

Why you need two kinds of smoke alarms

[By Daniel DiClerico | ConsumerReports.org – 15 hours ago](#)

At least one set of photoelectric and ionization smoke alarms should be installed on each level of your home, including the basement and the attic.

A recent [report on smoke alarms on NBC's "Dateline"](#) has triggered further debate about which type of alarm works best: photoelectric or ionization. If you're familiar with [Consumer Reports' smoke alarm tests](#), you know that the answer is ... neither. We recommend both technologies to ensure maximum protection from fire. ([Click here to go to Consumer Reports' smoke alarm tests.](#))

Here's why.

Our [tests of a dozen smoke alarms from BRK Electronics, First Alert and Kidde](#) found clear strengths among the two technologies. Smoke alarms that use ionization technology were great at detecting a fast, flaming fire such as burning paper, but poor at detecting a smoldering fire, as in a couch or mattress. The opposite was true of photoelectric smoke alarms. That's why you need both types of alarm in your home. Or consider a dual sensor model, which embeds the two technologies in a single alarm.

There should be at least one set on each level of your home, including the basement and attic. Be sure to place a detector in every bedroom and outside each sleeping area. Interconnected models, called out in [our smoke alarm tests](#), will all sound simultaneously when any one is triggered. That way you'll be warned of a fire in the basement when you're asleep upstairs. To avoid false alarms, don't mount ionization or dual smoke alarms in the kitchen, where burnt toast might set them off, or near sources of steam such as a bathroom, laundry room or sauna.

Watch [this 60-second video for more advice on choosing and using smoke alarms](#). And don't forget about adding a carbon monoxide alarm, especially important as more and more people use generators during storm events. For more tips, read our [CO and smoke alarm buying guide](#). And you can [find the "Dateline" smoke-alarm report on NBC News' website](#) (the report begins about 1 minute and 54 seconds into the video).