



Cremation Best Practices

2 CE Hours

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Final Exam – Cremation Best Practices (2 CE Hours)

1. Laws for required temperatures vary by state, but the cremation process usually occurs between _____ degrees Fahrenheit.
 - a. 800-1200
 - b. 1000-1400
 - c. 1200-1600
 - d. 1400-1800

2. The bone fragments that remain at the end of the alkaline hydrolysis process appear _____ in color.
 - a. Brown/tan
 - b. Gray
 - c. Pure white
 - d. All of the above

3. The alkaline hydrolysis process results in approximately _____ cremated remains than flame-based cremation and may require a larger urn or container.
 - a. 32% more
 - b. 47% more
 - c. 53% more
 - d. 61% more

4. The latest statistics from the National Funeral Directors Association (NFDA) show that between 2017 and 2019, the number of licensed crematories in the United States _____.
 - a. Decreased 8.9%
 - b. Decreased 14.6%
 - c. Increased 8.9%
 - d. Increased 14.6%

5. The primary reason consumers select direct cremation is its perceived _____.
 - a. Adherence to religious norms
 - b. Cost effectiveness
 - c. Environmental friendliness



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d. None of the above

6. Which of the following statements regarding simple viewings is NOT correct?
- The body is bathed and dressed, the features are set, and the body is embalmed
 - The body is typically presented on a dressing table that is draped with sheets or is in the actual cremation container
 - They are sometimes referred to as ID viewings
 - They give the family a chance for closure prior to the cremation
7. Some funeral homes have started transforming their facilities to include more inviting areas for receptions and celebrations of life. In many cases, these new funeral facilities _____.
- Are specifically designed to be as sterile and bland as possible, so as not to offend
 - Are specifically designed to blend as closely as possible with the already-existing decor of the funeral home
 - Are specifically designed to not resemble a traditional funeral home
 - Are specifically designed to resemble a traditional funeral home, but a more upscale version
8. A(n) _____ is a depository for cremated remains. It is an above ground structure inside or out-of-doors at a cemetery. If cremated remains are placed here, be certain to communicate to the family the reality of commingling.
- Columbarium niche
 - Ossuary
 - Urn
 - None of the above
9. If cremated remains must be transported by air, the Transportation Security Administration (TSA) suggests that the temporary or permanent crematory container be made of _____.
- Lighter weight material
 - Plastic
 - Wood
 - All of the above
10. Because they are the most easily detected, _____ tend to be the most troublesome pollutant for crematory owners and operators.
- Carbon monoxide leaks
 - Mercury emissions

- c. Radioactive seeds
- d. Visible emissions

Cremation Best Practices (2 CE Hours)

Learning Objectives:

Regardless of where you get your statistics, the cremation rate is on the rise, and likely to remain so. Are you ready to support your families as they navigate the process? This course grounds funeral professionals in the history of cremation, before turning to today's options in terms of the cremation process, what to do with the cremated remains, and memorial ceremonies. It closes with a look at emissions control.

By the end of the course, learners should be able to:

- Recall details of the cremation process, including environmental concerns
- Identify reasons for cremation's increasing popularity
- Recognize options for ceremonies complementing the cremation process
- Distinguish between disposition options for cremated remains, with attention to transporting them where necessary

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What is Cremation?

History

Cremation is not a new concept. It is believed that the first cremations took place around 3000 B.C., during the early Stone Age, and that by 1000 B.C., cremation as a method of disposition had become somewhat widespread. Many ancient cultures, including the ancient Greeks, Romans, and Scandinavians, are known to have used cremation as a means of disposition of the dead.

Cremation in North America came much later. 1876 is generally recognized by most scholars as the dawn of the cremation age in North America. As a note, it is believed that at least two cremations took place before 1800. Dr. Francis Julius LeMoyne constructed the first crematory in the United States in the town of Washington, Pennsylvania in 1876. The first cremation was performed on December 6, 1876. The body of Baron Joseph Henry Louis Charles de Palm was the first to be cremated on that day in Dr. LeMoyne's crematory. Dr. LeMoyne had studied the cremation process and built his crematory with the intention of cremating friends and family, and then eventually himself. He never intended it to be used commercially. Through his studies, he came to believe that cremation should be favored over earth burial, and even published a paper in 1878 explaining his reasoning. His six original arguments for cremation in 1878 were as follows:

1. Natural law argument – The role of removing decomposing matter. It was God's will to protect the health and life of man by removing all decomposing matter. Cremation simply replaces the process in a more efficient manner.

2. Sanitary argument – Vile odors of decomposition are to be avoided because they spread disease. Cremation can destroy the unpleasant and troublesome elements arising from decomposition in the grave.
3. Economical argument – It was Dr. LeMoyne’s belief that people spend too much money on funerals and monuments. He thought this money could be more wisely spent. Cremation cost was about 20% of a traditional burial.
4. Religious argument – Dr. LeMoyne claimed that the Bible did not fully support burial or cremation, leaving the appropriate method of disposition lacking distinctive clarity.
5. Social argument – The poor spend too much on funerals trying to imitate the wealthy, which they cannot afford. He believed all were equal in death with cremation.
6. Political argument – This argument is related to the social argument. Dr. LeMoyne felt that cremation treats everyone equally. He stated, “Cremation treats the body of a prince as it does that of the peasant.”

It is interesting to study this history and compare any connections to contemporary cremation. Reflection on these original arguments allows us to make connections to the modern era, although not all necessarily apply in contemporary funeral service. Much has changed since the first cremation, yet somehow much is still somewhat the same.

Definition

Cremation is defined as the mechanical, thermal or other dissolution process that reduces human remains to bone fragments. Cremation also includes processing and pulverization of the bone fragments into pieces that are usually no more than one-eighth inch. This definition covers a variety of technologies that may be used in order to achieve reduction to bone fragments, including traditional flame-based cremation and alkaline hydrolysis.

Flame-based cremation uses flame and heat to reduce the human remains to bone fragments, or cremated remains. This is completed within a machine called a cremator. Flame-based cremation is the most common type of cremation, and is available through most funeral homes, crematories, or cemeteries. The process will be discussed in more detail later.

Alkaline hydrolysis reduces human remains to bone fragments, cremated remains, or more specifically hydrolyzed remains, through a water-based dissolution process which uses alkaline chemicals, heat, agitation, and pressure to accelerate natural decomposition. Alkaline hydrolysis is a newer technology, and is currently only available in a few states and provinces in the United States and Canada. Where alkaline hydrolysis is accepted, there are limited providers available. This process will also be discussed in more detail later.

Flame-based cremation and alkaline hydrolysis are the legal cremation processes in the United States and Canada at this time. Additional processes may be in development but not currently accepted by regulators.

Cremation Process

According to the Cremation Association of North America (CANA), there are a minimum of four main elements of cremation: transportation, storage, the cremation process, and the return of the cremated remains. Other things may be chosen by a family, like a viewing or visitation prior

to cremation, which could involve embalming, setting features, or washing and dressing the deceased. The family may also want to witness the cremation if that is something that is offered.

Before getting into the actual physical process of cremating the body, therefore, we must discuss the entire process, starting first with the transportation of the deceased to the funeral home.

