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HEALTH Preparing for final moments

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Page 1 of 2

Preparing for final moments

➤ Recognise signs of impending death, comfort those nearing end of life

DEATH is an inevitable part of life, but the physical process leading to it can vary greatly from person to person. Whether it is a prolonged illness, a sudden event or the natural decline due to age, the body undergoes several stages as it approaches death.

While death is inevitable, how we approach the end of life is influenced by various factors, including the individual's health, age, emotional state and the circumstances surrounding their death. While these stages may differ depending on the individual and the circumstances of their death, there are common physiological patterns that people tend to go through in their final days, hours and moments.

Understanding death and accepting it is a deeply personal journey, in which one must come to terms with the inevitability of mortality, embracing it not as an end, but as a natural part of life's cycle.

Signs of impending death

➤ **Decreased circulation and blood flow**
As the body approaches death, one of the most immediate signs is the slowing down of circulation. The heart begins to pump less effectively and blood pressure drops. The skin may appear pale or bluish, and the hands and feet may become cool to the touch. The lack of proper circulation leads to reduced oxygen levels in tissues, contributing to the body's general weakening.

➤ Breathing changes

As the body moves closer to death, changes in breathing patterns are one of the most prominent signs. These can include irregular, shallow breathing and the cessation of normal rhythms. Common breathing changes include Cheyne-Stokes breathing, which is a pattern of irregular breathing that involves rapid, deep breaths followed by periods of no breathing or shallow breaths. It can occur in the final stages of life, particularly in patients with terminal conditions. Other than that, breathing may become more labored, with the chest and abdomen moving in an effort to get air. Patients may also experience irregular gasps or "agonal" breathing, which occurs when the brainstem is still partially functioning, but the body is no longer able to take in oxygen efficiently.

➤ Failure of organ systems

As blood flow becomes less efficient, the body's organs gradually cease functioning, starting with those that are less essential to basic survival. The decline of organ function can follow a general pattern starting with the urinary system where the kidneys may stop functioning as the body becomes dehydrated, resulting in reduced urine output or in some cases, no urine production at all. This is often accompanied by fluid retention, causing swelling (edema), especially in the lower extremities and abdomen. Next is the liver. As it shuts down, the liver can no longer detoxify the blood or metabolise medications and nutrients effectively. The accumulation of toxins in the bloodstream can lead to confusion, agitation or unconsciousness. Following this, the heart's pumping efficiency weakens, which can lead to arrhythmias (irregular heart rhythms) and a general failure to circulate blood effectively. Ultimately, the heart may stop beating altogether. The respiratory system will also weaken where the lungs lose the ability to properly oxygenate the body, and fluid buildup can accumulate in the lungs (pulmonary edema) causing difficulty



The emotional weight of a loss is devastating, not only for the patient but also for the family.
— 123RFPIIC

in breathing.

➤ **Neurological decline and cognitive changes**
As the body nears death, the brain's ability to function declines rapidly, leading to changes in consciousness and cognitive abilities. Some of the most common neurological symptoms include:

Confusion and disorientation: As blood flow to the brain diminishes, mental clarity becomes compromised. The individual may experience confusion, agitation or a decrease in cognitive awareness. This may manifest as difficulty recognising loved ones, disorientation regarding time and place and confusion about their condition.

Loss of consciousness: The individual may become semi-conscious or unresponsive. The person may slip in and out of consciousness, drifting into a state of deep unresponsiveness as the brain shuts down.

Hallucinations or vivid dreams: Some people report vivid hallucinations or strange dreams in their final days or hours. These can involve seeing deceased loved ones, animals or experiencing a sense of peace.

Decreased sensory perception: As circulation to the senses weakens, hearing, vision and other senses may fade. Many people in the final stages of life are still able to hear even if they can no longer respond to stimuli. Speaking to a person at this stage can offer comfort and reassurance, as they may still be aware of their surroundings.

➤ Changes in digestive system

In the final stages, the digestive system slows dramatically. The individual will experience loss of appetite and interest in eating or drinking. Even if food or fluids are offered, they may refuse. This is often due to the body's natural decline in energy needs as it prepares to shut down. As the body stops producing saliva and swallowing becomes more difficult, a dry mouth and throat may occur, which can lead to discomfort and the need for frequent mouth care. Additionally, the bowels and bladder may stop functioning, leading to incontinence or a lack of urination. In the final hours, some people may lose control of their bodily functions altogether.

➤ Muscle weakness and loss of coordination

As the body weakens, muscle mass begins to

decrease, and the individual may become unable to move or hold themselves up. The loss of muscle strength can also result in rigidity and stiffness as well as the inability to speak or move. The person may exhibit rigidity in their limbs as the muscles begin to stiffen. In some cases, there may be a loss of reflexes, including the inability to respond to stimuli. Following that, the weakening of the muscles and overall physical decline means that the person may be unable to speak or perform basic movements. They may be bedbound and completely dependent on others for care.

➤ Temperature regulation changes

As circulation declines, the body becomes less able to regulate its temperature. This can lead to cold extremities where hands and feet may feel cold or clammy, as the blood flow to these areas slows down. In some cases, the body may experience episodes of fever or sweating. This is particularly common in patients with terminal illnesses such as cancer or infections.

Final moments: What happens at the moment of death

The final moments of life are marked by a cessation of all vital functions such as heartbeat, breathing and brain activity. The body will show physical signs of death where the body will begin to cool after the heart stops beating and *rigor mortis* (muscle stiffening) sets in. This process can take a few hours.

Conclusion

The process of dying involves complex physiological changes across multiple body systems, with signs and symptoms varying depending on the cause of death and the individual. These changes are a natural part of the life cycle, though they can be distressing or difficult to witness. Understanding the physical and neurological changes that occur can help caregivers, families and healthcare professionals offer the best support and comfort to those nearing the end of life. It is important to recognise while the process of dying is often marked by loss of function and awareness, it can also be a time for peaceful reflection and connection for the person nearing death and their loved ones.

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Page 2 of 2

SUMMARIES

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