

A Tough Sell

If you're lobbying for a residential fire sprinkler ordinance in your community, nothing will stand in your way more than the public's misconceptions.

Alisa Wolf

What do residential fire sprinkler systems and refrigerators have in common? Not much, you might think. Yet both are easy to forget about because they usually work for years with nothing more than routine cleaning and maintenance. You may appreciate your car or your computer because you know how difficult your life is when they break down, but how often does your refrigerator grind to a halt? And unless your sprinkler system activates in response to a fire, you might be tempted to forget you have one.

This similarity is no less important to residential fire sprinkler advocates than the more obvious difference between residential sprinklers and refrigerators. Nearly everyone agrees that refrigerators are desirable and worthwhile. But ask just about any fire chief who's ever worked to get a sprinkler ordinance passed, and you'll find that most people have yet to be convinced of the value of residential sprinklers. To make matters worse, public attitude is based largely on ignorance and widespread myths.

Evidence of the public's attitude is more than anecdotal. A recent survey of 200 single-family homeowners in Connecticut sponsored by the Home Fire Sprinkler Coalition, a group made up of the American Fire Sprinkler Association (AFSA), the National Fire Sprinkler Association (NFSA), and NFPA, found that only four had residential sprinklers. Of the remaining respondents, only 4 in 10 had even heard of them. With the exception of 1 respondent out of the 41 who built their own homes, none had been offered in-home fire sprinklers as an option by builders. Thirty percent of all respondents had heard that sprinklers go off accidentally, and 40 percent agreed with this statement to some degree.

Making the case for sprinklers

Of course, Connecticut doesn't corner the market on misconceptions about sprinklers. A 1991 study by the Southern California Sprinkler Advisory Board found that many people believed that sprinklers are ugly, that they leak, that they can be operated by smoke, and that they're prohibitively costly.

"Today, we're in the same spot that the smoke alarm industry was in the early '70s," says Pat Coughlin, director of Operation Life Safety (OLS), a consortium of fire organizations whose primary purpose is to champion the increased use of residential sprinklers. "Smoke detectors were a proven technology back then, but consumer awareness was low, and there was active opposition from home builders." Awareness of the value of smoke detectors has increased, and with it, widespread public demand, which has also brought the cost of smoke detectors down. Sprinkler proponents hope that as people learn how valuable sprinklers are, the demand for residential sprinklers will also surge and that rising demand will drive down costs.

Several communities that have residential sprinkler ordinances have, in fact, reported cost savings to the consumer over time. In some communities, prices have dropped so drastically that sprinklers cost only pennies per square foot. Scottsdale, Arizona, which passed the nation's most comprehensive sprinkler ordinance in 1985, requiring an automatic sprinkler system in every room of every new industrial, commercial, or residential building in the city, has recently come out with a 10-year study that, among other things, shows a marked decrease in the cost of residential sprinkler installations. In 1986, the cost of installing a sprinkler system in an average 2,000-square-foot home was about \$1.14 per square foot. Today, some companies are

installing residential sprinklers in Scottsdale for close to \$.50 per square foot. And these prices don't include the design freedom and benefits that help offset the cost of sprinkler installation.

Lower prices

The key to lower prices is design offsets that may allow builders who install sprinklers to increase density, reduce residential street width, increase cul de sac lengths, eliminate 1-hour-rated construction for separations between multifamily homes and for single-family garages, and increase hydrant spacing. In Cobb County, Georgia, for example, where every multifamily dwelling built since 1981 has been sprinklered, sprinklering buildings may cost the same—or even less—than building without them.

Not all communities are in a position to take advantage of savings to this extent, however. Sprinkler systems in Gorham, Maine, actually cost more than the national average, according to Chief Robert Lefebvre, even though sprinkler ordinances for commercial and multifamily dwellings have been in effect there since 1987.

"Some of that has to do with the fact that a lot of companies putting in residential sprinklers are still using black iron pipe," Lefebvre says, "because the demand for residential systems hasn't reached a point where it's cost-effective to go out and buy tools and equipment to work with plastic pipe." Prices, he adds, are starting to come down and are

bound to drop even more with the approval of an ordinance now before the town council that would require sprinklers in all new construction except for barns and agricultural storage buildings.

Ultimately, sprinkler costs go down in communities where there's a demand for them. Construction modifications are just the start. Water utilities may discount or revoke standby fees to make sprinklers more affordable. And though fire insurance savings can be negligible, in some communities, savings on fire insurance can, over time, help cover up-front sprinkler costs. Some commercial occupancies may also depreciate sprinkler systems, just like any other office equipment.