The deceased will be removed from the place of death and taken to a funeral home. On rare occasions, they may be taken directly to the crematory. From the point of removal on, the deceased's identity is carefully confirmed at each step in the process. This ensures that a chain of identification is firmly established.

It takes time to finalize the paperwork and make plans, so until the services are planned and the cremation is scheduled, the deceased should be placed in secure, cold storage. The time between death and cremation can vary considerably based on many factors. It can be almost guaranteed, though, that cremation typically occurs at least 48 hours after death.

The process of cremation is essentially the conversion of a solid to a gas. This is accomplished by heating the body, which contains between 65-85% water by weight, to a temperature high enough to facilitate the combustion process. Laws for required temperatures vary by state, but the cremation process usually occurs between 1400-1800 degrees Fahrenheit.

The combustion process in the cremator proceeds in two stages. The first stage is primary combustion of the deceased in the main chamber of the cremator. Tissue, organs, body fat, and casket or other container materials burn off as gases and move to a secondary chamber, where they continue to undergo combustion. The bone fragments remain in the primary chamber. The inorganic particles, usually from the cremation container, settle on the floor of the secondary chamber. The gases formed as a by-product of combustion such as carbon dioxide, water, oxygen, etc. finally discharge through a stack in the roof of the crematory building.

The steps in the cremation process are as follows:

- The deceased is placed in a cremation container. The minimum requirement for a cremation container is that it be completely enclosed, rigid, leak resistant, and combustible. A family may select a cardboard or particle board container, rental casket, a wooden casket, or even a highly polished casket, provided it is combustible and non-toxic. Metal caskets cannot be cremated.
- Facility staff will confirm the identity of the deceased by checking all paperwork. A cremation number or other identification (ID) will be assigned. This number or ID is often stamped onto a stainless steel disc, but may also be in the form of a barcode. The number or ID is recorded on a cremation log. The stainless disc remains with the remains throughout the entire time at the cremation facility.
- When it is time for the cremation of the deceased, they will be removed from the storage unit and their identification will be confirmed using paperwork and the stainless disc. The container will be taken to the cremator unit and placed on a table in front of the cremator door.
- The door of the cremator will be opened, and the container will be placed inside the primary chamber. Usually this is performed manually with the aid of cardboard rollers or

mechanically with a rolling conveyor loader. The stainless disc with number or ID will be placed inside the cremator with the remains.

- The door will be closed and the cremation monitored carefully until it is completed. The process can take anywhere from 30 minutes, as in the case of a stillborn baby, to over two hours. This all depends on the body size and stored heat in the chamber of the unit.
- When the cremation is complete, the door will be opened and identification checked again against paperwork and the stainless steel disc. The bone fragments that remain, now called cremated remains, will be carefully swept out of the cremator into a cooling tray. The cremated remains will be allowed to cool, and then be taken to the processor.
- The processor is a machine that uses blades to pulverize the bone fragments until the remains are less than 1/8" in size.
- The cremated remains are then transferred to a strong plastic bag and placed in an urn. If the family has not selected an urn, the cremated remains will be placed in a temporary container. Identification is checked again and the stainless disc is placed in the container with the remains. The urn and its box are labeled with identifying paperwork and checked again before being stored for the family's retrieval.

The bone fragments that remain in the primary chamber are mostly calcium phosphates, with some other minor minerals. Cremated remains are generally white to gray in color. Additionally there may be pieces of metal in the cremated remains. This metal may come from surgical implants like hip replacements, dental fillings, casket handles, or jewelry that was not removed prior to cremation. The metal is separated from the cremated remains before they are processed (pulverized). The metal is typically recycled.

The average weight of adult cremated remains is between four and six pounds – a tiny percentage of the body's original mass. The cremation chamber is either swept thoroughly or vacuumed with specially designed equipment to retrieve as much of the remains as possible.

Alkaline Hydrolysis Process

Alkaline hydrolysis is sometimes referred to as AH, flameless cremation, water cremation, green cremation, chemical cremation, liquid cremation, aquamation, biocremation, or resomation. State and provinces that have approved the process use one of the following legal terms: alkaline hydrolysis, cremation, chemical disposition, or dissolution. In 2010, CANA and its Board of Directors voted to expand the association's definition of cremation to include processes like alkaline hydrolysis. The primary rationale for this was that state and provincial laws were already in place that determined alkaline hydrolysis could be marketed as cremation. From the consumer's perspective, the processes and results are similar.

Alkaline hydrolysis has actually been around for a long time. It was developed and patented in 1888 by Amos Herbert Hanson, a farmer who was looking for a way to make fertilizer from animal carcasses. In 1993, the first commercial system was installed at Albany Medical College to dispose of human cadavers. The process continued to be adopted by universities and hospitals with donated body programs over the next ten years. The process was first used in the funeral industry in 2011 by two different funeral homes, one in Ohio and one in Florida. While state and provinces have been slow to legalize the process for human use, pet crematories are under different rules and have adopted the process widely. The pace of approval for human use is

beginning to pick up and there are now twenty states and three provinces where alkaline hydrolysis is legal, and several more have legislation pending. In those states and provinces where it is currently legal, there are approximately thirty practitioners. States that currently allow alkaline hydrolysis are Washington, Oregon, California, Nevada, Idaho, Utah, Wyoming, Colorado, Kansas, Missouri, Illinois, Minnesota, Alabama, Georgia, Florida, North Carolina, Maryland, Connecticut, Vermont, and Maine. The provinces where alkaline hydrolysis is currently allowed are Saskatchewan, Ontario, and Quebec. To find a practitioner in your area, contact CANA, who maintains a directory.

From an operations perspective, the process – including but not limited to the removal, storage, and the chain of identification – is similar to flame-based or “traditional” cremation with TWO noted exceptions:

1. Pacemakers and other implants that cannot be exposed to extreme heat and flame do not need to be removed prior to the cremation, except where required by law; and
2. The remaining bone fragments need to be dried and cooled after the process.

The technical process of reducing the human body to cremated remains is distinctly different.

Alkaline hydrolysis uses water, alkaline chemicals, heat, and sometimes pressure and agitation, to accelerate natural decomposition, leaving bone fragments and neutral liquid called effluent. The decomposition that occurs in alkaline hydrolysis is the same as that which occurs during burial, just sped up dramatically by the chemicals. The effluent is sterile, and contains salts, sugars, amino acids, and peptides. There is no tissue and no DNA left after the process completes. This effluent is discharged with all other wastewater, and is a welcome addition to the water systems.

An alkaline hydrolysis machine is comprised of a single chamber which is air- and watertight. The chamber holds approximately one hundred gallons of liquid. The deceased is placed into the single chamber which is then sealed. Sex, body mass, and weight of the deceased determine the amount of water and alkaline chemicals combine to form a solution which fills the chamber. The contents may be subjected to heat (199-302 degrees Fahrenheit), pressure, and/or agitation to ensure proper cremation. This varies depending on the equipment used. This process may take three to sixteen hours depending on equipment and body mass.

In short, bone fragments and a sterile liquid are the end result of the alkaline hydrolysis process. The bone fragments, now called cremated remains or hydrolyzed remains, appear pure white in color. Because the process uses water, the remains are allowed to dry before pulverization. The process results in approximately 32% more cremated remains than flame-based cremation and may require a larger urn or container.

