

Frequently Asked Questions About Green Burial

Q. Is there a universal definition of green burials?

A. The Green Burial Council provides nuanced definitions of green burial in its *Glossary of Green Burial Terms*. These terms have been devised and evaluated by leaders in the field at all levels. In terms of certification, each level—hybrid, natural, and conservation—must meet specific standards to qualify.

Q. How can bodies be properly prepared for burial and what is a home funeral?

A. Home funerals, which allow for families



to care for a decedent and all aspects of a funeral at home will the 1930s. Home funerals find family and friends, next of kin, or a legally designated agent retaining custody and control of the body for the time period between death and disposition (burial or cremation). This is sometimes referred to as *home vigil* or DIY funeral. A home funeral involves bathing and dressing the body and using dry ice, Techni-ice, or other cooling mechanism as a preservative; it commonly lasts 1-3 days. A *home funeral guide* may provide education and support either prior to or during this time period. It's important to care for the body using these techniques prior to burial. For more information, go to the National Home Funeral Alliance.

Q. What are blended funerals?

A. Funerals that combine conventional funeral practices with home funeral and/or green burial practices; may include the use of a funeral director for certain aspects of care, such as obtaining, completing and filing paperwork or transporting the body. Families may have a home funeral without having a green burial and visa versa. Blended funerals offer families more options, especially when certain options are not available in their area. Most all GBC-approved funeral homes accommodate families wanting home funerals.

Q. What is a home burial?

A. A home burial is exactly what it sounds like—a burial on a family's property. Home burials are legal in all but Arkansas, California, Indiana, Louisiana, Washington state, and the District of Columbia, with some states stating that burials must be in established cemeteries; however, one can establish a family cemetery on one's own property by following state and local regulations and/or filing for a special exception in all of these restrictive states except DC. Burial in a family cemetery on private property is limited to family members only. To learn more about state by state requirements, go to Legal Requirements by State.

Q. How is a grave liner different from a vault?

A. A grave liner covers the sides and top of the casket where a vault is significantly more substantial, acting as a box for the box. Both are classified as outer burial containers. Neither is required by law, though cemeteries often require them to avoid grave subsidence. Neither is permitted in a green burial cemetery of any kind, as they both impede natural decomposition and introduce non-biodegradable materials into the earth.

Q. What about inverting the outer container?

A. Called 'butterdishing', this method may allow the body to be closer to the earth on the bottom surface, but still impedes and puts non-biodegradable artifacts in the ground. It is not an acceptable alternative to going without.

Q. Since burial vaults are made from concrete, shouldn't they be considered green?

A. While the concrete and metal in vaults may be considered "natural" to some, the manufacturing and transporting of vaults uses a tremendous amount of energy and causes significant carbon emission. In the US, vault manufacturing requires the production of 1.6 tons of reinforced concrete annually. No state or province legally requires vault purchase to implementation—individual cemeteries determine their own vault requirements.

Q. What is required for a shroud burial? And are burial garments required?

A. A shroud burial is usually just that — a body wrapped in a biodegradable shroud lowered into a grave. While burial garments may be used, often by followers of certain religious customs, they are neither required or discouraged as a matter of course. Some shroud burials also include a casket for ease of processionals and lowering, but the main determining factor is the cemetery's own policy and guidelines, usually written into their bylaws.

Q. How does a shrouded body get carried to the grave?

A. Many cemeteries have a vehicle for moving shrouded and casketed bodies, including retrofitted golf carts, wagons, trailers, or other wheeled conveyances. Some families choose to conduct a processional with pall bearers, either on shoulder for a casket or with carrying handles on a shrouding board for shroud burials. (See *Opening, Closing and Maintenance of a Green Burial Grave*)

Q. How and who lowers the body?

A. This depends on how the individual cemetery chooses to handle family participation and what mechanical devices are available. Some cemeteries continue to use excavators for digging and hydraulic machinery for lowering, while others pay employees to hand dig graves and allow the family, with direction if necessary, to lower the body themselves using shrouding boards, straps, or ropes. Sometimes family members wish to dig the grave themselves. Green burial operators should expect more family participation and be prepared with appropriate equipment—and liability waiver agreements built into their contract for services. (See *Opening, Closing and Maintenance of a Green Burial Grave*)

Q. What protects the cemetery from liability claims for injuries incurred during carrying, digging, lowering, and closing the grave?