"When you add that on top of construction savings and insurance, it puts a whole different light on commercial sprinkler costs," says Lefebvre.

For home buyers, savings come into play with building modifications and, in some cases, special insurance rates.

"The biggest nut to crack is insurance companies," says Fire Chief Bill Dolan of North Andover, Massachusetts, where residential sprinklers aren't required by ordinance, but can be required through zoning rulings. "There are good reasons why they should be giving us breaks." But many insurance companies harbor the same misconceptions about sprinklers as the general public, and homeowners with sprinklers don't always get the breaks they deserve.

What Experts Say About Promoting a Sprinkler Ordinance in Your Community

Be realistic

Assess your resources and plan for community and builder support. Recruit a task force of influential community members and agree on a legislation strategy. Many successful ordinances have gone through stages of acceptance, starting with commercial and multifamily dwellings and moving toward single-family homes. Whatever you decide, make sure you have broad-based community support.

Build your case

Lay a solid groundwork and document all of your arguments in favor of sprinklers. Be prepared to show how cost-effective residential sprinklers are. Seek out the help of the Home Fire Sprinkler Association and Operation Life Safety. Document your rationale, not only to convince a town or city council, but to help make an ordinance stick if it's challenged in later years.

Work out the technical details

Residential sprinkler systems need to be

properly designed, installed, and maintained. A quality control program for sprinkler installations also includes accountability and liability issues, which are of special concern to home builders. Who will the fire department rely on for information about these technical intricacies?

Know when to back off

A sprinkler ordinance can be a political hot potato. Know when the time is right, and back off if you're up against too much opposition. Concentrate instead on building public support. You may be able to take advantage of a "teachable moment," when the time is right politically to advance residential sprinklers.

Sprinkler your own home

"If residential fire sprinkler systems are so great, chief, why don't you get one?"

When Chief Bill Dover of North Andover, Massachusetts, was confronted at a public meeting with this challenge, he was able to stand up and say, "I have sprin-

klered my home," giving credibility to his arguments in favor of an ordinance.

It's not always easy to put your money where your mouth is. Dolan paid about \$4,000 to install a sprinkler retrofit in his five-room split level and garage. (NFPA 13D doesn't call for sprinklers in garages, but North Andover does.) But he knew he was investing not only in his convictions but in his peace of mind.

Keep up the public education

The fire department's job isn't over when an ordinance passes, says Pat Coughlin of Operation Life Safety.

"When economic issues arise and homes aren't being built," he says, "the fire department should be out making people appreciate the sprinklers they have."

Some of this information is adapted from Operation Life Safety's Strategies for Residential Fire Sprinklers: A Checklist for Community Action. For more materials and support, contact the Home Fire Sprinkler Coalition at (617) 984-7263, or Operation Life Safety at (703) 273-0911.

Perhaps the most important benefit to communities with residential sprinklers is the long-term tax savings due to lower fire department costs, which can be appreciable. In places like Napa Valley, California, for example, increasing demands on the fire department, coupled with new development in remote areas requiring longer response times, provided a strong rationale for residential sprinklers. With sprinklered homes, the fire department argued, it wouldn't have to grow exponentially to maintain adequate coverage. By 1987, Napa Valley had a local amendment requiring automatic sprinklers in all new homes located more than 1.5 miles from one of the city's three fire stations, those inaccessible to fire department apparatus because of narrow driveways and roads, and those built in hazardous fire areas, near wildlands or on hillsides.

Cost isn't the only issue

As important as convincing a town or city council that the cost of residential sprinklers needn't be prohibitive, cost isn't the only issue that may be leveraged to combat a sprinkler ordinance.

"Cost considerations are minuscule," says Steven Muncy, president of AFSA. "Amortized over 15 to 20 years, it's nothing." Scratch the surface of opposition to residential fire sprinklers and what you often find is real ignorance, on the part of the public, government officials, and home builders. The biggest misconception out there, says Muncy, is about how sprinklers operate.

"People believe they all go off at the same time," he says. "They frequently believe that sprinklers are controlled by smoke or other factors rather than heat. They're confused about how they actually operate." According to Muncy, many people are more concerned about water damage from a potential sprinkler activation than they are about the much more serious potential for water damage from a fire hose.

Such misconceptions are easily exploited by sprinkler opponents. Many fire chiefs across the country who've had sprinkler ordinances revoked in their communities know that convincing a city council of the value of residential sprinklers is only the first step. The real challenge is keeping the value of residential sprinklers in the public consciousness over time, so that sprinkler ordinances get the support they need to prevail against opposition.