The water at the end of the alkaline hydrolysis process is not the deceased’s remains. Just like flame cremation, fat and tissues are converted to basic organic compounds. In flame cremation, these harmless compounds, mainly carbon dioxide and water vapor, are released into the air. In alkaline hydrolysis, the harmless compounds formed include salts and amino acids, and are released with the water. This effluent is far cleaner than most wastewater. The sterile liquid released via a drain to the local wastewater treatment authority in accordance with federal, state

or provincial, and local laws. The pH of the water is brought up to at least 11 before it is discharged. Because of the contents of the effluent, water treatment authorities generally like having the water come into the system because it helps clean the water as it flows back to the treatment plant. In some cases, the water is diverted and used for fertilizer because of the potassium and sodium content.

The Rise of Cremation

The rise of cremation in North America was initially gradual, but by the year 1900, there were 20 crematories in operation, and by 1913, there were 52 crematories performing 10,000 cremations. The cremation rate continues to rise. CANA claims that in 1975, there were over 425 crematories performing almost 150,000 cremations, and by 2006, there were more than 2,000 crematories in the United States performing over 800,000 cremations per year. In 2015, the national cremation rate surpassed the casketed burial rate for the first time in United States History.

The latest statistics from the National Funeral Directors Association (NFDA) show that between 2017 and 2019, the number of licensed crematories in the United States (3,281) increased 8.9%. Approximately one-third of funeral homes in the country now operate their own crematories; another 11% plan to open their own within the next five years. The cremation rate in the United States is expected to increase from 52.9% in 2018 to 78.4% in 2040. The rising number of cremations can be attributed to changing consumer preferences, weakening religious prohibitions, cost consideration, and environmental concerns. The majority of NFDA-member funeral homes surveyed (53.2%) have stated that the cremation rate at their firm has increased since the COVID-19 pandemic began.

The annual number of cremations in the United States is expected to rise from 1.57 million in 2019 to 1.94 million by 2025, and to 2.65 million by 2035. For comparison purposes, the number of cremations in 2010 was 1 million.

Why is Cremation So Popular?

The substantial increases referenced above, according to CANA, could be grounded in the five primary reasons as to why cremation is being selected in contemporary society:

1. It saves money;
2. It saves land;
3. It is simpler;
4. The body is not in the earth; and
5. It is a personal preference.

Let's dig deeper into the increasing popularity of cremation.

Many factors contribute to the steadily rising popularity of cremation among United States consumers, including cost considerations, environmental concerns, an increasingly transient population, fewer religious prohibitions against the practice, and changing consumer preferences, such as the desire for simpler and less ritualized funeral ceremonies. In addition, cremation has

become socially acceptable as a growing number of Americans think and talk about death in new ways. Cremation's popularity is only expected to increase.

Cost Effectiveness

The primary reason consumers select direct cremation is its perceived cost effectiveness. In many areas, you can get a direct cremation for under \$1000, sometimes under \$500. Of course this does not include anything except the bare minimum. On the other end of the spectrum traditional burials can be several thousands of dollars. And the attraction to lower-cost options may be driven by a variety of factors, including greater life expectancy and increased transience.

The Centers for Disease Control (CDC) estimated the life expectancy in the United States in 2020 was 74.5 years for males and 80.2 years for females. When compared to the 1940 life expectancy of 60.8 for males and 65.2 for females, the evidence is clear. Americans are living longer. Advancements in health care and pharmaceuticals, new tools for disease prevention and diagnosis, and increased safety awareness extend our lives into an older age. Such news is welcomed as Americans spend billions of dollars each year to ward off the inevitable, instead favoring health and a quest for continued youthfulness. The United States population aged 65 and over is expected to reach 72 million people by the year 2030. The age group 85 and older is now the fastest growing segment in the population. As we age, our circle of friends and family may diminish, as well as financial resources. Others may be left with the monetary burden when faced with final arrangements. The fear of rising funeral costs, along with geographic distance from one's hometown, may be a factor in the decision to go with the affordability and mobility of cremation.

Although it is not something that every retiree does, many choose to relocate upon retirement. It has almost become part of the American cultural identity – a person works a lifetime, enjoys a nice retirement part, and then takes off to somewhere warm and sunny where it is like being on vacation all the time. While this is just a stereotype, the prevalence of senior retirement communities in hospitable climates is increasingly big business in the United States. Those who choose to relocate at some point during retirement may be drawn to new areas for various reasons. Mobility has now become an important factor and may be directly tied to the rise in cremations as people are dying away from home with no emotional attachment to where they left or where they are. They often do not have family where they left or where they are, either. With no connections, cremation seems like the best option. Families have discovered that cremation enables them to return cremated remains from wherever their loved one has moved to wherever their loved one still considers “home.”

Despite this sense of economy, a growing number of families follow the direct cremation of a loved one with some type of memorialization event that involves family and friends, but frequently eschew the services of a funeral director.

Environmentally Responsible

Since the first Funeral and Memorialization Information Council (FAMIC) study was conducted in 1990, the second most consistent response as to the primary reason for choosing cremation has been that it saves land. Consumers today are choosing businesses that offer environmentally

responsible or eco-friendly choices. Most of them are willing to pay more, often a premium, for these services in order to reduce their carbon footprint. Funeral services are no exception.

While some touted cremation as a green practice, primarily due to the limited impact of land space, the Green Burial Council (GBC) and others have not yet committed themselves to this premise. With fossil fuels being utilized for flame-based cremation and ensuing emissions from crematory facilities, questions remain whether this is indeed a green process – we'll return to this question towards the end of the course.

Still relatively unknown to the public, alkaline hydrolysis represents the newest offering to consumers who are seeking an alternative to flame-based cremation and traditional burial. Using one-fifth the energy of flame-based cremation while releasing no air emissions in the process, alkaline hydrolysis has been marketed as a green alternative to traditional cremation. Some companies marketing alkaline hydrolysis as an eco-friendly procedure have promoted the terms “bio cremation” and “green cremation.” Commercial use of alkaline hydrolysis in the United States is only a recent phenomenon.

Religion & Social Acceptability

More and more, Americans have fewer ties to religion than any time in recent history. This surge in the number of Americans who no longer identify with any religion has contributed to the decline of the traditional funeral in the United States and the rise of cremation as the disposition method of choice. Those who are non-religious are most likely to consider cremation for family and friends. From 2007 to 2014, the percentage of religiously unaffiliated adults increased from 16% to almost 23% of the United States population. Since 2012, the percentage of United States consumers aged 50 and older who feel it is very important to have religion as a part of a funeral has decreased from 49.5% in 2012 to 35.4% in 2019.

In areas of the country with lower participation rates in church, there tends to be a corresponding increase in cremation. Organized religions themselves are becoming more tolerant and accepting of the use of cremation. Such acceptance may be in part in trying to meet the demands of a dwindling membership, or possibly due to more highly educated congregations who seem to be embracing the concept of spiritualism over religion. Although it should be mentioned that as more religions are accepting of the use of cremation, there are some religions, including Orthodox Judaism, Greek Orthodox Christianity, and Islam, that demonstrate continued reluctance to accepting cremation.

As ties to religion continue to decline, and the taboos surrounding cremation correspondingly lessen, families are less bound by traditions of years past. No longer are survivors concerned about the scrutiny from friends and neighbors about the quality of casket wheeled down the center aisle at church. Add this to the prevalence of the family plot declining, as people are rapidly moving from their hometowns.

