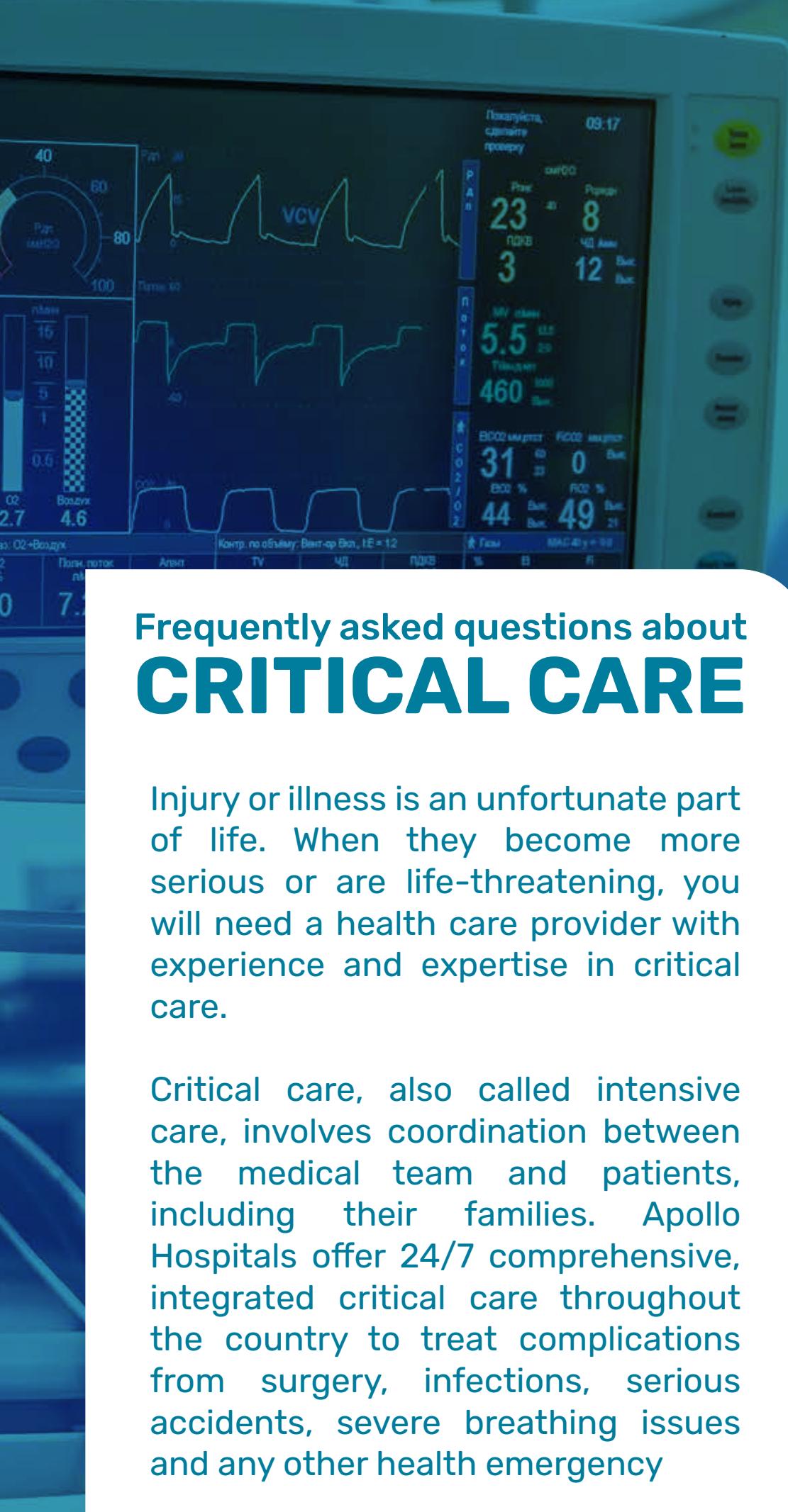




# FAQ ABOUT **CRITICAL CARE**





## Frequently asked questions about **CRITICAL CARE**

Injury or illness is an unfortunate part of life. When they become more serious or are life-threatening, you will need a health care provider with experience and expertise in critical care.

