MEMORANDUM

FIRE DEPARTMENT

CITY OF PHILADELPHIA

DATE: April 1, 2005

TO: Lloyd Ayers, Fire Commissioner

FROM: John J. Devlin, Deputy Chief, Fire Prevention Division

SUBJECT: ANALYSIS OF FIRE DEATHS – 2004

Last year in 2004, 45 people died in Philadelphia in 34 fires. This is an increase of one over the 44 who died in 2003 but was in keeping with the average for recent years – 45 deaths in 2001 and 51 in 2000.

In order to measure trends and the effectiveness of public fire safety programs and education, it is preferable to look at the average over several years. Simply stated, the input data numbers are so low, that one or two multiple fatality fires can dramatically affect the results. In 1992 the ten-year average was 87 fire deaths per year, in 1998 it was 74, in 2002 it was 58 and now the ten-year average for 2003 has been reduced to 54. The decreasing fire death trends are clear and are a better measure of our effectiveness. An analysis of the circumstances surrounding these deaths may help us to further reduce future fire deaths.

As determined by the Fire Marshal's Office, in 2004, fires caused by open flame were responsible for the deaths of twelve people. This category was the highest cause of fire deaths last year. However, it has several broad sub categories, such as; fires caused by candles, open flame in conjunction with drug use, combustibles left to close to an open flame and fires determined to have been caused by an open flame because of the resultant flame pattern. Since these sub categories represent different behaviors, open flame is a broad category as opposed to being a single cause. **Smoking** on the other hand was responsible for eleven deaths, which makes it **the single highest accidental cause of fire fatalities.**

In 2004 there were 11 fire death victims aged 55 and over, a decrease over the seventeen in 2003 and still a decrease from the 26 older adult fire deaths in 2001 and the 28 deaths in 2000. These eleven older adult fire deaths accounted for 24.4% of the total city fire deaths. If we start at age 50, the number above that age that died last year rises to 15. Six of this group died from smoking fires. We should continue to focus on older adult fire safety, especially careless smoking and cooking.

Between 1997-2001 we averaged five deaths per year caused by children with matches. During this period of time we provided Fire Stopper programs to approximately 1,000 families. During 2002 and 2003 there were three deaths in each year caused by children with matches. In 2004 there were was one fire death caused by children with matches.

There was a slight increase in the number of children's fire deaths (aged 12 and under) in 2003 it was 6 in 2004 it rose to 7; this continues to be a significant decline in fire deaths in this age category since the 20 deaths in 1997.

Battalion 8 had the highest number of fire deaths at eleven; Battalions 2,4,12 & 13 had the lowest at two each.

Most fatal fires occurred in residential occupancies, either a one or two family home (31) or a multiple occupancy dwelling(8).

With 28 fatalities, African Americans had the most deaths for a racial group. In the category of gender, 29 males and 16 females died as a result of fire.

October was the deadliest month for fires, accounting for 11 deaths. More than half (24) or 53% of all the fire deaths occurred Friday through Sunday; Saturday with 18 fire deaths was the highest single day for fire fatalities. Most fire deaths (23) occurred during the hours when we sleep – 11PM to 7AM.

Thirty-one of the 45 people that died in fires last year or 68.8% were not protected by a functioning smoke alarm.

Smoke alarms save lives. The NFPA reports that the risk factor for people in homes without smoke alarms is 10.4 times greater than for people in homes with smoke alarms. Most of the homes that suffered a fatal fire last year did not have a functioning smoke alarm. In 2004, the Philadelphia Fire Department installed over 2,000 smoke alarms in people's homes. Home escape planning is another important part of the home fire safety equation.

There were nine fires that resulted in twelve deaths where the smoke alarm was present and activated yet the occupants failed to escape. Two of the victims had clothing that was the primary combustible ignited. Four victims had their exits blocked. Six other victims were unable to escape due to age, infirmity and/or to impairment.

The Medical Examiner's Office provided toxicology reports for 38 fire victims. Fourteen victims or 36.8% of the victims for which we have test results were under the influence of alcohol or drugs at the time of the fire. These fourteen victims, which we know were under the influence of drugs or alcohol, represent 31% of last year's victims.

There were eleven fire deaths in eleven separate fires caused by smoking in 2004. It represents 24.4% of the total number of fire deaths in 2004. It is the highest number of fire deaths from a single behavioral cause. If we could educate the public to take their smoking outdoors, we could significantly reduce this category. In addition, we must continue to encourage homeowners to install smoke alarms on each level of their home and to design and practice a home escape plan. Simple precautions such as taking smoking outside, the safe use of candles, never leaving a pot unattended on the stove and eliminating extension cords and space heaters from the home can all contribute to preventing a tragedy.

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