Instead, survivors are increasingly deciding to begin their own unique traditions. Many of the choices for memorialization today center on the personal nature that is becoming expected in the ceremony. Baby Boomers, those born between 1946 and 1964, and 71.6 million strong as of July 1, 2019, have long scrutinized traditional rituals and concluded them to be lacking and

inadequate. Additionally, Baby Boomers have significant resources and available discretionary income. They know what they want and are not afraid to spend money as long as they perceive value for dollars spent.

The use of celebrants to officiate or emcee a memorial event is seeing favor among families. Funeral directors are increasingly relying upon the services of these specially trained officiants to create a very warm, personalized funeral experience, without regard to religious affiliation. As families seek new ways to memorialize their loved ones that forgo traditional funeral rites, celebrants seem to offer value for a meaningful experience. Some funeral professionals even become certified celebrants to provide this service to the families they serve if needed, or encourage other staff to seek certification. However, many funeral homes continue to outsource this position.

Regardless of the actual or perceived reasons, cremation rates have been increasing in the United States, and it is reasonable to speculate this trend will continue into the future. It is critical that all funeral service professionals have a fully operational understanding of contemporary cremation, and remember that cremation is simply a means toward disposition. The diverse clientele which we have the honor to serve should understand all options available regarding services and memorialization, regardless of the mode of final disposition selected.

Cremation, Your Clients, and You

Change is hard. Change in funeral service is even harder!

The funeral profession has been slow to accept the fact that cremation is here to stay, and even more than that, is becoming more and more commonplace. However, those funeral homes that have accepted cremation and what can be done with these services have thrived. A refusal to change will not end well. Think of Blockbuster. When Netflix came along and even offered a partnership to create the rental company of the future, Blockbuster refused and held onto the past. And as we all know, that didn't end well. Funeral homes do not want to go the way of Blockbuster!

So how can a funeral home make it happen? How can we survive? Funeral professionals must engage families. And funeral directors must continue to rely on offer that high level of customer service they are accustomed to offering families.

Experience tells us that statements of appreciation following a funeral relate to personal service, not to equipment and caskets. This is an obvious reminder that the most important thing that you, the funeral director, have to offer is yourself. The physician offers service. The minister offers service. The attorney offers service. You offer service too. The chapel, the couch, the limousine, and the music are worth little to the family without the person who – through their experience, education, and concern – helps make the funeral meaningful.

To meet the business challenges created by the ongoing rise in cremation rates and the continued decrease in preferences for a traditional funeral, funeral homes, crematories (if allowed by state

law), and cemeteries will likely offer more products and services associated with cremation, along with cremation packages and custom urns. In addition, funeral homes should continue to expand their array of extra services offered to families, increasing their focus on niche markets to differentiate themselves, and drawing attention to their value-added services such as webcasting funerals and serving groups with diverse cultural and religious preferences.

And most importantly, the focus should be on outstanding customer service. In today's cremation and funeral market, customer service is a strong differentiating factor. It is an important action you must take to elevate yourself above competitors.

Customer Service – Making it Client-Friendly

Customer service is a phrase thrown around a lot in business, without much explanation following. What is excellent customer service? What does it look or feel like, and how do you know if you are providing it?

The tricky thing about customer service is that it is subjective: everyone has their idea of what customer service should be. That said, here are some general things to consider when establishing your customer service standards.

Start by thinking about how customer service ties into your day-to-day work with families interacting with your location, with you, and your employees. These interactions could be a family that has lost a loved one, someone looking for information, or maybe a community event that you attend or take part in. Every interaction is an opportunity to show them the superior level of customer service you provide.

On the phone, make sure you or your staff begin the interaction the same way: with a proper, warm greeting that assures the person on the other end of the line that they chose to call the right place. If someone asks about pricing, take the time to fully understand what services they are looking for. Even if they just say cremation, you can explain the different options for cremation while still offering the pricing details they had originally requested. Finally, confirm that everyone knows how to transfer a call, so as not to hang up on a potential client family. Along with the actual transfer of the call, make sure the person you are transferring them to knows what they have already told you so they do not have to repeat themselves.

At your location, have clear signage and/or staff assigned to direct families to where they need to go. Be sure to greet people upon entering the funeral home. Remember the little things like offering coffee or other beverages, snacks, a comfortable waiting room, and a clean bathroom. Make sure families feel comfortable in the funeral home.

Out in the community, are you or your staff involved in events and organizations? This is a great way to interact with the community you serve, and also allows people to ask you questions in a casual, less intimidating environment. Hosting events at the funeral home for the community to attend is another way to get to know your community: things like holiday services and blood drives are great ways to serve your neighbors.

Ceremony: Viewings and/or Memorial Services

Choosing cremation does not mean that there will not be a ceremony. The reasons for having some sort of ceremony, no matter what it is, are just as valid with a cremation as when there is not a cremation. With cremation, there can be a traditional ceremony with the deceased present, a ceremony with an urn containing the cremated remains present, and/or a memorial service. All of these can be meaningful ceremonies that help family and friends share the experience of loss and celebrate the life of someone they knew and loved.

A ceremony that allows the family to say goodbye their way is possible and appropriate with a cremation. The family just needs to know what options are out there!

It is necessary to ask the family lots of questions to understand what they want in their remembrance event(s). Besides the questions we have to get answered for the death certificate, try asking questions to find out more about their loved one, like different memories they might have, proud moments, special things they want friends and family to remember about their loved one, some of the deceased's closest friends and how they liked to spend their time together, or what they liked to do to relax. The answers to these questions can help you guide the family through the arrangement and plan an event that will be personal and meaningful to the family and all of those in attendance.

Regardless of the ceremony the family chooses, be sure they are aware of the ways in which technology can support them. Because it may be impossible for all family members and friends, especially those living far away, to attend these functions. Some funeral homes have begun to accommodate those distant loved ones by providing a live online broadcast. These broadcasts can be archived on the funeral home's website for viewing at a later date or made into a DVD the family can keep. This has really become almost a necessity in the time of COVID-19; if you're not already offering options like this, it's worth seriously considering. Likewise, the traditional displays set up at in-person events can be replicated as memorial videos which include photographs and are accompanied by music. These videos can be shown at future ceremonies, and are a special keepsake to treasure forever.

Viewings/Visitations

It is possible to have either a viewing or a visitation with a cremation. A viewing provides an opportunity for family and friends to actually see the deceased and pay their final respects. The viewing can be done at the funeral home, the crematory, a church, a community hall, or even a private residence. The viewing can be followed by a funeral ceremony with the body and a cremation after. The viewing can also take place just before the actual cremation. If it is a public viewing, especially if there is a funeral after, the body is almost always embalmed.

Simple viewings done with family prior to cremation are becoming more and more common. These are sometimes referred to as ID viewings. This is when the body is bathed and dressed, and the features are set, but the body is not embalmed. This gives the family a chance for closure prior to the cremation. Many crematories have an area for this simple viewing to take place. The body is typically presented on a dressing table that is draped with sheets or is in the actual cremation container. There are times when these simple viewings might not be a good idea without additional services like embalming or cosmeticizing. Examples might include when a full autopsy is performed, or when severe trauma occurred prior to death.

