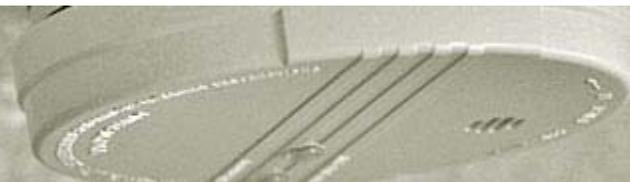


FOCUS ON FIRE SAFETY
Smoke Alarms



Focus on Fire Safety– Smoke Alarms

A selected bibliography of recent publications

Compiled by the NETC Learning Resource Center



[Journal Articles](#) [Reports](#) [Books](#) [EFO Papers](#)

Journal Articles

| Title | Author | Journal Title | Description | Publication Date |
|--|--------------------------------|--|-------------|------------------|
| Alarming insights | Perdell, Neil | FIRE PREVENTION - FIRE ENGINEERS JOURNAL | p. 23 | November 2003 |
| Aspirating smoke detection | Whitt, Joe and Beals, James | INTERNATIONAL FIRE PROTECTION | p. 31-32+ | May 2005 |
| Aspirating smoke detection - when performance counts | Massingberd-Mundy, Peter D. G. | FIRE SAFETY ENGINEERING | p. 32-35 | May 2001 |
| Aspirating smoke detection: moves into smaller areas | Massingberd-Mundy, Peter D. G. | FIRE SAFETY ENGINEERING | p. 21-23 | June 2005 |
| Beam detectors for wide area protection | Steel, Ian | INTERNATIONAL FIRE PROTECTION | p. 46-48 | February 2008 |
| Breathing space | Massingberd-Mundy, Peter D. G. | FIRE SAFETY ENGINEERING | p. 18-20+ | July/August 2006 |
| Change your calendar; change your detector | Coleman, Ronny J. | SPRINKLER AGE | p. 27-28 | October 2005 |
| A comparative study of effectiveness of smoke alarms in two types of buildings | He, Yaping and Nelson, David | JOURNAL OF FIRE SCIENCES | p. 415-434 | September 2008 |
| Considerations when specifying and installing beam smoke detectors | Scorfield, Steve | INTERNATIONAL FIRE PROTECTION | p. 63-64+ | February 2005 |
| Cost-effective early warning detection for small critical areas | Massingberd-Mundy, Peter D. G. | FIRE SAFETY ENGINEERING | p. 26-28 | May 2004 |
| Dead battery in smoke alarm proves fatal - Mississippi | Tremblay, Kenneth J. | NFPA JOURNAL | p. 26 | March/April 2005 |
| Digital video smoke detection: Using CCV for smoke detection | Gentile, Kenneth L. | ASIA PACIFIC FIRE MAGAZINE | p. 58-61 | December 2004 |
| Distance brings fire detection closer to perfection | Goosman, Donald | FS-WORLD.COM | p. 40-42 | Spring 2005 |