Critical care, also called intensive care, involves coordination between the medical team and patients, including their families. Apollo Hospitals offer 24/7 comprehensive, integrated critical care throughout the country to treat complications from surgery, infections, serious accidents, severe breathing issues and any other health emergency



## What is critical care ?

Critical care is the medical care given for individuals who have life-threatening injuries and illnesses. Usually, it takes place in an Intensive Care Unit (ICU). A team of specially trained healthcare providers provides you 24-hours care with specialised treatment and continuous monitoring.

## Who needs critical care ?

A person may require critical care if he/she has a life-threatening injury or illness, like:

1. Severe COVID-19
2. Respiratory failure
3. Heart attack
4. Heart failure
5. Kidney failure
6. Stroke
7. Sepsis
8. Severe bleeding
9. Serious infections
10. Serious injuries like car crashes, falls and shootings
11. People recovering from certain major surgeries

## What happens in a critical care unit ?

In a critical care unit, health care providers monitor the patient round the clock using monitoring devices, gives specialized care and treatment until he is out of danger for his or her life.



In a critical care set-up, the health care providers use numerous different equipment, such as:

1. Catheters: Flexible tubes that are used to get fluids into your body or to drain fluids from your body
2. Feeding tubes that gives you nutritional support
3. Dialysis machines (artificial kidneys) for those with kidney failure
4. IV (Intravenous) tubes to give you medicines and fluids
5. Oxygen therapy to give you extra oxygen for breathing
6. Machines that check the patient's vital signs and display them on the monitors
7. Tracheostomy tubes, which are breathing tubes. The tube is placed in a surgically made incision/hole that goes through the front of the neck and into the windpipe.
8. Ventilators (breathing machines) that move air in and out of your lungs. This is for people having respiratory failure.

These machines can help keep a person to be alive, but many of them can also raise the risk of infection.

Sometimes patients in a critical care unit are not able to communicate. An advance directive should be in place to help the health care providers and family members make important decisions, including end-of-life decisions.



# NASOGASTRIC TUBE

## **What is a nasogastric tube ?**

Nasogastric tube is a flexible tube that is inserted into your stomach

## **How is it inserted & who needs it ?**

It is inserted by the doctor through the nose mostly and through the mouth in unconscious patients) while the patient.

It is done for the following purposes:

1. To give short term nutritional support & to administer drugs when you are unable to swallow (Swallowing disorders or decreased level of consciousness).
2. Certain conditions where gastric juices need to be removed- to give rest to the bowel or to decompress the stomach when there is bowel obstruction.
3. To identify the presence of bleeding inside your stomach.
4. Nasogastric tubes are made of polyvinyl chloride (PVC), polyurethane, or silicone and come in numerous sizes
5. The commonly used RYLE'S tube is made of PVC.

## **How does the Doctor make sure it entered my stomach ?**

The position is confirmed by listening with a stethoscope & on x-ray by the doctor right after insertion.

## **Is The procedure painful ?**

No, it is not. But insertion can cause discomfort in your nose & throat.

## **Does the tube cause difficulty in talking ?**

No. It goes through the nasopharynx & esophagus. It does not interrupt your talking.

## **For how long can I use an NG Tube ?**

It can be used for up to six weeks or so. If there is an indication for its use for a longer time, special enteral feeding tubes are used.



# FOLEY'S CATHETER



## What is a Foley's catheter ?

It is a flexible tubing passed into the urinary bladder to collect urine & then drain it into a bag. Urinary catheters come in many sizes and types. They can be made of rubber ,plastic (PVC) or silicone.

## Who needs a Foley's catheter ?

Catheters are generally necessary when someone cannot empty their bladder due to obstruction or is not conscious enough to urinate. It is also used in the ICU setting to measure the hourly urine output to monitor kidney function.

## How is it inserted ?

Your genital area will be cleaned to prevent infection. The catheter will be inserted into your urethra after using a numbing medicine. When urine begins to flow into the tubing, the balloon is filled to keep the catheter in place. Then, the open end will be attached to a drainage bag.