A visitation is when the family makes itself available to receive friends and other family members who wish to express condolences directly. A visitation can have the body present, or not. If the body is present, the same applies as above. If the body is not present, the only difference is that there is no opportunity to actually see the body. The urn can be present, or not. As long as the family is there to receive people, it is a visitation.

Memorial Services

A memorial service performs much the same function as a funeral service where a burial is involved, except that it is not limited by timeline, and to a lesser extent by location, as a traditional funeral often is.

Because the body is not present at a memorial service, the activity can take place really at any point after the death – and the focus can be entirely on the life and values of the deceased loved one. The personality and energy of the deceased are honored, rehabilitated, and fondly remembered for the good years and events of his or her life. Survivors are able to go away with pleasant images, strong reinforcement of their investment in the individual, and renewed respect for the capabilities and influence of their loved one. This is especially important after a long-term illness or a decline in the deceased's ability to function.

Changing and Adapting

It should come as a wake-up call for all funeral professionals: as they plan their ceremonies, funeral homes don't necessarily top consumers' go-to lists. Instead of the funeral home as the preferred venue, facilities available to rent for events are becoming increasingly popular. Likewise, instead of relying on funeral professionals to assist with arrangements, families have started turning to event planners – even wedding planners! – to fulfill service needs.

In response, some funeral homes have started transforming their facilities to include more inviting areas for receptions and celebrations of life. In many cases, these new funeral facilities are specifically designed to not resemble a traditional funeral home. Instead, visitors may end up entering a venue reminiscent of an upscale resort, or one which is as inviting and homey as their own living room.

The bottom line here is that we must understand the people we serve. A contemporary funeral establishment staff needs to be truly prepared to exceed the client's expectations and not just get the job done. Funeral professionals are in the business of celebrating the life of the individual by recognizing how they touched the lives of others. The mission is to orchestrate and direct a meaningful ceremony with compassion, flexibility, and options – a ceremony that is as unique as the person who died. Remember that today's consumers are a diverse group. They are informed, educated, inquisitive, and not easily impressed. They are best satisfied when a ceremony is uniquely planned to honor their loved one. Be the funeral professional the family you are serving needs you to be!

What to Do with Cremated Remains

As the cremation rate continues to rise, even funeral service providers who have fully embraced cremation face challenges as the industry continues to change. In the world of an over 50%

cremation rate, the question of what to do with cremated remains is asked more and more. All too often, when faced with this question, families are too overwhelmed by the process of dealing with the death, planning the funeral, and attending the services to make a decision regarding what to do with the cremated remains. While making decisions regarding the funeral must be made immediately, families see the question of what to do with the cremated remains as one that can be put off to a later date – a date they will most likely push off as long as they can.

As a funeral professional, it is your job to guide families through the decisions they must make regarding the remains of their loved ones. Today, our role is generally the same, but the counsel we provide has evolved as our industry has evolved. Helping families make this decision is just another one of our duties as a professional. Being well informed on what options they have is important in order to make sure they are able to find a way to honor their loved one.

Most likely, when people consider what to do with cremated remains, they think of things like inurnment and scattering. Of course these are both good options, but here we will explore many more possibilities for the disposition of the cremated remains.

The Urn

An urn is any receptacle designed to permanently encase the cremated remains. Choosing an urn may seem deceptively simple: after all, they come in a variety of sizes, styles, and materials as unique as the individual. There are urns to satisfy every taste, requirement, and budget.

That said, the final placement of the cremated remains will influence the design, shape, and size of the urn. Columbarium niches may limit the urn's dimensions, burial may require a vault to encase the urn, and scattering may be easier with a specially designed container. There are urns to meet all these needs, and more! Urns range in size from those that are large enough to house multiple sets of remains for joint placement to small keepsake urns designed to hold a portion of the remains. A presentation urn can hold a temporary container for use at a memorial service when a family is undecided about the final placement. You and your staff should be able to advise on an appropriate choice for each family.

If an urn is not selected at the time of cremation, the crematory will supply a temporary container. These are usually made of plastic or aluminum, and designed to hold the cremated remains only until an urn or other method of placement is chosen. Families should have the option of asking for help transferring the cremated remains from the temporary container to the urn once one is selected.

Inurnment

Let's start with the obvious: inurnment, or the act or ceremony of burying an urn containing cremated remains. This is a very common method of final disposition. This practice can take place in a cemetery or on private land, as long as all related laws and regulations are adhered to. If utilizing a public cemetery, the cemetery rules should be verified. They may have specific details about the urn used and could also have an urn vault requirement.

An urn or cremation garden will have many different choices created specifically for the placement of cremated remains. Some gardens offer individual urn burial plots that will

accommodate a marker. Others offer unmarked areas for inurnment with adjacent walls or sculptures for memorial plaques. Some will have a columbarium or a scattering garden within the designated space, as well.

Urns can also be buried in regular family or ground plots at a cemetery. Some cemeteries will permit the inurnment of the cremated remains of more than one person in a single adult space. Cremated remains may be placed in the ground with a marker like any other burial, often near other family markers. Some of these markers can even be designed to incorporate some of the cremated remains in the construction.

Entombment

Entombment is the placement of the remains in a columbarium niche. A columbarium is an above-ground structure, located inside or outdoors, designed specifically to hold cremated remains in urn compartments called niches. Columbaria or columbariums may be an entire building, a room, a wall along a corridor, or a series of special alcoves or halls in private or public mausoleums, chapels or other buildings. These may be located in cemeteries where both indoor and outdoor options exist. Churches are another common and popular location. More and more, funeral homes even offer columbariums for the entombment of cremated remains. Niches will vary in size: some hold just the urn, while others are large enough to include memorabilia and are protected by barriers called fronts, made of glass, marble, bronze, granite, or mosaic tile. There are also double urn niches in some columbariums that are big enough for two urns. It is common practice for each columbarium to have specific urn dimensions in order to facilitate entombment, and some even require the purchase of a specific urn for use in that specific columbarium.

Ossuary

An ossuary is a depository for cremated remains. It is an above ground structure inside or out-of-doors at a cemetery. If cremated remains are placed in an ossuary, be certain to communicate to the family the reality of commingling. An ossuary is kind of like a large urn for many people. They may be privately reserved for a family or publicly available to anyone in the community. The ossuary will have a ledger and memorials commemorating the remains placed within. It is also necessary to adhere to all state and local regulations regarding ossuaries. As with all methods of final disposition, be sure to secure the authentic signature of the appropriate party authorizing placement of remains in the ossuary. It would be impossible to get someone's remains out of an ossuary since the remains are comingled with others.

Casting/Scattering

Casting, more commonly referred to as scattering, is dispersing cremated remains over land, through the air, or over water as allowed by state and local law. Different options exist regarding scattering, and funeral professionals should be apprised of all of them, as well as all state and local laws and regulations that might apply.