A. It is wise to require the next-of-kin to sign a liability waiver that indemnifies the cemetery and all of its employees from responsibility for injuries of anyone in their party during the funeral. This can be simple language included in the contract or a stand-alone agreement that is witnessed if possible. It is good practice to provide written instructions and warnings in a guidebook designed to educate the

family about cemetery rules and best practices when purchasing the plot and/or arranging the burial. (Coming soon *Sample Guidebook for Hybrid Cemetery Operators*)

Q. How deep does one place the body?

A. Burial depth differs by state. For a comprehensive list by state of this and other requirements, go to Legal Requirements by State. As a general rule, the ideal burial depth for optimal decomposition conditions is 3.5 – 4 feet from the bottom of the grave to the soil horizon, which also guarantees an 18-24 inch smell barrier that prevents animals, two and four legged both, from being able to smell anything. By adding the displaced soil to the top of the grave in a mound, that depth is doubled until it gradually settles.



Q. What if the body is in bad condition?

A. Included in the contract and/or guidebook should be explicit guidelines for the condition of the body when presented for burial, with the clear understanding that they will be turned away if those conditions are not met. Many families hire funeral directors for body preparation so it would be the professional's job to repair any damage or rectify any issues. If the family is in charge, bodies will most likely be coming for burial in a short enough period of time that these scenarios are unlikely, but if there were a problem, it would be their responsibility to address it by whatever means necessary. (Coming soon *Sample Guidebook*)

Q. Does the GBC recommend removing pacemakers, plates, screws, joint replacement hardware, gold or amalgam fillings or even metal zippers or buttons prior to burial?

A. The GBC leaves it to individual cemeteries to determine what is required. However, we do advise that consideration be given to the invasive nature of removing any of these items from a body and balancing that with the potential for environmental damage.

Q. Won't wild animals dig up corpses?

A. No. Burials occur 3.5 feet under the ground with, at minimum, an 18-inch smell barrier. Animals are much more interested in living prey above ground than in working that hard. We're just not that delicious. (See *Real Answers to Questions Real People Ask*)

Q. Won't we be able to smell them?

A. No. Same principles apply. And remember this from 5thgrade science? Humans have a dismal sense of smell compared to animals. If they can't detect bodies by scent, we surely won't be able to either. Wild boar are the most deep-digging of all wildlife and they typically max out at 12 inches. They are usually more interested in investigating the freshly turned soil and marking their territory. (See *Real Answers to Questions Real People Ask*)

Q. Do green burials contaminate the water table or drinking water?

A. No. With burials at 3.5 feet deep, there is no danger of contaminating potable water that is found about 75 feet below the surface. Mandatory setbacks from known water sources also ensure that surface water is not at risk. (See *The Science Behind Green Burial*)

Q. Do unembalmed bodies pollute the ground with chemo or other drugs?

A. Soil is the best natural filter there is, binding organic compounds and making them unable to travel. Microorganisms in the soil break down any chemical compounds that remain in the body. We lose more toxic chemicals during a day of living than a whole body will decomposing. A 2018 Recompose study done by the University of Washington found that chemicals, heavy metals, and other potential biochemical concerns met or exceeded EPA levels by a significant margin. Additionally, embalming does not remove toxins from anywhere in the body except the fluids that are removed during the process.