| | | | | |
|--|--|--|-----------------|------------------------|
| Do smoke alarms still function a year after installation? a follow-up of the Get-Alarmed Campaign | Thompson, Corleen J., Jones, Alma R., Davis, Mary Kidd, and Caplan, Lee S. | JOURNAL OF COMMUNITY HEALTH | 11 p. (171-181) | April 2004 |
| Don't forget aspirating smoke detection! | Munday, Peter | INTERNATIONAL FIRE PROTECTION | p. 71-74 | May 2006 |
| Duct smoke detection | | FIRE PROTECTION ENGINEERING | p. 56-58 | Spring 2006 |
| Effectiveness of fire safety components and systems | Thomas, Ian R. | JOURNAL OF FIRE PROTECTION ENGINEERING | p. 63-78 | 2002 |
| The efficacy of duct smoke detection | | FIRE PROTECTION ENGINEERING | p. 52-53 | Winter 2006 |
| Engineering a video image smoke detection system | Gentile, Kenneth L. | INDUSTRIAL FIRE WORLD | p. 10-11 | July/August 2005 |
| False alarm reduction by use of new technology: optical smoke detection using dual light wavelengths | Hunter, Mark | INTERNATIONAL FIRE PROTECTION | p. 55-56+ | November 2006 |
| Fire deaths in the United States: how best to keep reducing them | Eisenberg, Elliot F | FIRE PROTECTION ENGINEERING | p. 8-10+ | Winter 2005 |
| Fire detection | Peberdey, Bill and Woodward, Neil | INDUSTRIAL FIRE JOURNAL | p. 15-16 | January 2001 |
| Fire detection in atrium buildings | Unoki, Juzo and Kawada, George | FS-WORLD.COM | p. 30+ | Spring 2005 |
| Fire detection in cold stores | Birch, Brett | FIRE PROTECTION-SOUTH AFRICA | p. 15-17 | Summer 2003 |
| Fire detectors | Barrett, Roger | FIRE PREVENTION - FIRE ENGINEERS JOURNAL | p. 55-57 | June 2004 |
| Fire kills family of three; alarm missing battery - South Carolina | Tremblay, Kenneth J. | NFPA JOURNAL | p. 24+ | March 2005 |
| Gas, smoke, flame & heat detection | Ransden, Niall | INDUSTRIAL FIRE JOURNAL | p. 47-49 | September 2004 |
| Getting it right with smoke alarms | Jones, Gerald | FIRE | p. 58 | September 2008 |
| Has battery power for alarms expired? | Perdell, Neil | FIRE SAFETY ENGINEERING | p. 30 | February 2008 |
| Heard but not seen | Jaros, Marek | FIRE SAFETY ENGINEERING | p. 27-28 | December 2007 |
| Home smoke alarms: the data as context for decision | Ahrens, Marty | FIRE TECHNOLOGY | p. 313-327 | December 2008 |
| Incipient fire detection in hazardous areas | Fox, Peter | INTERNATIONAL FIRE PROTECTION | p. 59-61 | February 2007 |
| Innovations in fire system technology | Cook, Peter | INTERNATIONAL FIRE PROTECTION | p. 39-42 | February 2005 |
| Installer friendly beam smoke detectors | Scorfield, Steve | FIRE SAFETY ENGINEERING | p. 22-24 | November 2004 |
| Maintenance is crucial, too | Araujo, Sandra | NFPA JOURNAL | p. 32 | November 2005 |
| Making the grade in fire safety: increasing campus fire safety by increasing smoke | Moore, Wayne D. | NFPA JOURNAL | p. 42 | September/October 2006 |

| | | | | |
|--|---|---|-----------------|------------------------|
| detector reliability | | | | |
| National Fire Alarm Code issues: NFPA 72 builds on the latest smoke detection and alarm research | Almand, Kathleen H. | NFPA JOURNAL | p. 26 | January/February 2008 |
| Preventing harm, one home at a time: DCFD's "SAVU" program: smoke alarm verification and utilization | Rubin, Dennis L. | FIREHOUSE | p. 38-41 | November 2007 |
| Projected-beam smoke detectors - more than just a substitute for spot detectors | | FIRE PROTECTION ENGINEERING | p. 34-39 | Summer 2004 |
| Reducing fire deaths in older adults: optimizing the smoke alarm signal | Almand, Kathleen H. | NFPA JOURNAL | p. 26 | September/October 2006 |
| A relative time analysis of the performance of residential smoke detection technologies | Milarcik, E. L., Olenick, S. M., and Roby, Richard J. | FIRE TECHNOLOGY | p. 337-349 | December 2008 |
| Risk and protective factors for fires, burns, and carbon monoxide poisoning in U.S. households | Runyan, Carol W., Johnson, Renee M., Yang, Jingzhen, Waller, Anna E., Perkis, David, Marshall | AMERICAN JOURNAL OF PREVENTIVE MEDICINE | 7 p. (102-108) | January 2005 |
| Smoke alarm evaluations | Mniszewski, Kim R. | FIRE FINDINGS | p. 7-11 | Winter 2008 |
| Smoke alarms | | NFPA JOURNAL | p. 19 | March-April 2001 |
| Smoke alarms and residential fire mortality in the United States: an ecologic study | Stevenson, Mark R. and Lee, Andy H. | FIRE SAFETY JOURNAL | p. 43-52 | February 2003 |
| Smoke and CO detector safety for people who are deaf or head-of-hearing | Christianson, Bernt R. and Anderson, Vicki | MINNESOTA FIRE CHIEF | p. 18-21 | July/August 2006 |
| Smoke but no fire: motion detection technology searches for earliest indication of emergencies | Reicher, Anton | INDUSTRIAL FIRE WORLD | p. 12 | July/August 2005 |
| Smoke detection technology: the latest research in support of the next generation | Almand, Kathleen H. | NFPA JOURNAL | p. 32 | September/October 2008 |
| Smoke detector response and the use of antistatic materials: an empirical study | Qualey, J. R. and Penney, S. | FIRE TECHNOLOGY | p. 215-234 | October 2005 |
| Smoke detectors on boats | McDevitt, John | NFPA JOURNAL | p. 36-37 | July/August 2004 |
| Strategies to increase smoke alarm use in high-risk households | Harvey, Pauline A., Aitken, Mary, Ryan, George W., Demeter, Lori A., | JOURNAL OF COMMUNITY HEALTH | 11 p. (375-385) | October 2004 |
| To-do lists should include smoke alarm tests | Araujo, Sandra | NFPA JOURNAL | p. 44 | May-June 2004 |
| USFA investigation of fires with operational smoke alarms | | HEALTH & SAFETY | p. 13 | October 2006 |
| Using behavioral science to improve fire escape behaviors in response to a smoke alarm | Thompson, N. J., Waterman, M. B., and Sleet, D. A. | JOURNAL OF BURN CARE & REHABILITATION | p. 179-188 | March-April 2004 |
| Very early warning smoke detection: why and how it's applied to mission critical facilities | Tieppo, Eddie | FS-WORLD.COM | p. 10-16 | Spring 2007 |
| Wake up and smell the smoke | Chubb, Mark | FIRE ENGINEERING | p. 184-186 | March 2003 |
| Why people continue to die in their homes | Gardiner, Daniel B. C. | VOICE | p. 6+ | December 2003 |