If a family expresses a plan for scattering that is essentially illegal, it is the responsibility of the funeral professional to let them know not to proceed. The best thing to do is to check local regulations. It is particularly important to note any regulations against the indiscriminate scattering of cremated remains – in these cases, scattering may constitute littering or violate

other ordinances. For example, a family cannot take a loved one's cremated remains with them to Disneyland to scatter in Pirates of the Caribbean. Without permission from the property owner, which Disney will not extend, this is illegal. However, some National Parks – for example, Yosemite National Park – generally will grant permission to those wishing to scatter cremated remains within the borders of the National Park. To receive permission, an application must be completed and the approval process may take up to three weeks. Scattering of cremated remains may also be accomplished in the open sea: the Environmental Protection Agency (EPA) requires they be scattered a minimum of three nautical miles from land, and the EPA must be notified within 30 days following the event (a fact sheet explaining the EPA's Burial at Sea Reporting Tool is included as Appendix A).

It is also important that funeral professionals inform families what to expect and what they will witness when they scatter cremated remains, especially if this is something they plan to do on their own. These things are not always how they appear in the movies! Explain to the family what the actual cremated remains look like, to start. Even the color and consistency are most likely new to the family, and could be quite shocking. Let them know about the identification tag that is in the bag with the cremated remains and explain what it is. Make sure they know to be aware of the direction of the wind: the bulk of the remains will fall immediately, but some particles do remain airborne. If they plan to scatter in water, explain that the remains will just rest on top of the water for a while. Depending on how they feel about that, you might suggest they place the remains in a water-soluble, biodegradable urn that dissolves and disperses the remains into the water.

Aerial scattering is an option that requires the assistance of a professional service. As the remains are cast from a plane, a plume can be visible from the ground – this may be a very powerful experience for family members. Scattering can also take place in a designated scattering area, like a scattering garden at a cemetery or church. A scattering garden allows for cremated remains to be ceremonially released to the earth with a memorial marker to honor the remains that will return to nature. These markers vary from small plaques to benches or a tree near the scattering place.

Raking/Trenching

Raking is when cremated remains are dispensed directly onto soil and raked into the earth. This is a common method in cemetery scattering gardens. Trenching is when cremated remains are dispensed into a superficial trench in the soil and subsequently covered. Creativity can be used in the creation of the trench to design a meaningful shape. Trenching is commonly used by families in a dedicated cemetery section.

Memorial Reef

A memorial reef is created by mixing cremated remains with concrete. This is developed into a reef and submerged to the ocean floor. Companies that make these reefs and provide this service can create a small individual personal reef, or they can commingle cremated remains of several or many people to unite them and create a larger reef. These permanent memorials are a way to use cremated human remains to create habitat for marine creatures. It is an environmental tribute to life.

Sending Cremated Remains to Space

Several companies exist that offer families the ability to send small portions of cremated remains into space. Typically, only between 1-7 grams of the cremated remains are allowed. Options vary, and include just launching into space and then returning to Earth, launching into space to orbit the Earth, launching to the lunar orbit or even the surface of the Moon, or launching into deep space. Families are able to track the progress of the launch. This could be a very compelling option for some families: for example, if the portion of cremated remains were placed on the surface of the Moon, a permanent memorial would be available. Each time the family looked up at the night sky and saw the Moon, they would think of their loved one.

Return to Family

An option selected by many cremation consumers is to bring the cremated remains home in an urn or other container, and create a special area to honor the life of a loved one. If it is the intention for the family to pick up the cremated remains, always be sure the authorized agent or other party assigned by the agent is the one to sign for them and pick them up. It is also important that the funeral home staff remain mindful that the cremated remains are indeed the remnants of the body and should be afforded appropriate respect. It is best to have the urn in a dedicated area of the funeral home, placed in a reverent and respectful way, and let the family pick up cremated remains when they are ready. Always inform the family what to expect with respect to the weight of the container, and always assist with transporting the cremated remains. It should be noted that if the funeral director is made aware down the road that the family has decided to do something with the remains – for example, scatter them somewhere – the funeral director may need to either amend an existing permit or create a new permit. This varies from state to state and may not need to be done.

Keepsakes

The family may decide to use some or all of the cremated remains for keepsake items like pieces of jewelry, art, ornaments, or other items. There are so many keepsake options on the market today. Whatever item the family would like as a keepsake can be found. This allows for very personalize, meaningful keepsake items that really connect to the family. Keepsakes also allow cremated remains to be divided among family members. Each family member could pick a keepsake that reminds them of their loved one, and a small amount of cremated remains can be incorporated in each one. Keepsakes also allow for a small amount to be kept after burial, scattering, or some other form of final disposition.

Many companies and individual artists exist that can combine cremated remains with paint or other media and create various art designs. These pieces of art are typically driven by the wishes of the family. They might include large portraits or small sculptures or paper weights. One such type of art is blown glass, with several companies offering to blow a portion of cremated remains into beautiful pieces of colorful glass. Creating pieces of jewelry out of cremated remains is another option. There are companies that will process cremated remains under intense heat and pressure to the point that the component carbon is turned into a man-made diamond. Upon completion of this process, the diamond can be used in the creation of a piece of jewelry.

The options are as limitless as the imagination. Believe it or not, some tattoo artists can mix a small amount of a loved one's remains with ink and have it tattooed into your skin. Families

could also have their loved one go out with a bang by incorporating cremated remains into fireworks or self-firing rockets and setting them off in a customized display.

Transporting Cremated Remains

Traveling

If a family is traveling commercially with cremated remains – for example, to a scattering destination – be sure to orient them to all applicable rules and regulations. There are a number of issues involved in transporting cremated remains, so advance planning is key.

Depending on the destination, the family may need to get a licensed funeral director involved in the process. A variety of documents, like the death certificate, certificate of cremation, various authorization forms, etc., may be required.

If traveling by air, most airlines will allow you to transport cremated remains, either as air cargo, as a carry-on, or in checked luggage. Families should be sure to check with their airline to determine its particular policies: some airlines will not accept cremated remains in checked luggage, while others may only accept it as checked luggage; some airlines require seven days' notice before travelling; etc. In all cases, the contents should be identified as cremated human remains. Families should also review the Transportation Security Administration (TSA)'s requirements. The TSA issues the following statement with guidelines on their website:

We understand how painful losing a loved one is and we treat crematory remains with respect. Some airlines do not allow cremated remains in checked bags, so please check with your airline to learn more about possible restrictions.

To facilitate screening, we suggest that you purchase a temporary or permanent crematory container made of a lighter weight material, such as wood or plastic. If the container is made of a material that generates an opaque image, TSA officers will not be able to clearly determine what is inside the container and the container will not be allowed. Out of respect for the deceased, TSA officers will not open a container, even if requested by the passenger.

Advise families to arrive early to ensure adequate time for security clearance. They should be sure to carry the death certificate, certificate of cremation, or other appropriate documentation with them, and also consider attaching copies to the container containing the cremated remains. Finally, assist the family with consulting a licensed funeral director at the origin of travel and at the destination to determine if there are local laws to be considered.

If traveling internationally, there are additional issues involved in transporting cremated remains. Advise the family to contact the embassy for the country they are taking cremated remains to or from to identify specific rules and legal requirements. This information can often be found on the country's website, but verifying it might require a phone call or email inquiry. Also, some countries will require additional authorizations. The embassy should be able to provide families with the forms, but a licensed funeral director or legal counsel may be needed to complete the required information. Two weeks at a minimum should be allowed for the process, as there can be a number of steps involved.

