



## An Overview of Cremation

There are at a minimum four main elements of cremation.

1. **Transportation** of the deceased from place of death to the crematory.
2. Secure, cold **storage** of deceased prior to cremation
3. The **cremation process** itself
4. **Return** of cremated remains to the authorized agent

When comparing prices and providers, ensure each element is included in the price and ask questions about the specific policies and procedures for chain of identification at each step.

You may still choose to have a visitation or viewing prior to cremation, which may involve embalming, setting features or washing and dressing the deceased. You may also arrange to witness the cremation itself.

### Transportation

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.

### Storage

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

### Steps in the Cremation Process

1. The deceased will be placed in a cremation container. The minimum requirement for a cremation container is that it be completely enclosed, rigid, leak resistant, and combustible. You 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.
2. 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/id is often stamped onto a stainless steel disc, but may also be in the form of a barcode.

The id/number is recorded on a cremation log. The stainless disc remains with the remains throughout their entire time at the cremation facility.

3. 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.
4. 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/id will be placed inside the cremator with the remains.
5. 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, to over two hours depending on the body size and stored heat in the chamber.
6. When the cremation process is complete, the door will be opened and identification checked again against paperwork and the stainless disc. The bone fragments that remain, now called cremated remains, will be carefully swept out of the cremator into a cooling tray, allowed to cool and taken to a processor.
7. The processor is a machine that uses blades to pulverize the bone fragments until the remains are less than 1/8" in size.
8. The cremated remains are then transferred to a strong plastic bag and placed in either an urn or temporary container if the family has not selected an urn yet. 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 Technical Details**

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% and 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 and 1600 degrees F.

The combustion process in the cremator proceeds in two stages — first 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.

## **What can be Cremated?**

Personal items of the deceased, such as jewelry, watches or other items will be removed from the container and returned to the family with prior arrangement. Sometimes families request that items of significance be cremated with the deceased. In some cases this can be

allowed, but in many cases it cannot. This is for safety reasons, as not everything is combustible and may cause damage to the equipment or the operator if left in the container. The funeral director will advise the family on what can or cannot be put in the container.

### **What is in the Cremated Remains?**

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.

### **How do I Know I am Getting My Loved One's Remains Back?**

Chain of custody refers to the chronological documentation of the custody, control, transfer, analysis, and disposition of remains and personal property. This is an important definition. Cremation is an irreversible, unstoppable process. Every step of the process needs to be documented, from the receiving of the human remains to the ultimate disposition of the cremated remains, including returning the cremated remains to the authorized agent.

### **Identification checkpoints:**

1. Removal of deceased from place of death
2. Transport to crematory
3. Placement in storage
4. Placement in cremator
5. Removal from cremator
6. Processing at pulverizer
7. Placement in urn
8. Return to authorized agent

It is important to note that each state/province requires different operational data to be recorded, and requires specific forms of documentation, thus each facility may have different policies and procedures which will vary slightly from the above. The funeral director can advise the family of what their facility's procedures are and what to expect.

<https://www.cremationassociation.org/page/CremationProcess>