Q. How long does it take for a body to completely decompose?

A. Depending on soil type, oxygen availability, and moisture present, it takes on average 6 weeks to lose the majority of soft tissue through moisture absorption by the soil, and up to 2 years for complete decomposition. It may take up to twenty years for bones to absorb in moist soils. (See <u>The Science</u> **Behind Green Burial**)

Q. What soil conditions are the most favorable for green burial?

A. Well drained soils with some clay content to absorb organic compounds, and an active biological presence of bacteria are ideal for promoting efficient decomposition. This allows for aerobic decay, followed by anaerobic decay, resulting in rich soils high in nitrogen content and organic compounds. (See *The Science Behind Green Burial*)

Q. Can bodies be buried in winter?

A. Depending on frost levels and previous preparation of the gravesite, burial in winter is feasible. Various methods are available for snow removal and thawing ground in cold climates, including coal fires, use of heaters, and thermal blankets. Often digging graves ahead of time and filling them with straw, compost, or other organic material and then capping it for easy removal at need works well. (See *Opening, Closing and Maintenance of a Green Burial Grave*)

Q. What is done in the winter time if the cemetery is closed?

A. Burials in cemeteries that choose not to bury in winter may have systems and facilities that house bodies until spring burial. All bodies respond well to being kept cool for the time needed, whether in a mausoleum, below grade facility, or other means of consistent cool temperatures. (See *Opening*, *Closing and Maintenance of a Green Burial Grave*)

Q. How close together should graves be dug?

A. Burial density depends primarily on the type of cemetery and its space availability, and on the amount of burial land on the property that is usable. Wetlands, steep slopes, animal game trails and habitat, pristine areas, protected and sensitive flora areas, trees, boulders, and other factors mapped out during a Natural Resources Inventory will affect the total acreage practical for burial. Areas slated for restoration are also going to be off the table, at least for some period of time. Originally 20' x 20' for a gravesite was thought to be a reasonable guideline, but as we have had more experience we've

realized that footage can be significantly smaller, more in the range of 8-9' x 4'. Time is the second major factor. Somewhere in the region of 300 burials per open and unimpeded acre over a hundred year period would be the maximum; but more reasonably, it would be much less given the above considerations. Bottom line is that the land will determine the density on your specific property.

Q. How does one mark the actual burial spot?

A. Ideally, graves are marked by GPS, but these systems can be costly. Corner markers made of stone are acceptable, as are flat markers at the head. Metal spikes could be buried near the surface to allow a metal detector to locate the perimeter of the grave, a more cost-effective and durable method, depending on the metal used. Some other type of physical marker is possible as well, such as native plants, trees or shrubs, or a plain or engraved fieldstone.

Q. What about memorialization?

A. Green burial sections do not allow upright monuments. Instead, a flat marker, usually made of native stone, is at the head. Using concrete to set stones is frowned upon in a green section, as concrete has its

own significant environmental downsides. Flat markers make finding the grave and mowing the area relatively easy. Maintenance consists of removing overgrowth, if wished. Some cemeteries choose to have no physical markers yet include the person's name and dates on a central cenotaph at the entrance. Some cemeteries allow installation art pieces situated throughout the cemetery.



Q. How are vaultless burials disinterred?

A. Families are asked to sign a contract stating that they understand that their family member will not be disinterred unless legally ordered to do so by the State, and that the family will be responsible for any costs not born by the State should this be ordered. Good records and physical indicators of the perimeter are critical, though the shorter burial depth and proper preparation of the grave with evergreen boughs, compost, or other organic material may provide a soil roadmap.

Q. What about grave robbing?

A. Grave robbing as a way to make extra cash by providing cadavers for medical study ended by the early 1900's. Body donations now provide plenty for a variety of scientific research. Given the superstitions ingrained in us, plus the significant repercussions for violating anti-desecration laws, grave robbing has not been reported in decades in any cemetery, no less a green burial one. Additionally, if the grave is 3.5 -4 feet deep and the displaced soil is mounded above by 3-4 feet, it's highly unlikely that anyone is going to bother and mess. By the time the body has decomposed and it's down to bones, the grave may be pretty well blended into the environment. If concerned, consider locating the green

burial area nearer a central location instead of the periphery.

Q. What do green burial plots cost?

A. Green burial plots need not be different from conventional plot pricing. Although there is maintenance for both, it is different, not necessarily more or less intensive. In fact, not having to haul around heavy equipment, spread herbicides, pesticides, and fertilizers, mow and trim, or clean and repair headstones could mean big savings on perpetual care. What green burial families are paying for is the same thing anyone else is: real estate in a specific location. Whatever the going rate is in your cemetery or general region for a plot should apply universally.

