of the 16 smoking-related fires occurred during this time period killing 10 people including one fire in which three (3) teenagers died.

#### 25 **■** Fires Deaths Number of Fire Deaths 20 15 10 Midnight - 4 a.m.-8am-Noon -4 nm -8 n m 4:00 p.m. 8:00 p.m. Midnight 8:00 a.m Noon Time of Day

#### DAY OF WEEK OF FATAL FIRES



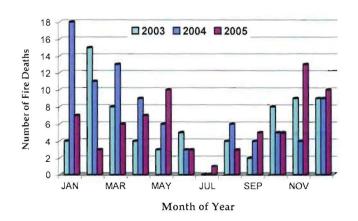
Fatal fires have been more likely to occur over the weekend, and those days were equally deadly in 2005.

Almost 40 percent of the fatal fires occurred during the three-day weekend period Friday, Saturday and Sunday, which resulted in almost 50 percent of the fire deaths for the year. Thirty-six (36) people died from 29 fires that started on the weekend, including five (5) multiple-death fires that killed 12 victims. Four (4) of those fires were smoking-related, claiming the lives of six (6) adults and three (3) teenagers.

## MONTH OF YEAR

The first three months of the year have often been the busiest months for fatal fires. As illustrated in the adjacent graph, 2005 proved to be an exception, when 45 percent (33) of the 73 fire fatalities resulted from the 25 fires during May, November and December.

Seven (7) of the 16 smoking-related fires occurred during those months, resulting in 12 of the 23 deaths associated with those fires. Six (6) of the 17 fires in the last two months of the year are still under investigation for cause.



						FIRE	CAUSI	 E		<del></del>			FIRE D	EATHS	FATAI	FIRES
COUNTY	Smoking	Electrical	Candles	Child Play	Cooking	Arson	Suicide	Heating Related	Combusfi ble too close	Vehicle Accident	Other	Under Invest/ Undetermined	Total Deaths	Percent of Total	Total Fires	Percent of Total
Allegany	0	0	0	0	0	0	0	0	0	0	0	1	1	1.4%	1	1.6%
Anne Arundel	2	0	0	0	0	0	0	0	0	0	0	0	2	2.7%	2	3.3%
Baltimore City	5	5	1	0	0	0	0	1	1	0	0	7	20	27.4%	17	27.9%
Baltimore County	0	0	0	0	0	0	0	0	0	3	0	4	7	9.6%	5	8.2%
Calvert	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Caroline	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Carroll	1	0	0	0	1	0	1	0	0	0	0	0	3	4.1%	3	4.9%
Cecil	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Charles	0	0	0	0	1	0	0	0	0	0	0	0	1	1.4%	1	1.6%
Dorchester	0	2	0	0	0	0	0	0	0	0	0	0	2	2.7%	2	3.3%
Frederick	0	0	0	0	0	1	0	0	0	1	0	0	2	2.7%	2	3.3%
Garrett	0	0	0	0	0	0	0	1	0	0	0	0	1	1.4%	1	1.6%
Harford	0	0	0	0	0	0	0	0	0	0	0	1	1	1.4%	1	1.6%
Howard	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Kent	0	0	0	0	0	0	0	1	0	0	0	0	1	1.4%	1	1.6%
Montgomery	4	0	0	0	0	0	2	0	1	0	0	0	7	9.6%	6	9.8%
Prince George	6	2	1	1	0	4	1	0	0	0	0	0	15	20.5%	11	18.0%
Queen Anne	0	0	0	0	0	1	0	0	0	0	0	0	1	1.4%	1	1.6%
St. Mary's	1	0	0	0	1	0	0	0	0	0	0	0	2	2.7%	2	3.3%
Somerset	1	0	0	0	0	0	0	0	0	0	1	0	2	2.7%	2	3.3%
Talbot	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Washington	3	0	0	0	0	0	0	0	0	0	0	1	4	5.5%	2	3.3%
Wicomico	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	0	0.0%
Worcester	0	1	0	0	0	0	0	0	0	0	0	0	1	1.4%	1	1.6%
TOTAL FIRE DEATHS	23	10	2	1	3	6	4	3	2	4	1	14	73	100%	61	100%
Column % of All Fire Death	32%	14%	3%	1%	4%	8%	5%	4%	3%	5%	1%	19%				
TOTAL FATAL FIRES	16	10	2	1	3	5	4	_ 3	_ 2	4	_1	10				
Column % of All Fatal Fires	26%	16%	3%	2%	5%	8%	7%	5%	3%	7%	2%	16%				