The true value of sprinklers

Because of his work promoting residential sprinklers, Pat Coughlin knew when he put his sprinklered home on the market that the realtors showing the single-family dwelling wouldn't be able to explain the value of the system to potential buyers.

"We listed it as an advanced fire safety system," Coughlin says. "Twenty-four couples came through, but no one ever saw the sprinklers or asked about them. They just blend in so well, you don't notice them."

Ultimately, Coughlin accepted an offer on his house from buyers who might have remained oblivious to their sprinkler capabilities had he not explained the system to them. And if the sprinkler system doesn't activate during the new owners' tenure, they might then sell the house to still another set of buyers who know even less.

Although hypothetical in Coughlin's case, this collective memory loss has been a problem in communities where sprinkler ordinances have been challenged. The public doesn't turn out to support the invis-

ible benefits of sprinkler ordinances at city council meetings, and elected officials can be easily convinced that residential sprinklers are wrong for their constituents, despite demonstrated long-term cost savings to taxpayers, lower costs to builders through design and construction alternatives in building requirements, and the assurance of safety in the event of a fire.

Take Rialto, California, a city in San Bernardino County, about 60 miles east of Los Angeles, whose single-family sprinkler ordinance for new construction was revoked after seven years.

"It's frustrating," says Division Chief Stephen Wells. "In the research I got involved in trying to defend the ordinance, and in seeking out local sprinkler vendors in regards to cost, the statistics I found were overwhelmingly in our favor to support the ordinance. Both water companies that serve the city of Rialto made adjustments to what they charged for meters and standby so that no additional costs were added to developers. With our trade-offs on our building requirements, basically, it got down to only a couple hundred additional dollars on every house—pennies a square foot for the home buyer—while not really adding any true cost to the developer."

Even so, the fire department found itself under attack by the Building Industry Association in a politically charged climate. Though the fire department was able to convince the city council that sprinklers made sense cost-wise, the builders swayed the council on the issue of free choice.

"They argued that consumers are bombarded with all kinds of safety mandates—air bags, seat belt laws, smoke detectors—and that sprinklers should be an upgrade, just like carpet, landscape, and tile roofs that consumers can elect when they're walking through the models," says Wells. In other words, if people want sprinklers, they should have them by choice.

As is the case in most communities that don't have sprinkler ordinances, however, builders don't offer residential sprinklers as part of the package the way they do granite countertops or tiled roofs.

"Home builders don't make it easy," says Gary Keith, NFPA's assistant vice president and chair of the Home Fire Sprinkler Coalition. "There's no public demand, the argument goes, so builders don't offer sprinklers as an option, and people don't ask for them because they're not familiar enough."

This generalization holds true in Rialto, California, now that the sprinkler ordinance has been revoked. If you want a fire sprinkler system, says Wells, "you have to ask for it."

What's the one word he'd use to describe the public's position?

"Apathetic," Wells says. "You make a sound argument, and nobody listens to logic. People get emotional talking about dollars. All they have to do is to suggest that sprinklers aren't cost-effective, and that gets people's attention. It's a political hot potato."

Wells is not alone in California. Chief Jeff Bowman of Anaheim, a city of almost 300,000 people, is also frustrated. His community's sprinkler ordinance, which was passed 10 years ago, was killed by the same argument: reducing the interference of big government.

"I was completely blind-sided," he says. "I didn't even know this was an issue." The ordinance had passed three times over the years without incident, and the city had worked to reduce costs to less than \$.50 per square foot.

"We put in the ordinance in the hopes that we'd have the ability to go in and have sprinklers installed when the eastern border of Anaheim was developed," says Bowman. This area is all wildland, but Bowman expects development to begin in the city's canyons within a year.

"It would've been the only area in the city with complete coverage," he says. "It would've been outstanding." Bowman is looking at plans to provide an engine and a truck company to the outlying areas, which the city would have to fund. If the area had residential sprinklers, on the other hand, he would have recommended the city reduce its fire service to an engine company only.

But the city council either didn't understand Chief Bowman's rationale, or, he says, they didn't buy it.

Wins and losses

"We haven't given up," says Bowman. "Education is going to provide the persuasion. It's a matter of making sure the city council doesn't have any questions about sprinklers." He hopes that the council members will see the wisdom of sprinklers before new construction starts in the canyon, but he has only so much control over their point of view. All he can do is put forth solid arguments and hope they carry.

Rialto's Wells has put the sprinkler struggle behind him for now, and he's waiting for a change in the political climate or the makeup of the council before he puts the issue forward again.