Q. Do green cemeteries reuse burial plots?

A. There are no laws against reusing a plot. In many countries, graves are routinely "rented" and refilled at a later date, often removing the bones to an ossuary. Green burial cemeteries have the ability to reuse ground space in the future if desired.

Q. Can cremated remains be scattered in green burial cemeteries?

A. Because of the density and nonbiodegradable content of cremated remains, many green burial cemeteries do not allow scattering. Cremated remains consist of calcium phosphate and sodium and are heavy, apt to smother foliage on the surface. Underground cremated remains create what is essentially a nutrient-deficient salt lick that has no environmental benefits.

Q. What does it mean if a cemetery is Green Burial Council certified?

A. GBC certification allows consumers to be able to distinguish between the three types of cemeteries and understand that each has a different set of standards. It requires cemetery operators commit to a certain degree of transparency, accountability and third party oversight. And it prevents future owners from going back on whatever ecological or aesthetic promises have been made in the past, from limitations to burial density that protect a local ecosystem to prohibitions against the use of monuments that would negatively impact views. For more information on certifying with the GBC, go to Why **Certification Matters** and **Become Certified**.

Q. What's wrong with embalming?

A. The Council does not think any end-of-life ritual, form of disposition, or mode of post-mortem preparation is "wrong". We are simply advocating for green services and products that help to minimize the environmental impact of our last acts. Embalming fluid is usually comprised of the carcinogen chemical formaldehyde, which has been proven to pose health risks in funeral homes. A <u>study by the National Cancer Institute released in late 2009</u> revealed that funeral directors have a much higher incidence of myeloid leukemia. Another study completed in 2015 by the <u>Journal of Neurology</u>, <u>Neurosurgery & Psychiatry</u> indicates a three times higher incidence of ALS, Lou Gherig's Disease, than in the general public. And the National Funeral Directors Association recently published NFDA Environmental Compliance officer Carol Lynn Green's opinion piece <u>Excising a Health Risk</u> where she predicts the end to embalming for safety reasons.

Q. What about essential oils and green embalming fluid?

A. Fortunately, there are now several formaldehyde-free embalming fluids, including one made entirely of nontoxic and biodegradable essential oils, which recently earned the GBC seal of approval. The sanitation and preservation of a decedent can almost always take place without the use of chemicals, as is done in just about every nation in the world. To find a green embalmer, go to **Funeral Home Providers** to locate a certified funeral director near you, or go to **Product Providers** to inquire of a product manufacturer.

Q. How do I know that a particular product is suitable for a green burial?

A. The GBC believes a casket, urn, or shroud is suitable for a green burial if it is made from materials and substances that are nontoxic and readily biodegradable. We also require that these products not be made from materials that are harvested in a manner that unnecessarily destroys habitat. See **Product Providers** before purchasing any green funeral product.

Q. Doesn't cremation create a lot of pollution?

A. Cremation uses far fewer resources than conventional lawn burial with a vault but it certainly has an environmental impact. Cremation burns fossil fuels, and some older cremation facilities can use significantly more energy compared to newer ones. Mercury is also emitted when a person with dental amalgam fillings is cremated, but filtration devices that can fully mitigate mercury pollution have not been invented yet. While no standards yet exist that allow consumers to determine which cremation retorts produce fewer pollution and carbon emissions, there are several things that can be done to offset the carbon footprint of cremation, such as recycling medical parts, making a contribution to a carbon fund, or supporting ocean reef regrowth.

Q. Why don't you certify cremation disposition programs?

A. While a cremation disposition program may provide benefit by setting ecologically responsible standards for memorial reefs and scattering grounds, the amount of resources and effort required to responsibly establish and manage such programs come at the cost of utilizing resources to further the organization's main objectives: to encourage environmentally sustainable deathcare through its funeral home and product compliance program, and to preserve natural areas through green burial via its burial compliance program. Accordingly, we currently do not have a cremation disposition certification program.