	CY	2003	CY	2004	CY	CY 2005		
FIRE CAUSE	Number of Deaths	Percent of Total	Number of Deaths	Percent of Total	Number of Deaths	Percent of Total		
Smoking	7	9.9%	22	25.0%	23	31.5%		
Electrical Malfunction	12	16.9%	7	8.0%	10	13.7%		
Arson/Arson Homicide	1	1.4%	4	4.5%	6	8.2%		
Vehicle Accident	4	5.6%	9	10.2%	4	5.5%		
Suicide	0	0.0%	2	2.3%	4	5.5%		
Cooking Related	8	11.3%	6	6.8%	3	4.1%		
Heating Related	1	1.4%	3	3.4%	3	4.1%		
Candles Unattended	7	9.9%	5	5.7%	2	2.7%		
Combustibles too close	3	4.2%	0	0.0%	2	2.7%		
Child Playing	0	0.0%	7	8.0%	1	1.4%		
Arson Suicide	2	2.8%	0	0.0%	0	0.0%		
Unattended Fire	1	1.4%	0	0.0%	0	0.0%		
Other	4	5.6%	2	2.3%	1	1.4%		
Undetermined	21	29.6%	21	23.9%	14	19.2%		
TOTAL DEATHS	71	100.0%	88	100.0%	73	100.0%		
Heating Includes:			-					
Kerosene Heater	1		2		0			
Space/Bsbrd Heater	0		0		2			
Furnace	0		0		1			
Faulty Chimney	0		1		0			
DEATH CAUSE			1					
Section Control of the Control	10	00.00/				F		
Smoke Inhalation & Burns	19	26.8%	42	47.7%	40	54.8%		
Smoke Inhalation	38	53.5%	25	28.4%	22	30.1%		
Burns	8	11.3%	14	15.9%	10	13.7%		
Other	6	8.5%	7	8.0%	1 70	1.4%		
TOTAL DEATHS	71	100.0%	88	100.0%	73	100.0%		
SEX OF VICTIM								
Male	38	53.5%	54	61.4%	48	65.8%		
Female	33	46.5%	34	38.6%	25	34.2%		
TOTAL DEATHS	71	100.0%	88	100.0%	73	100.0%		
AGE OF VICTIM			ľ					
0 - 4	4	5.6%	6	6.8%	3	4.1%		
5 - 9	3	4.2%	9	10.2%	4	5.5%		
10 - 14	3	4.2%	1	1.1%	1	1.4%		
15 - 24	7	9.9%	4	4.5%	10	13.7%		
25 - 34	8	11.3%	6	6.8%	6	8.2%		
35 - 44	9	12.7%	10	11.4%	7	9.6%		
45 - 54	10	14.1%	14	15.9%	9	12.3%		
55 - 64	10	14.1%	10	11.4%	5	6.8%		
65 - 74	7	9.9%	13	14.8%	5	6.8%		
75 - 84	6	8.5%	10	11.4%	15	20.5%		
85 +	4	5.6%	5	5.7%	8	11.0%		
TOTAL DEATHS	71	100.0%	88	100.0%	73	100.0%		

	CY 2	2003	CY	2004	CY 2005		
LOCATION OF FIRE	Number of Deaths	Percent of Total	Number of Deaths	Percent of Total	Number of Deaths	Percent of Total	
Home	41	57.7%	63	71.6%	52	71.2%	
Apartment	15	21.1%	10	11.4%	7	9.6%	
Mobile Home/Trailer	3	4.2%	1	1.1%	1	1.4%	
Outside	2	2.8%	4	4.5%	4	5.5%	
Vehicle	6	8.5%	10	11.4%	7	9.6%	
Hotel/Rmng House/Nursng Home	0	0.0%	0	0.0%	0	0.0%	
Store/Warehouse/Manufact/Garag	4	5.6%	0	0.0%	1	1.4%	
Other	0	0.0%	0	0.0%	1	1.4%	
TOTAL DEATHS	71	100.0%	88	100.0%	73	100.0%	

AREA OF FIRE ORIGIN		3-11				
Bedroom	15	21.1%	14	15.9%	21	28.8%
Living Room	15	21.1%	22	25.0%	15	20.5%
Kitchen	16	22.5%	11	12.5%	9	12.3%
Vehicle	6	8.5%	10	11.4%	9	12.3%
Basement/Utility Room	1	1.4%	9	10.2%	4	5.5%
Outside	2	2.8%	3	3.4%	3	4.1%
Family Room/Den	2	2.8%	2	2.3%	3	4.1%
Porch/Balcony	2	2.8%	4	4.5%	1	1.4%
Hallway/Entrance/Foyer/Stairway	4	5.6%	2	2.3%	0	0.0%
Dining Room	1	1.4%	2	2.3%	0	0.0%
Bathroom	2	2.8%	1	1.1%	0	0.0%
Garage	0	0.0%	1	1.1%	0	0.0%
Shop Floor/Equipment Room	3	4.2%	0	0.0%	0	0.0%
Other	2	2.8%	7	8.0%	8	11.0%
TOTAL DEATHS	71	100.0%	88	100.0%	73	100.0%

SMOKE ALARM STATUS IN S	TRUCTUI	RE FIRES				
Present/Operated	22	37.3%	17	23.0%	11	18.3%
Present/Did Not Operate	3	5.1%	3	4.1%	10	16.7%
Present/Function Undetermined	11	18.6%	16	21.6%	21	35.0%
NO DETECTOR PRESENT	11	18.6%	16	21.6%	9	15.0%
Undetermined	12	20.3%	22	29.7%	9	15.0%
TOTAL STRUCTURE FIRE DEATHS	59	100.0%	74	100.0%	60	100.0%

