

“But Mommy, what happens to Uncle John's body?”

The disposition of your or your loved one's remains is too often left until the last minute. While respect for the deceased's body is a hallmark of our civilization, many options are available today. Here are some possibilities for Uncle John's body to help you plan in advance.

Modern Burial



Throughout most of human history, families and religious communities have cared for their dead. It was only after the Civil War and the advent of embalming that the modern funeral industry arose. Before this, most U.S. funerals were traditional and involved burying an unembalmed body in a simple pine box. Today, this is known as a green burial.

Modern or conventional burial has primarily supplanted traditional burial. No longer can you bury Uncle John under the willow tree where he loved to sit. A modern burial requires the purchase of a cemetery plot. Then, a usually expensive casket, made from either metal or precious wood, enshrouds the almost always embalmed body. The coffin then goes into a cement vault that lines the grave. This vault will keep the ground from sinking so the cemetery can easily mow the lawn to maintain a manicured look. If you are considering purchasing a conventional cemetery plot, please see the [FCA's Consumer's Guide to Cemetery Purchases](#).

Modern burials are no longer the first choice for the final disposition of Uncle John's remains. Dropping to second place, it now trails cremations as the most common option for final bodily disposition. In 2021 the [National Funeral Directors Association](#) reported modern burial rates at 36.6%.

High cost and the realization that modern burials are incredibly harmful to the environment account for this slip in popularity. A small but growing percentage of the funeral home industry—and the broader death care market—is being gobbled up by private equity-backed firms attracted by high-profit margins, predictable income, and the eventual deaths of tens of millions of baby boomers. "The real master that's being served is not the grieving family who's paying the bill—it's the shareholder," said Joshua Slocum, former Funeral Consumers Alliance executive director.

Cremation



Cremation is the most "popular" choice for Uncle John's body. According to the Cremation Association of Northern America, in 2021, the U.S. cremation rate was 57.5% and is expected to grow to 78.7% by 2040.

Cremation brings a new meaning to Uncle John's old saying, "That burns me up." Now it's literal, Uncle John. Your deceased bodily remains will be placed, very quickly, into a pre-heated retort or crematory – don't want to let the heat out – then exposed to a column of flames produced by a fossil fuel furnace and heated to 1400 to 1800 degrees F. The heat **dries your body**, burns your skin and hair, contracts and chars your muscles, vaporizes your soft tissues, and **calcifies your bones** to crumble eventually. The gases released during the process are discharged through an exhaust system, sometimes with toxic elements such as mercury.

If the crematory doesn't have a secondary afterburner, the technician will have to crush your partially cremated remains with a long hoe-like rod. By now, you are reduced to skeletal remains and bone fragments, which are collected and allowed to cool. If you were "burned up" in a container, like a coffin, there would likely be **non-consumed metal objects** such as screws, nails, hinges, and other parts of the casket or container. In addition, the mixture may contain dental work, dental gold, surgical screws, prosthesis, implants, etc. These objects are removed with the help of strong magnets or forceps after manual inspection. All these metals are later disposed of as per the local laws. (We're curious if they check the pockets of the technicians afterward.)

The final step is grinding the dried bone fragments into a finer sand-like consistency. The machine used for this pulverization is called **a cremulator**.

It takes about **one to three hours** to cremate a human body, reducing it to **3-7 pounds of cremains**. The cremation remains are usually pasty white.

These remains are transferred in a cremation urn and given to the relative or representative of the deceased. If you do not have an urn, the crematorium may return the ashes in a plastic box or default container.

Uncle John's "ashes" may be scattered in areas that have no local prohibition, provided you obtain written permission from the property owner or governing agency. The entire CA "disposer booklet" can be found [here](#).

Cremation is considerably less expensive and has roughly 1/4th the carbon footprint of a modern burial. However, cremation still harms the environment, which brings us to...(next page)

Green or Natural Burial



Green or natural burial emphasizes simplicity and environmental sustainability. Not only are green burials traditional and performed in an Eco-friendly manner, but they also can protect and steward land. The body is neither cremated nor prepared with chemicals such as embalming fluids. It is placed in a simple biodegradable coffin or shroud and interred without a concrete burial vault.