Shipping

Effective September 30, 2019, the United States Postal Service established new requirements for shipping cremated remains to increase visibility and improve handling. Mail pieces sent to domestic addresses must be sent using the Priority Mail Express service. Customers who do not use their own packaging must use the Priority Mail Express Cremated Remains box, also known as the Box CRE.

Label 139, which indicates CREMATED REMAINS, is now required to increase visibility during USPS processing and transportation. Label 139 will allow USPS to identify these packages during processing and transportation and ensure they are handled with care. The label is available through the USPS online store at <https://store.usps.com>. Label 139 must be adhered to all sides of the box, including the top and bottom. Funeral homes and crematories can order cremated remains mailing kits that contain a sturdy box preprinted with Label 139 on all sides and the top and bottom, bubble cushioning, a self-sealing plastic bag, reinforced Priority Mail tape, and a copy of Publication 139, which has been updated to include the new requirements. These kits are available to order through the USPS online store.

A benefit of the Priority Mail Express service requirement is the assurance that the package is tracked online via the USPS website. New process requirements increase visibility of cremated remains in the postal network, thereby improving customer satisfaction. The full instructions for packaging and shipping cremated remains through the USPS are available on their website at <https://about.usps.com/publications/pub139.pdf>.

Pet Cremations

Let's take a quick detour to go over an increasingly popular request.

The pet industry is a juggernaut in the economy, even in times of recession. According to the American Pet Products Association, it is estimated that \$58.51 billion was spent on pets in the United States in 2014. This can be partially attributed to the fact that Americans' treatment of their pets goes far beyond what has been traditionally accepted. Dogs, cats, and other household pets used to be seen as just that – pets. Today, these beloved animals aren't just pets; they are part of our families. Our beloved furry friends wear cute and stylish clothing that changes with the seasons, have a toybox full of the best toys, eat human-quality food that is the best on the market, spend time at “day camp” with their pals, and often even travel with us wherever we go.

It is no surprise that the funeral service industry in recent years has taken notice of this special relationship. Today, a simple search of the internet reveals the plethora of providers offering service for those who have experienced pet loss. In years past, stand-alone pet cremation facilities existed through close relationships with veterinarian offices. Many in funeral service initially preferred to distance themselves from these less-dignified facilities. However, with the dramatic change in American perception of pets as part of the family, funeral service has embraced compassionate pet loss services. According to the NFDA Cremation Report, 17% of funeral homes offer pet cremation services with another 17% planning to offer such services within the next few years.

To summarize this section, there is no denying that consumer preferences for celebrating the lives of deceased loved ones are changing. Funeral professionals should be willing to accept these changing preferences, and adapt their practices to support them. Their ability to do so will greatly impact how well they serve their communities, and how likely their businesses are to survive and function in the future.

Environmental Concerns

As we've discussed, cremation has been touted as an environmentally conscious choice: it's seen as sanitary, and it reduces land use. This is becoming an increasingly important point: over the last three decades, industry research and consumer studies have shown there is a genuine concern for the environment when it comes to final disposition of our dead, whether it be accomplished through cremation or burial. The use of land for burial is a tremendous influence for those that choose cremation over burial. Many people think land should not be used for the burial of embalmed human remains that gradually decompose and metal caskets that can rust and leak, affecting water tables, oceans, and bays.

In addition, North American cremation practices have long been considered environmentally friendly – particularly as compared to many places around the world. Much of this has to do with North American crematories being located primarily in funeral homes and city centers, where there was a strong need and desire to operate cremation equipment free of smoke and odor.

However, crematory emissions are, without question, one of the biggest current concerns touching death care environmental issues today. Both corporate and private concern for the environment continues to grow and affect the way crematories operate. Local municipalities, which are often not well informed, have denied zoning and building permits to allow crematories in their back yards. This requires owners and operators of cremation equipment to be more knowledgeable about environmental matters.

Just what exactly is coming out of a crematory stack? The following is a review of commonly-regulated pollutants from crematories:

- **Particulate Matter** – This can be defined as a solid matter, dust, soot, ash, and unburned particles from the cremation container and remains.
- **Visible Emissions** – Visible emissions, commonly referred to as smoke, are particulate matter that has traveled through the cremation equipment and afterburning system without being completely consumed. Because they are the most easily detected, visible emissions tend to be the most troublesome pollutant for crematory owners and operators.
- **Carbon Monoxide (CO)** – Carbon monoxide is the result of incomplete combustion. The auxiliary fuels used to quicken the cremation (natural gas, LP gas, or oil), as well as the products of combustion given off during the cremation of the body and container, must be completely burned to avoid significant emission of carbon monoxide.

Minimizing emissions of all types is certainly a priority of crematory owners, operators, and crematory manufacturers, who have developed training programs to minimize many types of

emissions common to crematories. These training programs, which include special sections on cremator design, the environment, and proper operations, have been presented to thousands of operators over the last 20 years.

Testing by state, federal, and independent agencies has shown time and time again that crematories operate well within the current environmental guidelines. United States Environmental Protection Agency (EPA) testing even resulted in human and animal cremation equipment being eliminated from the list of industries that were to be covered by the new federal environmental regulations put into place in 2005. This saves funeral homes and crematories both time and money by eliminating the need for additional permits and testing.

CANA's cremation equipment emissions research – the most extensive ever undertaken – confirmed that the design and operation of typical North American crematories provided significantly better emissions than regulations required, and even exceeded current expectations with older operating systems. This is due to designs that included large afterchambers for the reburning and scanning of the exhaust prior to discharge into the atmosphere. These types of designs are especially important, as the locations where crematories have often been built in North America are light commercial and adjoining residential properties.

Just as knowing which pollutants are emitted from your crematory is important, it is also beneficial to know how your equipment reduces these pollutants, and what other methods are available to reduce them further. How well a crematory reduces pollutant output depends largely on the design, upkeep, and operation of the equipment. One of the best methods of reducing pollutant output is also one of the easiest: scrutinizing the materials included in the remains and container for cremation.

Of all of the crematory emissions being discussed these days, mercury raises the greatest interest. The EPA discusses mercury as a naturally-occurring element that can be found throughout the environment. Although natural, humans can influence the amount of mercury in the atmosphere. The most notable way that mercury enters the cremation cycle, and therefore crematory emissions, is through silver amalgam dental fillings found in many dead human bodies. Silver amalgam tooth fillings containing mercury have been common for many years, but their use appears to be in significant decline. It is estimated that at one time, silver amalgam represented the greatest majority of filling materials used, possibly as high as 90%. Within the last 10 years, the percentage of fillings containing mercury has already declined by 30%, a significant decrease. Although concern for the environment has always been a priority for the dental industry, the primary driver of this trend is actually found in the mirror – appearance. Composite resins blend better with the color and appearance of natural teeth. Other materials, such as gold, porcelain, and non-precious alloys are also used to restore teeth, but none of these contain mercury. All of these changes in dental practices and consumer preferences have resulted in significantly less mercury entering the cremation stream and thereby reducing mercury emissions by reducing mercury input.