## What are the side effects if the urinary bladder is not emptied?

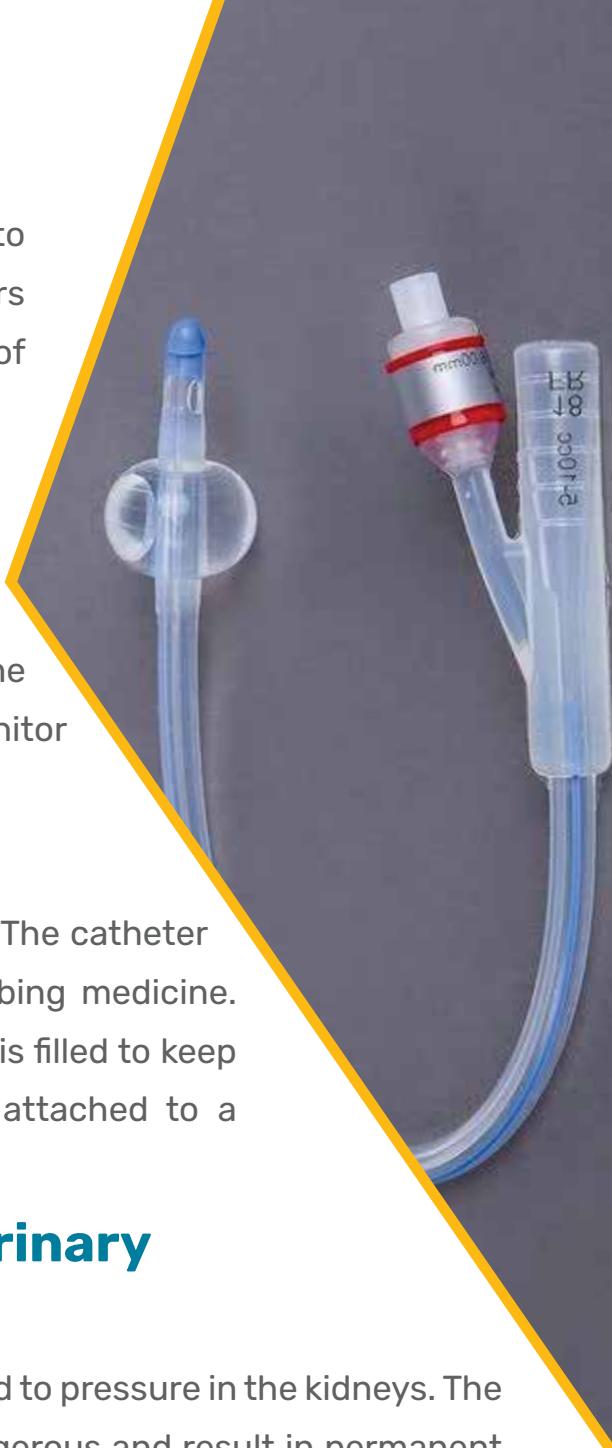
If the bladder is not emptied, urine can build up and lead to pressure in the kidneys. The pressure can lead to kidney failure, which can be dangerous and result in permanent damage to the kidneys.

## For how long is a Foley's catheter kept in ?

Most catheters are necessary until you regain the ability to urinate on your own, which is usually a short period.

## What are the complications of Foley's catheter ?

- 1. Urinary Tract Infections:** for prevention, it is inserted Under fully sterile conditions, and a closed drainage system is used.
- 2. Bleeding:** to avoid bleeding & pain, adequate lubrication with a local anaesthetic gel is done.





# RESPIRATORY FAILURE

# What is Respiratory Failure ?

Failure to take in oxygen and/or expire carbon dioxide out.

When we breathe, our lungs take in oxygen.

The oxygen passes into our blood, which carries it to our organs. Our organs like the heart and brain need this oxygen-rich blood to work well.

Another part of breathing is removing the carbon dioxide from the blood and breathing it out. Having too much carbon dioxide in your blood can harm your organs.

## What are the symptoms of respiratory failure ?

Air hunger, a feeling of shortness of breath, rapid breathing, increased heart rate, confusion and sweating are some symptoms. Increased carbon dioxide can cause drowsiness also.

There will be bluish discoloration of lips, fingertips and toes in severe cases, and the patient may lose consciousness.

## What causes respiratory failure ?

Any disease of the lungs, muscles that help in respiration, nervous system affecting the respiratory function, bones that surround the lungs, various poisonings or drug overdose can cause respiratory failure.

