

# Despite Risk, Embalmers Still Embrace Preservative



Chester Higgins Jr./The New York Times

Isaiah Owens, a funeral director, says newer embalming fluids are not as good as formaldehyde.

By [ANDREW MARTIN](#)

Published: July 20, 2011

With the government declaring formaldehyde a carcinogen, these might be boom times for alternative embalming fluids — if it weren't for the so-called everlasting effect funeral directors stake their reputations on.

“Formaldehyde is the perfect product for fixation and short-term preservation,” said Debbie Dodge, president of the Dodge Company in Cambridge, Mass., which markets embalming fluids to funeral homes. “Formaldehyde will firm up the body tissue more than any of the nonformaldehyde products out there.”

The formaldehyde industry fought the government's designation for years, arguing that the science was fuzzy on the link between the chemical and certain cancers. Consumer advocates hope [a government warning in June](#) will spur increased demand for products with little or no formaldehyde — for items as diverse as plywood, pressed wood, wrinkle-free shirts and hair straighteners.

Among funeral directors? Not likely.

Next to arsenic, which is no longer used, undertakers insist nothing else preserves the body long enough so that it is presentable for public viewing and can be shipped. In embalming rooms across the country, the focus is on limiting exposure while still using enough of the chemical to keep the customer looking as lifelike as possible.

“Family members,” John H. Fitch Jr., senior vice president of advocacy for the National Funeral Directors Association, “have a fairly high expectation.”

Undertakers have been aware of formaldehyde's dangers for more than a decade — the first workplace restrictions on formaldehyde came in the 1980s — and many have been changing their embalming practices to make the process safer.

“In our new facility, the ventilation is very good,” said Michael J. Lensing, co-owner of the Lensing Funeral and Cremation Service, in Iowa City, Iowa. “In our old facility, oh, my God. It was different.” At the Lensing funeral home, roughly 60 percent of the bodies are embalmed.

The array of precautions were on display at the A. A. Rayner & Sons Funeral Home on Chicago’s South Side, where Charles S. Childs Jr. provided a tour last month of a funeral home started in 1947 by his grandfather.

Back then, he said, embalmers went about their work without gloves or masks or much ventilation. Years later, ducts were installed in the ceiling so the fumes wafted in front of their faces as they were sucked out of the room.

But now Mr. Childs’s embalming area is fume-free. There were five bodies lying on gurneys, in various states of preparation, and a sixth in a harness, prepared to be lowered into a casket. A colleague who was preparing to embalm one of the bodies wore gloves and a protective apron, and planned to add eyewear and a mask once he got started.

Mr. Childs pointed to ventilation ducts installed at table level.  
“We have to protect ourselves,” Mr. Childs said.

Various forms of body preservation have been around for eons, including mummification by the ancient Egyptians. During the Civil War, embalmers prepared the bodies of soldiers on the battlefield and shipped them their family by train or horse and buggy. A high point in embalming lore is that President Lincoln’s body traveled by train from Washington to Springfield, Ill., with public viewings on the way. Arsenic was then one of the primary preservatives. Formaldehyde eventually replaced it.

Modern-day embalming fluid is a mixture of formaldehyde, other less toxic chemicals and water. The embalming fluid that is injected to the arterial system, to replace blood, is up to 5 percent formaldehyde, while a more concentrated form — up to 50 percent formaldehyde — is injected into the body cavity. An average embalming requires a minimum of three gallons of the embalming solution, said Melissa Johnson Williams, executive director of the American Society of Embalmers.

Ms. Dodge’s company began selling embalming fluids without formaldehyde a few years ago, and some companies now market “green burials” in which less toxic chemicals are used. But while the sales of nonformaldehyde products are increasing, she said that as of yet they simply do not work as well and cost nearly three times as much.

The problem is that the new embalming fluids do not give bodies that “everlasting effect,” said Ed Lins, a funeral director at Cross Island Funeral Service, in Flushing, N.Y. “I wouldn’t embalm a body that is being shipped overseas with it,” he said.

Said Isaiah Owens, who owns a funeral home in Harlem, “It may look perfectly well. But it may be smelling.”

The first major safety improvements in the funeral industry’s use of formaldehyde came in the 1980s after the Occupational Safety and Health Administration set exposure limits for the chemical in the workplace, including mortuaries. About a decade ago, the National Funeral Directors Association met with chemical companies and urged them to come up with alternatives to formaldehyde, Mr. Fitch, the association’s senior vice president, said.

Two years ago, the association released a stronger set of recommendations for how its members should deal with formaldehyde. Foremost on the list was installing a proper ventilation system that regularly changes the air in the room and is tested often to make sure it is working properly.

Since formaldehyde is heavier than air, ventilators should be installed below “the breathing zone of the embalmer.” The group also urges embalmers to wear respirators and nitrile gloves, rather than latex, because they are more resistant to formaldehyde.

The average funeral home embalms about 150 bodies a year, suggesting that many embalmers are not exposed to formaldehyde throughout the day. But these days, many funeral homes outsource the embalming to “trade houses” that do many times the average. Among them is Paccione Funeral Directors in Staten Island, which embalms up to 140 bodies a month.

“In our facility, we do a complete air change in the space every four minutes,” said Rocco Paccione, the owner, adding that embalmers wear protective eyewear and suits.

Studies of workers exposed to high levels of formaldehyde have found higher incidences of certain types of rare cancers.

But while a few funeral directors said they knew of [cancer](#) among some older undertakers, most said they did not know of any colleagues who had developed the rare cancers.

“I just love what I do,” said Mr. Owens, the Harlem funeral director. “There’s a risk associated with any occupation. So I’m willing to do what I do and let nature take its course.”

Such attitudes make Joseph Sehee’s job a tough sell. He is the executive director of the Green Burial Council.

“I can’t tell you how many funeral directors come up to me and say, three generations and no cancer,” he said. “In this industry, more than any other you’ll come across, there is really an emotional relationship these guys have with the chemical companies and the chemicals.”

**A version of this article appeared in print on July 21, 2011, on page B1 of the New York edition with the headline: Despite Risk, Embalmers Still Embrace Preservative**