

How Important Is A Working Smoke Alarm?

Almost all households in the U.S. have at least one smoke alarm, yet in 2000-2004, no smoke alarms were present or none operated in almost half (46%) of the reported home fires. (Homes include one- and two-family dwellings, apartments, and manufactured housing.) During the same period, 43% of all home fire deaths resulted from fires in homes with no smoke alarms, while 22% resulted from homes in which smoke alarms were present but did not operate.

The death rate per 100 reported fires was twice as high in homes without a working smoke alarm as it was in home fires with this protection. If all homes had working smoke alarms, an estimated 890 lives could be saved annually, or just under one-third the annual fire death toll. Fatalities resulting from home fires with working smoke alarms were more likely to have been in the area of origin, with occupants who tried to fight the fire themselves, or to have been at least 65 years old.

Two-thirds of the smoke alarms in reported non-confined home fires were powered solely by batteries. The rest split evenly between hardwired only and hardwired with battery backup. More than half (54%) of the smoke alarm failures were due to missing or disconnected batteries; 19% were due to dead batteries. Nuisance alarms were the leading cause of disabled alarms. Hardwired devices accounted for 29% of the smoke alarms in non-confined fires but problems with the hardwired power source caused only 7% of the smoke alarm failures.

These estimates are based on data from the U.S. Fire Administration's (USFA's) National Fire Incident Reporting System (NFIRS) and the National Fire Protection Association's (NFPA's) annual fire department experience survey.