Reports

| Title | Author | Publication Date | URL |
|--|---|------------------|---|
| Are photoelectric smoke alarms better than ionization smoke alarms for adjacent to kitchen installations, to minimize nuisance alarms? | | March 2005 | www.cps.gov.sk.ca/Safety/fire/pdf/Kitchen_Smoke_Alarms.pdf (82.9kb) |
| The audibility of smoke alarms in residential homes | Lee, Arthur | January 2007 | www.cpsc.gov/LIBRARY/FOIA/foia05/os/audibility.pdf (2mb) |
| Home smoke alarms and other fire detection and alarm equipment | | April 2006 | www.usfa.fema.gov/downloads/pdf/white-paper-alarms.pdf (370.6kb) |
| Investigation of auditory arousal with different alarm signals in sleeping older adults | Bruck, Dorothy, Thomas, Ian R., and Kritikos, Ada | May 2006 | www.nfpa.org/assets/files//PDF/Research/Investigation_of_Auditory_Arousal.pdf (3.1mb) |
| Notification effectiveness for large groups | Gwynne, Steven M. V. | June 2007 | www.nfpa.org/assets/files//PDF/Research/Notification_report-large_groups.pdf (1.4mb) |
| Performance of home smoke alarms: analysis of the response of several available technologies in residential fire settings | Bukowski, Richard W., Peacock, Richard D., Averill, Jason D., Cleary, Thomas G., Bryner, Nelson P., Walton, William D., Reneke, Paul A., and Kuligowski, Erica D. | December 2003 | smokealarm.nist.gov/HSAT.pdf (24.6mb) |
| Performance of home smoke alarms: analysis of the response of several available technologies in residential fire settings | Bukowski, Richard W., Peacock, Richard D., Averill, Jason D., Cleary, Thomas G., Bryner, Nelson P., Walton, William D., Reneke, Paul A., and Kuligowski, Erica D. | December 2007 | http://www.lrc.fema.gov/starweb/lrcweb/servlet.starweb?path=lrcweb/STARLibraries1.web&search=R%3D171806 |
| Predicting smoke and carbon monoxide detector response in the ceiling jet in the presence of a smoke layer | Davis, William D., Cleary, Thomas G., Donnelly, Michelle K., and Hellerman, Samuel D. | July 2003 | fire.nist.gov/bfrlpubs/fire03/PDF/f03003.pdf (391.6kb) |
| Reducing fire deaths in older adults: optimizing the smoke alarm signal - research project - | Geiman, Justin A. and Gottuk, Daniel T. | May 2006 | www.nfpa.org/assets/files//PDF/Research/Summary_Technical_Report.pdf (2.8mb) |

| | | | |
|--|--|-----------------|---|
| summary technical report | | | |
| A review of the sound effectiveness of residential smoke alarms | Lee, Arthur, Midgett, Jonathan, and White, Sharon | December 2004 | www.cpsc.gov/library/foia/foia05/os/alarm1.pdf (662.3kb) |
| Smoke alarms - ionization and photoelectric technology | | August 21, 2007 | www.iafc.org/associations/4685/files/FLSS_Position_Paper_smoke_alarms.pdf (62kb) |
| Smoke characterization report | Fabian, Thomas Z. and Gandhi, Pravinray D. | April 24, 2007 | www.nfpa.org/assets/files//PDF/Research/SmokeCharacterization.pdf (3.1mb) |
| Smoke detection in buildings with high ceilings | Andersson, Petra and Blomqvist, Jan | 2003 | www.sp.se/fire/Sv/PDF_reports/SP_Report_2003_33.pdf (7.3mb) |
| Smoke detector performance for level ceilings with deep beams and deep beam pocket configurations - research project | O'Connor, Daniel J., Cui, Ervin, Klaus, Matthew J., Lee, Cheol H., Su, Chen, Sun, Zeqiang, He, Ming, Jiang, Yun, Vythoulkas, John, and Al-Farra, Tawfeeq | April 2006 | www.nfpa.org/assets/files//PDF/Research/WaffleCeilings.pdf (2mb) |
| U. S. experience with smoke alarms and other fire detection/alarm equipment | Ahrens, Marty | April 2007 | http://www.lrc.fema.gov/starweb/lrcweb/servlet.starweb?path=lrcweb/STARLibraries1.web&search=R%3D164922 |
| Waking effectiveness of alarms (auditory, visual and tactile) for the alcohol impaired | Bruck, Dorothy, Thomas, Ian R., and Ball, Michelle | June 2007 | www.nfpa.org/assets/files//PDF/Research/alcohol&alarmsreport.pdf (511.7kb) |