Based on advice OLS gives, that's probably a good idea. According to Coughlin, other areas that lost ordinances had experiences similar to Anaheim's and Rialto's. Coughlin started tracking ordinances this year, and so far, he's compiled a database of about 300, though he believes there are up to 500 nationwide.

"So far, what I'm seeing in terms of what motivates communities to adopt sprinkler ordinances are areas that have experienced high population growth over the past 15 years, sometimes called 'green growth'—that is, new developments, fresh land converted for structural use. California and Florida," he notes, "seem to be the two biggest areas."

Coughlin finds that the best justification for sprinkler ordinances is usually the fact that they reduce the economic impact of the need for fire service as a community grows. Where sprinklers are used extensively, fire departments can spread their resources without as much overlap and with less staff. This doesn't necessarily translate into job cuts for firefighters, but into a less urgent need for a department to grow as quickly as it would without residential sprinkler coverage. With the crash of the building boom of the '80s, however, many communities started to look at ways to cut costs, and home builders organized against sprinkler ordinances. As a result, many ordinances were revoked nationwide.

Dover, New Hampshire, for example, recently suffered a setback to an ordinance that took effect in April 1986, at the beginning of the building boom. The pitch was made that developments and condominiums, which were just getting popular, should be sprinklered. At that time, the city produced a video, "Dover Leads the Nation," about the value of sprinklers. Chief David Bibber spearheaded numerous demos of residential sprinklers, and proponents pitched the future cost savings that would be realized 10 to 20 years down the road—due, in large part, to the fact that the fire department wouldn't have to grow as quickly to adequately protect the burgeoning city. The ordinance

passed, requiring all new commercial developments and new residential construction except single-family homes to be sprinklered.

As in other communities with sprinkler ordinances, Dover realized cost benefits by doing away with standby fees and waterline charges. Developers took advantage of variances allowed for sprinklered areas. Then, in the late '80s, the economy took a downturn. Dover was the only community on the seacoast with such an ordinance, and the city council felt that people wouldn't want to spend extra money on sprinkler systems to live there. Now the community uses the codes required by state law to determine what should be sprinklered.

Public reaction when the sprinkler ordinance went down? Assistant Chief Ronald Clymer echoes Wells: "Apathetic," he says. People didn't show up to support the ordinance, he says. Why not?

"The general perception, not just with sprinklers, but with anything having to do with fire protection, is, 'It's not going to happen to me.'"

Losing an ordinance is discouraging, and it can take time to rebuild enough support to get another one voted in.

"The last couple of years have been a little rugged," says Jim Dalton, NFSA's director of Public Fire Protection. "Home builders have made a major effort to repeal ordinances, and they've been marginally successful."

However, the news, in general, is optimistic. Though several cities in California have lost their ordinances, Coughlin notes, these cities are outnumbered by those adopting them. And other communities throughout the nation have also made progress. But not without a fight.

Vigilance

Organizing the assault on public misconceptions takes vigilance. Dan Jones, chief of the Chapel Hill, North Carolina, Fire Department, started his battle for an ordinance in 1993. As the chief of a college town, Jones was concerned about fire risks in fraternity and sorority houses on and around campus.

"We met with stiff opposition from the home builders association and area developers," says Jones, who adds that home builders went so far as to bring in a lobbyist from Washington, D.C., who made a presentation to the city council full of false information that clouded the issue enough to kill that effort.

"They raised the specter of affordable housing, arguing that it would be no more, and the issue of sprinklers not being dependable. They twisted statistics from the fire marshal's office to make it look like most of the time, sprinklers didn't work." Under the rules of public hearing, Chief Jones didn't have the opportunity to refute these claims.

Then, in 1996, when he reintroduced three ordinances, the local chapter of home builders completely reversed its position and endorsed the sprinkler effort. What made the difference?

By way of an answer, Jones recites the names of five young men and women who died in a fraternity house fire in his jurisdiction in May 1995.

Jones took advantage of what Coughlin calls "a teachable moment," when people are more open than usual to fire safety messages. Unfortunately, in the case of Chapel Hill, it took a tragedy to wake people up to the fact that fatal fires can happen anywhere to anybody.

When the initial reaction to a tragedy cools down, which it does quickly, the teachable moment soon passes, and Jones knew he had to

move fast. With the support of the city manager and the mayor, he started talking about the need for sprinklers during his first post-fire interview with the media. The media picked up the ball and did a lot of the work of influencing public opinion.

But Jones didn't try to push for ordinances for which he didn't feel he could garner support.

"I didn't attempt to require them in one- or two-family dwellings, because I knew it wouldn't fly," he says. "So we limited it to multifamily dwellings and commercial buildings."