The grave site is allowed to return to nature, and the goal is complete body decomposition and its natural return to the soil. Only then can a burial be “ashes to ashes, dust to dust,” a phrase often used when we bury our dead.

Green burials are the most ecological option, and they are simple, have lower costs, conserve natural resources, eliminate hazardous chemicals, and preserve natural areas.

However, in California, to bury a body, the body must be buried in an established cemetery. (Sorry, Uncle John...no willow tree for you). While there are many green burial sites throughout California, the only one in the Monterey Bay area is the Historic Hybrid Soquel Cemetery. If you live in a rural area, check with your municipal or county zoning department to find out whether you can establish a cemetery on your property for home burial.

Aquamation or Alkaline Hydrolysis

(aka, Water Cremation)



As of 2020 Aquamation has become legal in California for humans (and pets). Aquamation, dissolves a body, DNA and all, in a vat of liquid into a relatively non-harmful solution of slightly alkaline water that can be neutralized and returned to the Earth.

By the end of the process, the only solid thing that’s left is a pile of soft bones that gets crushed into a sterile powder for family members of the deceased to take home.

No actual liquid is returned to the survivors, only the remaining calcium (the crushed bones.) The process results in about 20-30 percent more “ashes” being returned to the family. So while you can’t drink Uncle John, you will get more of his “ashes.”

Recomposition

(aka Human Composting or Terramation)



Human composting relies on natural processes that assist the body in decomposing aerobically and efficiently. This above-ground process will become legal in California starting in 2027, so ask Uncle John to “hang on there, Bro.” Between then and now, the Cemetery and Funeral Bureau, a division of the state Department of Consumer Affairs, will create regulations for the program, and mortuaries, crematoriums, and human-composting providers will have time to create their business models for the change. Until then, Californians can contract with companies in other states to transport human body for recomposition. *Recompose* in Washington state has been composting human bodies for nearly two years and was the first facility in the country to do so.

The recomposition process involves placing the body in a metal cylinder along with some organic material such as alfalfa and straw. Over 30 days, the barrel is regularly infused with oxygen and is occasionally turned. The decomposition process raises the temperature in the vessel to 150 degrees Fahrenheit and breaks down the remains into soil.

While the process is Eco-minded and certainly greener than cremation and contemporary burials, it still involves a lot of resources and energy. Urban facilities must be built, requiring manufactured resources, and energy is used to keep these operations running 24/7. Finally, the resulting heaping compost truckload must be driven to its final resting place. And it does create a surprising amount of material – about a cubic yard, enough to fill the bed of a pickup truck, much more than Uncle John's original body.

Whole Body Donations



The gift of whole-body donation is authorized by the individual, but the legal next of kin is responsible for carrying out the donor's wishes. If the next of kin opposes the donation, it will not occur.

Accredited whole body programs have completed the necessary certifications and maintain specific standards, both of which are required of whole body programs. Unaccredited whole body programs do not have the certification or regulated standards to maintain the program. Using accredited programs as the higher standards and certifications ensure donated gifts are used ethically.

Donation information and forms for University of California, San Francisco; and for Stanford Medical Clinical Anatomy can be found on the Members Resources page of the FCAMB website (fcamb.org). Finally... a chance for Uncle John to go to Stanford.

Whole-Body Burial at Sea



Whole-body burials at sea are not new, but they are rare. However, they are becoming more popular, and for someone who has always loved the ocean or is environmentally motivated, it is both possible, and legal: as long as certain protocols are followed. Even if you don't have a particular affinity for the sea, an ocean burial can be deeply symbolic.

Most people aren't aware they can have a full body burial at sea, but anyone can be buried at sea as long as the burial occurs at least three nautical miles from shore and in at least 600 feet of water, according to federal regulations. If a person wants to be buried in the ocean without a casket, the EPA recommends the body be wrapped in a biodegradable shroud and weighted, to ensure it falls quickly to the ocean floor and stays there. (*We don't want Uncle John's body bobbing up to the surface.*) Advanced permission is not needed for a burial at sea, but the EPA does need to be notified within 30 days of the service.

A whole-body sea burial by a private company, including a coffin or custom-made shroud and boat rental, might cost between \$5,000 and \$10,000. Anchors aweigh, Uncle John.