## How is it treated ?

Treatment depends on the severity and underlying cause. Providing oxygen and assisting in ventilation for carbon dioxide removal is the main principles, along with treatment of the cause. Various oxygen delivery devices are used. Oxygen support can be given by a nasal cannula, face mask or non rebreathing mask.

Advanced ventilation support devices used in those with severe disease include non-invasive ventilators or invasive ventilators, also called mechanical ventilators.



## **WHAT IS NIV ?**

NIV is Non-Invasive Ventilation used to provide high levels of oxygen to the patient and assist in breathing to prevent the patient from being exhausted by the rapid breathing.

## **How is NIV administered ?**

A mask is put over the patient's face covering the nose, mouth and chin to form a snug fit so that air does not escape or enter. Oxygen is delivered, and breathing is assisted by providing pressure support from the device. It is avoided in semi or unconscious patients.



## **Complications of NIV :**

Swallowing too much of air causes abdominal distension pressure sores on the face where the mask is applied. Other problems which can be treated include anxiety, agitation, oral and nasal dryness as well as difficulty in verbal communication due to air in the mask

## **What is intubation ?**

Intubation is a procedure that is used when you cannot breathe on your own. Your doctor puts a tube down your throat and into your windpipe to make it easier to get air into and out of your lungs. A machine called a ventilator pumps in air with extra oxygen. Then it helps you breathe out air that's full of carbon dioxide (CO<sub>2</sub>). This is called mechanical ventilation. It helps keep your oxygen and CO<sub>2</sub> at healthy levels.

## **What is mechanical ventilation ?**

In this process, a tube is passed through the mouth into the trachea (windpipe) to provide oxygen to & remove carbon dioxide from the lungs. It is used to provide higher levels of oxygen to the patient & assist in breathing similar to NIV, but the degree of external respiratory support & machine control over the breathing pattern is much higher. It is used in cases where NIV fails. It is used in semi or unconscious patients and those in shock (low BP).



## How does a patient feel while on a ventilator?

The ventilator itself does not cause pain, but the tube may cause discomfort because it can cause coughing or gagging. A person cannot talk when an ET tube passes between the vocal cords into the windpipe. He/she also cannot eat by mouth when this tube is in place. A person may feel uncomfortable as air is pushed into the lungs.

## Is a patient on a ventilator always unconscious?

Sometimes a person will try to breathe out when the ventilator is trying to push air in. This is working (or fighting) against the ventilator and makes it harder for the ventilator to help.

People on ventilators may be given medicines (sedatives or pain controllers) to make them feel more comfortable. These medicines may also make them sleepy. Sometimes, medications that temporarily prevent muscle movement (neuromuscular blocking agents) are used to allow the ventilator to do all the work for the patient. These medications are typically used when a person has a very severe lung injury; they are stopped as soon as possible and always before ventilator support is removed.

## Complications of mechanical ventilation:

**1. Lung Infections:** Patients on the ventilator are more likely to get pneumonia, which can be a serious problem. A patient may need to remain on the ventilator for longer while the pneumonia is treated with antibiotics.

**2. Collapsed lung (due to pneumothorax):** Sometimes, a part of the lung can become weak and develop a hole, letting air leak out and causing a collapsed lung. If the lung collapse is severe enough, it can cause low blood pressure and death. In order to re-expand the lung, a tube needs to be placed into the chest (chest tube) to drain the air that is leaking out. Once the lung has healed, then the tube can be removed



**3. Lung damage:** The pressure of putting air into the lungs with a ventilator can damage the lungs. Doctors try to keep this risk at a minimum by using the lowest amount of pressure that is needed. Very high levels of oxygen may be harmful to the lungs as well.

**4. Side effects of medications:** Sedatives and pain medications can cause a person to seem confused or delirious, and these side effects may continue to affect a person even after the drugs are stopped. The health-care team tries to adjust the right amount of medication for a person. However, different people will react to each medicine differently.

## How long do I require oxygen support?

Patient may need oxygen support until the cause for respiratory failure is treated. As the patient improves the support is decreased from NIV to Oxygen mask and then to nasal cannula.

## How long do I require mechanical ventilation?

Mechanical ventilation is needed until the patient's cause for the respiratory failure is treated and he/she is conscious enough to cough and breathe on their own.





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