Jones also promoted a sprinkler ordinance for all fraternity and sorority houses, existing and new, calling for retrofits within five years. Again, he reversed the negative outcome that resulted from his push for sprinklers in 1993.

"We prepared ourselves in 1993, but not quite to the degree we did in 1995," Jones says. "I learned my lesson about how much information we were going to need, and we did a better job of preparing and presenting to elected officials."

"And frankly, our motivation was a lot higher. We had faced the parents of those kids, and we told them we were going to make something good come of this. You don't take lightly a pledge to a parent who's just lost a child. Fire officials have to be willing to stand up and say, 'This didn't have to happen.'"

But it takes more than a fire chief's conviction to sway a city council, as Jones himself demonstrated. Though the tragedy served as a starting point for public awareness, Jones called in support from OLS and the sprinkler associations, and he and his staff did their homework.

In fact, Coughlin recommends that, even before starting working on an ordinance, fire departments assess their resources and get buy-in from community leaders and builders. OLS publishes a booklet called *Strategies for Residential Fire Sprinklers: A Checklist for Community Action*, outlining several issues for consideration. It contains an infrastructure checklist, which includes an assessment of water supply and fire department access issues; a technical support checklist, which ensures a level of expertise for plans review and inspection; a housing marketplace checklist; and a political climate checklist. The booklet stresses that a fire department needs to build community support.

"When we polled California in 1991," says Coughlin, "one of things we saw was that in towns where ordinances had been rescinded—and some had thousands of sprinklers—no homeowners came forward to support them. Why?"

Why, indeed.

In November 1996, the Home Fire Sprinkler Coalition got together to address this question. Over the years, says NFSA's Dalton, sprinklers have gained wider acceptance.

"California's in front of the wave," he says. "In Napa, it's to the point where there are signs on the road proclaiming the wonders of sprinklers." Such signs signify a big turnaround on the part of home builders, he adds.

However, says AFSA's Muncy, growing acceptance of residential sprinklers has occurred only in pockets around the country, not nationwide.

"We have, in fact, really failed as an industry to talk to the public about the benefits of residential sprinklers," he says. "That's what

we're trying to do through the Home Fire Sprinkler Coalition."

The coalition has launched its efforts in Connecticut, working with Hartford Fire Marshal John Vendetta, to implement a statewide residential fire sprinkler campaign. The effort has included a presence at two Connecticut home shows and has enlisted the help of local media. The coalition has even had a spot on two national television shows.

At this point, the short-term costs of installing residential sprinklers is still a barrier, says Vendetta, who, even before he began working with the coalition, had been part of an effort to sound out the different stakeholders on sprinkler issues in preparation for possible legislation.

"We had a home builder on our task force who was very pro-sprinkler, but the problem was the cost factor," Vendetta says. "That's his only problem. He believes in them. He installed a sprinkler system in one of his model tract homes, and during one of our meetings, he stated that that was the only home that didn't sell, because of the cost." Vendetta's now working with the water companies to lower the costs of installation hookups and other building modifications.

If the year-long public education campaign is successful, says Vendetta, "We may be able to build the desire on the part of home buyers not to want homes without sprinkler systems in them. We may very well end up with voluntary, rather than mandated, requirements. But that doesn't mean that we're not going to pursue legislation."

Connecticut will serve as a model for the coalition's national expansion, which will focus on each state's individual needs.

"Ultimately," says Julie Reynolds, NFPA's director of Public Affairs, "the work of the coalition will show communities how important residential fire sprinkler protection really is."

Meanwhile, fire chiefs continue their own efforts to make sure people value their fire sprinklers as much as they do their refrigerators. They're keeping records of sprinklered homes that have had activations and showing how much less expensive a sprinklered home fire costs than one to which the fire department responds. Chief Lefebvre of Gorham, Maine, takes time to sit down with people who have questions. Chief Dolan of North Andover, Massachusetts, sends out mailings and lends videos to new neighborhoods that have been sprinklered. Chief Bowman of Anaheim, California, collects statistics he hopes will sway his city council. Chief Jones of Chapel Hill, North Carolina, keeps alive the memory of the young men and women who died in an unsprinklered fraternity house fire.

But heightening public awareness about the value of residential fire sprinklers is tough going.

"The public doesn't wake up and say, 'I hope I don't have a fire today,'" says Dolan. "Fire's not on somebody's mind every day. We're the ones who have to think about it." ♦

Alisa Wolf is editor of the NFPA Journal.

The Home Fire Safety Coalition is offering a new brochure to assist communities in their public awareness efforts about residential fire sprinklers. To find out more, call (617) 984-7263.