There is also the possibility of encountering radiation in connection with a crematory. “Radioactive seeds,” or small, radioactive metal pellets that are placed in or near a tumor, are used in prostate cancer brachytherapy, and less commonly, breast cancer therapy. Deceased

individuals who have I-125 prostate implants, for example, and are cremated should be handled with caution; however, cremation can be performed safely. A few percentages of the radioactivity in the body are likely to be contained in the cremated remains. The funeral professional performing the cremation should wear a mask when handling cremated remains. It is also recommended to use rubber gloves during handling of the remains, or to wash hands directly afterwards. It is further recommended that cremated remains should not be processed – which could cause unnecessary contamination and exposure – and should be put in a metal urn for storage or inurnment. In keeping with the recommendation of the American Association of Physicists in Medicine (AAPM) Radiation Therapy Committee Task Group No. 56, who outlined how to dispose of radioactive seeds, the unwanted seeds should decay in storage for 10 half-lives (equal to 20 months) before being discarded into regular garbage. With that in mind, cremated remains should not be scattered for at least 20 months from the date of the implant – or, if that date is unknown, from the date of cremation. It should also be noted that the general public’s exposure to the radiation is minimal, if happening at all, and within expectable limits for anything that might be emitted with stack gasses.

It is very important for crematory operators to understand the air pollution permit that allows them to operate their cremation equipment. Air pollution permits consists of conditions that specify how the crematory is to be operated and required compliance methods to prove the conditions are being met. It is necessary to demonstrate compliance with every permit condition. Demonstrating compliance means proving that the facility is meeting the condition. The permit will list the required methods of showing compliance. Noncompliance with the permit conditions can result in fines or other enforcement action.

As an industry and profession, we must be receptive to discussing environmental and performance issues whenever they come up. Proper training of crematory operators and managers must be continually encouraged, and older cremation systems should be properly maintained and updated to keep them in prime operating condition.

Conclusion

Funeral service has traditionally been a male-dominated profession. It also has been a “family” profession, with firms being passed down from one generation to the next. Today, people who did not traditionally choose funeral service as a career are joining the profession and finding it very rewarding. In fact, many of today’s mortuary school graduates do not have family members working in funeral service and have decided to join the profession as a second career. There are many opportunities for people thinking about joining funeral service.

Today, more than 60% of mortuary science students in the United States are women. Many of these women have discovered and are attracted to the skills and traits needed as a funeral director, including communication skills, compassion, a desire to comfort those coping with a death, as well as organizational and event-planning skills.

Given these changing norms, it makes sense to embrace others as well. Your understanding of the practice of cremation, as well of the needs of the families who choose it, will help you stay a vital member of the ever-evolving funeral profession.

Appendix A - Burial at Sea Reporting Tool: Fact Sheet

Overview

EPA has issued a general permit under the Marine Protection, Research and Sanctuaries Act (MPRSA) to authorize the burial of non-cremated and cremated human remains at sea. The MPRSA general permit authorizes the transportation and burial at sea of non-cremated and cremated human remains in ocean waters under specified conditions. Placement of non-human remains (such as pet remains) is not allowed under the general permit. The MPRSA general permit is published in the federal regulations at 40 CFR 229.1. For additional information about the MPRSA general permit for burial at sea, including EPA contacts for inquiries about burial at sea, please refer to the EPA Burial at Sea Web page: <https://www.epa.gov/ocean-dumping/burial-sea>

The MPRSA general permit for burial at sea requires that EPA be notified of a burial at sea within 30 days following the event. All burials at sea conducted under the MPRSA general permit must be reported to the EPA Region from which the vessel carrying the remains departed.

To facilitate reporting of burials conducted under the MPRSA general permit and reduce paperwork burden, EPA developed the online Burial at Sea Reporting Tool. The Burial at Sea Reporting Tool may be accessed at <https://burialatsea.epa.gov/>

What is the Burial at Sea Reporting Tool?

The Burial at Sea Reporting Tool enables individuals or companies that have conducted a burial at sea to enter information into a simple online form and report the burial directly to EPA. The Burial at Sea Reporting Tool provides two options for submitting a report: you may submit a report as a “guest” or you may create an account to submit reports. The guest option is anticipated to be most suitable for individuals reporting one burial at sea. Individuals and companies that provide burial-at-sea services, however, may prefer to create an account; this option reduces the burden of re-entering information on future reports and allows the account holder to view the report submission history. The Burial at Sea Reporting Tool also includes the option of using a spreadsheet to simplify the reporting of multiple burials at sea.

The Burial at Sea Reporting Tool should be used solely for reporting burials at sea of human remains authorized under the MPRSA general permit.

What information will I need to report?

- Contact information (i.e., the name, address, phone number, and email address) for the director or individual responsible for the burial arrangements. This individual may be a funeral director, a relative of the deceased, or a person designated to report the burial at sea.
- Contact information for person responsible for the vessel used to conduct the burial at sea.
- Information about the burial arrangements, including the name of the deceased, burial

date, and location of the burial. Coordinates for the burial location can be entered in decimal degrees, if known. Alternatively, coordinates for the burial location can be identified using the interactive map in the Burial at Sea Reporting Tool.

How do I submit a report using the Burial at Sea Reporting Tool?

1. Go to <https://burialatsea.epa.gov/>
2. Log-in by:
 - a. creating a new account,
 - b. logging into an existing account, or
 - c. submitting the report as a guest.
3. Enter contact information for the director or individual responsible for burial arrangements. The MPRSA general permit for burial at sea does not require that the person responsible for the burial arrangements have any special credentials. This individual may be a funeral director, a relative of the deceased, or a person designated to report the burial at sea.
4. Enter contact information for the vessel point of contact.
5. Enter burial arrangement information in one of two ways:
 - a. If entering as a single-entry report:
 - i. Enter the name of deceased, date of burial, departure location, type of remains, distance from baseline, and coordinates of burial. Note: coordinates for the burial location can be entered in decimal degrees, if known. Alternatively, coordinates for the burial location can be identified using the interactive map in the Burial at Sea Reporting Tool.
 - b. If entering as a multiple-entry report:
 - i. Click on and review “Additional guidance for required fields”
 - ii. Download the spreadsheet
 - iii. Enter the required information into the columns and save the spreadsheet
 - iv. Browse for, and upload, the completed spreadsheet in the “Upload” box.
6. Submit the report. Once the report has been submitted, an email response will be sent confirming the submission. EPA will then review the report and the report will be either:
 - a. Accepted, and the user will receive an email response confirming the report status as accepted, or
 - b. Rescinded, and the user will receive an email stating that the report has been rescinded due to specific issues. If a report is rescinded, the user will be asked to correct specific error(s) and re-submit the report using the Burial at Sea Reporting Tool.

Who should I contact for technical assistance using the Burial at Sea Reporting Tool?

Please contact the EPA Central Data Exchange (CDX) help desk at 888-890-1995 for technical assistance using the Burial at Sea Reporting Tool.

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Funeral Service Academy

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COURSE EVALUATION

We'd love your feedback!

Evaluations can be submitted by mail or email (contact information above).

Learner Name: _____

Course Name: _____

	Low			High		
Orientation was thorough and clear	1	2	3	4	5	
Course objectives were clearly stated	1	2	3	4	5	
Content was organized	1	2	3	4	5	
Content was what I expected	1	2	3	4	5	
Program met my needs	1	2	3	4	5	
Satisfied with my learning experience	1	2	3	4	5	
Satisfied with customer service, if applicable	1	2	3	4	5	n/a

What suggestions do you have to improve this program, if any?

What educational needs do you currently have?

What other courses or topics are of interest to you?



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