Books

| Title | Author | Corporate Author | Publication Date | Call Number |
|--|--------------------|--------------------------------------|------------------|--------------------|
| The American home is a fire trap | Patton, Richard M. | | 2001 | TH 9148 .P322 2001 |
| Fire in your home: prevention and survival | | National Fire Protection Association | 2005 | TH 9148 .N48 2005 |

EFO Papers

| Title | Author | Publication Date | URL |
|---|-------------------|------------------|---|
| ASAP, the Atlanta Smoke Alarm Program | Ham, Dennis S. | April 2005 | www.usfa.dhs.gov/pdf/efop/efo38132.pdf (101.8 kb) |
| Community risk assessment: a smoke detector program in the city of East Palo Alto | Aus, Geoffrey | December 2003 | www.usfa.dhs.gov/pdf/efop/efo36778.pdf (108.7 kb) |
| A correlation between regions of crime occurrence, fire occurrence, and smoke detector protection | Caufield, John D. | October 2003 | www.usfa.dhs.gov/pdf/efop/efo36276.pdf (102.8 kb) |

| | | | |
|---|-------------------------|----------------|---|
| Development of a smoke alarm program for the town of Danvers | Prendergast, Stephen L. | October 2004 | www.usfa.dhs.gov/pdf/efop/efo37463.pdf (126.4 kb) |
| Elderly fire protection: prevention based activities to reduce the risk to the elderly within the city and county of Honolulu | Farris, Jeff K. | January 2005 | www.usfa.dhs.gov/pdf/efop/efo37841.pdf (5.5 mb) |
| Encouraging the use of residential smoke detectors | Davis, David H. | April 2004 | www.usfa.dhs.gov/pdf/efop/efo36902.pdf (97.04 kb) |
| Evaluating the effectiveness of the city of Tulare, CA, Fire Department smoke alarm installation program | Long, Cameron F. | September 2008 | http://www.lrc.fema.gov/starweb/lrcweb/servlet.starweb?path=lrcweb/STARLibraries1.web&search=R%3D177311 |
| The impact of risk perception on smoke alarm use in the City of San Bernardino, California | Fratu, James M. | October 2005 | www.usfa.dhs.gov/pdf/efop/efo38588.pdf (242.2 kb) |
| Impact of the Fort Worth Fire Department's residential smoke detector program | Parker, Gary J. | April 2004 | Sections of this paper not on the Internet. www.usfa.dhs.gov/pdf/efop/efo36900.pdf (169.2 kb) |
| Is Greenville Fire Rescue's smoke alarm program meeting the needs of the deaf and hard of hearing? | Griffin, Eric T. | July 2007 | www.usfa.dhs.gov/pdf/efop/efo40824.pdf (197.5 kb) |
| Is it time for a change to the smoke detector program in metro Louisville | Larkins, Richard W. | October 2003 | www.usfa.dhs.gov/pdf/efop/efo36361.pdf (99.5 kb) |
| Locating the older adult population in Clyde, Ohio | Fiser, Paul H. | April 2008 | www.usfa.dhs.gov/pdf/efop/efo41899.pdf (2.1 mb) |
| Measuring the Ferndale Fire Department smoke alarm program after a decade | Van Sparrentak, Ken | April 2003 | www.usfa.dhs.gov/pdf/efop/efo36362.pdf (115.7 kb) |
| Reducing community risk through a residential smoke alarm testing program | Chudy, Kenneth S. | December 2004 | www.usfa.dhs.gov/pdf/efop/efo37736.pdf (149.4 kb) |
| Saving the most at risk but least prepared - a smoke detector installation program in the suburban/urban environment | Kerby, Berman Mark | June 2006 | Sections of this paper not on the Internet. www.usfa.dhs.gov/pdf/efop/efo39222.pdf (118.3 kb) |

U.S. Fire Administration - Learning Resource Center, 16825 S. Seton Ave., Emmitsburg, MD 21727
(800) 638-1821 Fax: (301) 447-3217