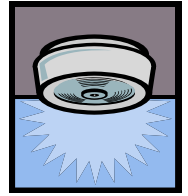




Smoke Alarms in Reported U.S. Home* Fires

Based on a telephone survey done in 2004, 96% of all homes have at least one smoke alarm. Overall, three-quarters of all U.S. homes have at least one *working* smoke alarm.

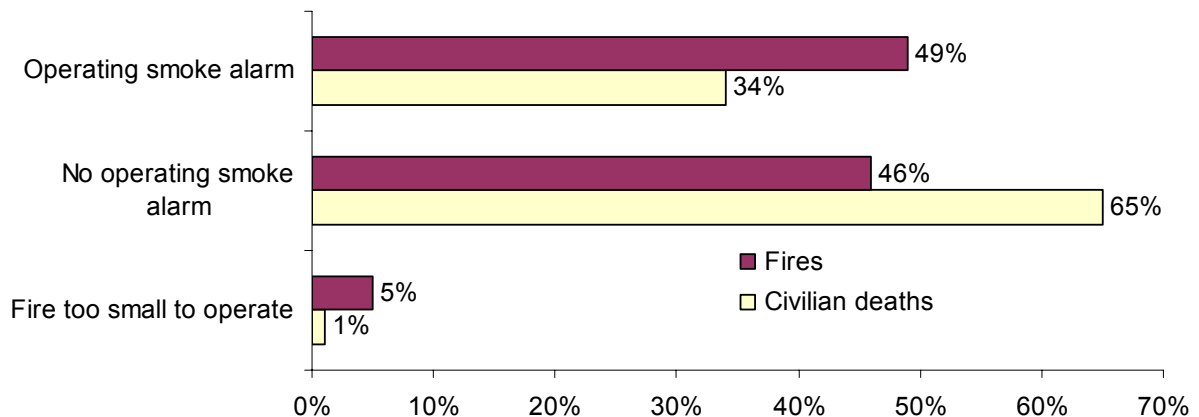


The 2000-2004 statistics derived from the Version 5.0 of the U.S. Fire Administration's National Fire Incident Reporting System (NFIRS) and NFPA's annual fire department experience survey show that

- Smoke alarms sounded in roughly half of the home fires reported to U.S. departments.
- 65% of reported home fire deaths in 2000-2004 resulted from fires in homes with no smoke alarms or no working smoke alarms.
 - No smoke alarms were present in 43% of the home fire deaths.
 - In 22% of the home fire deaths, smoke alarms were present but did not sound.



**Home Structure Fires and Deaths by Smoke Alarm Status
 2000-2004 Annual Averages**



- The death rate per 100 reported fires is twice as high in homes without working smoke alarms (1.13) as homes with working smoke alarms (0.55)
- An estimated 890 lives could be saved each year if all homes had working smoke alarms.

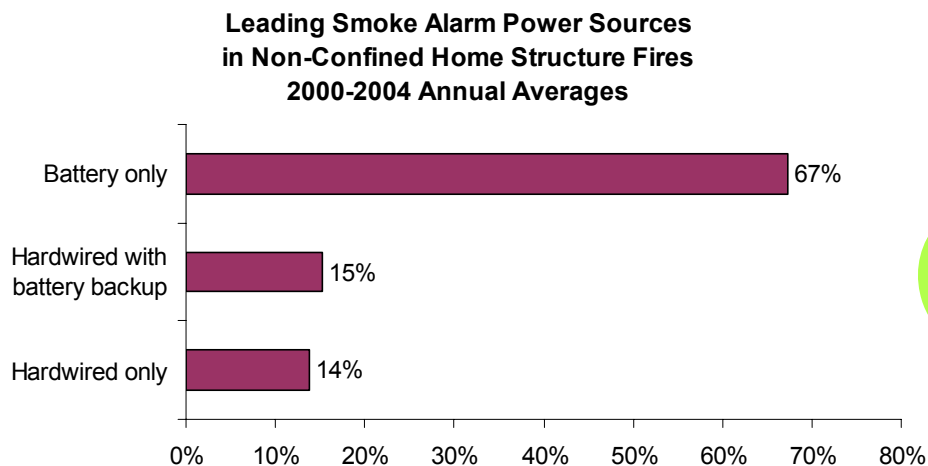
Other studies, including the Consumer Product Safety Commission's Smoke Detector Project, and the study of homes in rural Iowa by Peek-Asa et al, found that many homes do not have a smoke alarm on every level.

*Homes include one- and two-family dwellings, manufactured homes, apartments, townhouses, rowhouses, and condominiums.

Home Smoke Alarm Power Sources

Two-thirds of the smoke alarms in non-confined home structure fires were battery-operated. Homes built since 1980 were more likely to have hardwired smoke alarms.

Hardwired smoke alarms tend to be interconnected so that if one sounds, all will sound. This can provide earlier warning throughout the home regardless of the location of the fire and the location of the people.

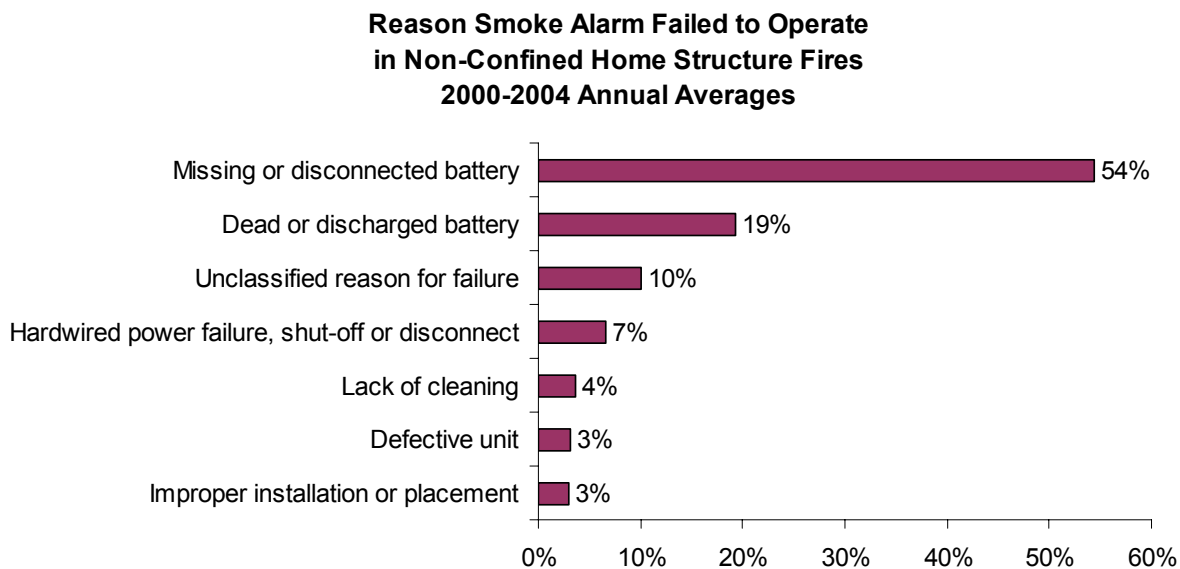


Reasons for Smoke Alarm Failure

In more than half of the reported fires in which the smoke alarms did not operate, batteries were missing or disconnected. Nuisance alarms were the leading reason for disconnected smoke alarms.

Roughly one of every five smoke alarm failures was due to dead batteries.

Only 7% of the failures were due to hardwired power source problems.



Source: Ahrens, Marty. *U.S. Experience with Smoke Alarms and Other Fire Detection Equipment*, National Fire Protection Association, Quincy, MA, April, 2007.