	CY 2	2003	CY	2004	CY	2005
TIME OF ALARM	Number of Deaths	Percent of Total	Number of Deaths	Percent of Total	Number of Deaths	Percent of Total
0001 - 0159 0200 - 0359	8	11.3% 18.3%	13 16	14.8% 18.2%	10 12	13.7% 16.4%
0400 - 0559 0600 - 0759	6 10	8.5% 14.1%	12 5	13.6% 5.7%	11	15.1% 5.5%
0800 - 0759	7	9.9%	3	3.4%	4	5.5%
1000 - 1159   1200 - 1359	7 2	9.9% 2.8%	6 4	6.8% 4.5%	6	8.2% 8.2%
1400 - 1559	2	2.8%	6	6.8%	6	8.2%
1600 - 1759 1800 - 1959	2 2	2.8% 2.8%	7 3	8.0% 3.4%	5	2.7% 6.8%
2000 - 2159 2200 - 2400	3 9	4.2% 12.7%	10	3.4% 11.4%	4 3	5.5% 4.1%
TOTAL DEATHS	71	100.0%	88	100.0%	73	100.0%

DAY OF WEEK						
Sunday	8	11.3%	15	17.0%	13	17.8%
Monday	12	16.9%	11	12.5%	9	12.3%
Tuesday	9	12.7%	14	15.9%	8	11.0%
Wednesday	10	14.1%	7	8.0%	9	12.3%
Thursday	12	16.9%	12	13.6%	11	15.1%
Friday	8	11.3%	18	20.5%	12	16.4%
Saturday	12	16.9%	11	12.5%	11	15.1%
TOTAL DEATHS	71	100.0%	88	100.0%	73	100.0%

FIRE FATALITIES BY MONTH	I					
January	4	5.6%	18	20.5%	7	9.6%
February	15	21.1%	11	12.5%	3	4.1%
March	8	11.3%	13	14.8%	6	8.2%
April	4	5.6%	9	10.2%	7	9.6%
May	3	4.2%	6	6.8%	10	13.7%
June	5	7.0%	3	3.4%	3	4.1%
July	0	0.0%	0	0.0%	1	1.4%
August	4	5.6%	6	6.8%	3	4.1%
September	2	2.8%	4	4.5%	5	6.8%
October	9	12.7%	5	5.7%	5	6.8%
November	8	11.3%	4	4.5%	13	17.8%
December	9	12.7%	9	10.2%	10	13.7%
TOTAL DEATHS	71	100.0%	88	100.0%	73	100.0%

# FIRE DEATHS IN MARYLAND

						5-Year	Percent of	FIRE DEATH
COUNTY	CY 2001	CY 2002	CY 2003	CY 2004	CY 2005	Average	State Total	RATE*
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Allegany	1	3	1	0	1	1.2	1.5%	1.6
Anne Arundel	5	5	4	12	2	5.6	7.0%	1.1
Baltimore City	23	24	28	30	20	25.0	31.2%	3.8
Baltimore County	21	11	9	6	7	10.8	13.5%	1.4
Calvert	0	0	0	0	0	0.0	0.0%	0.0
Caroline	0	0	1	2	0	0.6	0.7%	2.0
Carroll	1	1	0	1	3	1.2	1.5%	0.8
Cecil	0	4	2	0	0	1.2	1.5%	1.4
Charles	1	2	1	1	1	1.2	1.5%	1.0
Dorchester	0	0	0	2	2	0.8	1.0%	2.6
Frederick	2	0	0	1	2	1.0	1.2%	0.5
Garrett	0	0	0	0	1	0.2	0.2%	0.7
Harford	5	3	3	2	1	2.8	3.5%	1.3
Howard	0	0	0	4	0	0.8	1.0%	0.3
Kent	1	0	0	0	1	0.4	0.5%	2.1
Montgomery	11	8	5	4	7	7.0	8.7%	0.8
Prince George	13	11	7	19	15	13.0	16.2%	1.6
Queen Anne	2	1	1	0	1	1.0	1.2%	2.5
St. Mary's	0	0	2	0	2	0.8	1.0%	0.9
Somerset	0	0	0	0	2	0.4	0.5%	1.6
Talbot	2	0	0	0	0	0.4	0.5%	1.2
Washington	0	2	5	3	4	2.8	3.5%	2.1
Wicomico	3	0	1	1	o	1.0	1.2%	1.2
Worcester	3	0	1	0	1	1.0	1.2%	2.1
TOTAL FIRE DEATHS	94	75	71	88	73	80	100.0%	1.5

FIRE DEATH RATE\*\*

1.8

1.4

1.3

1.7

1.4

<sup>\*</sup>DEATH RATE: Number of civilian fire deaths per 100,000 population

<sup>\*\*</sup>Rates are based on the 2000 census estimates

