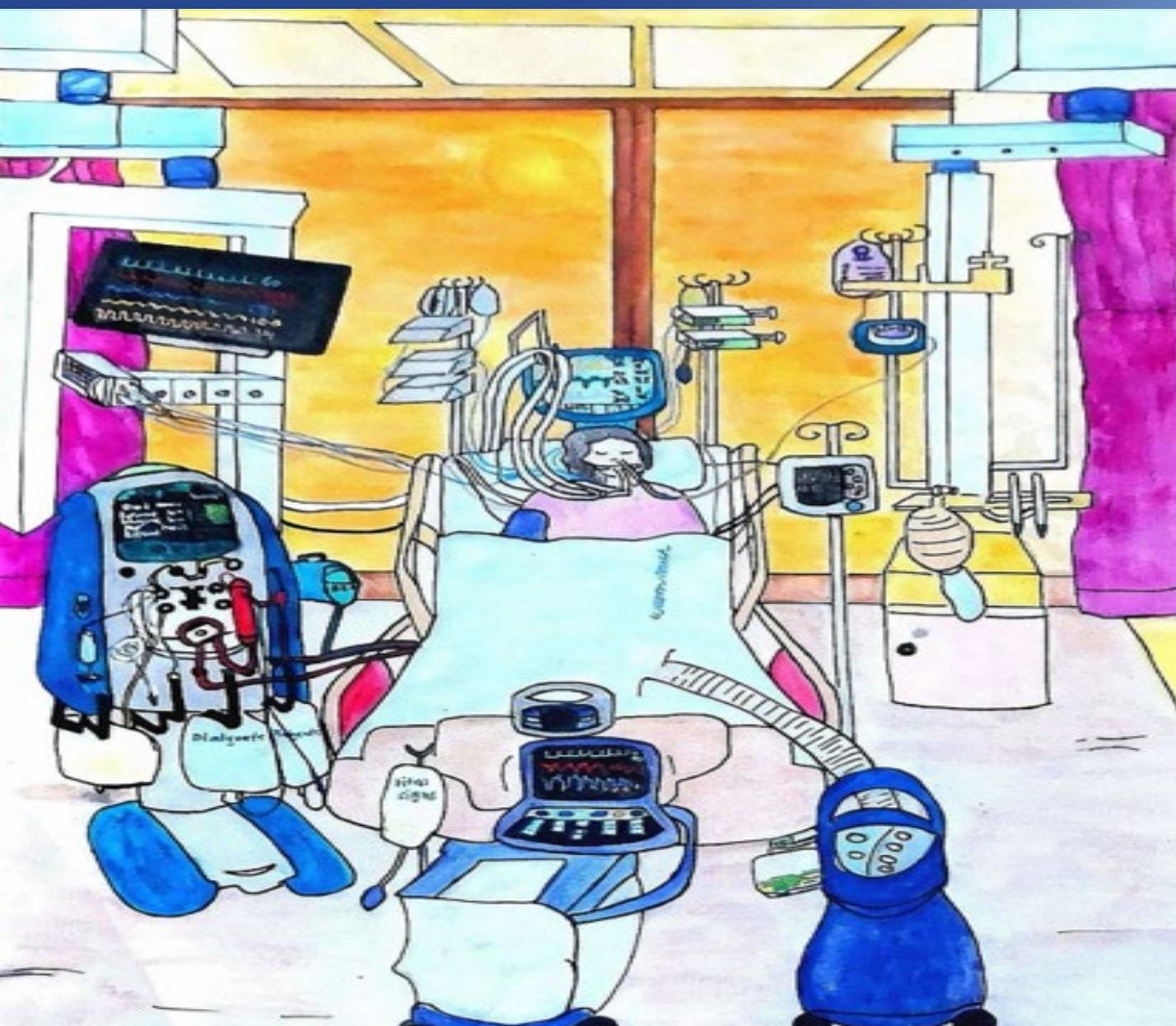


Department of
Nursing

Understanding the ICU environment: A Guide for Patient and Families



ICUs @ TTSH

There are 5 specialised intensive care units in Tan Tock Seng Hospital and National Centre of Infectious Diseases:

At Level 3:

Ward 3A – Neurology ICU

Ward 3B – Surgical ICU

At Level 6:

Ward 6A – Coronary Care Unit

Ward 6B – Medical ICU

At NCID Level 3

Ward 3E – Outbreak ICU

This booklet helps you understand the medical equipment (devices) you may see when visiting your loved ones in the ICU.

We will first explain the common devices used in all ICUs. You can find these in the <General ICU> section.

Then we will describe special devices that are only used in certain ICUs.

The medical team connects devices according to your loved one's condition.

General ICU

Sounds



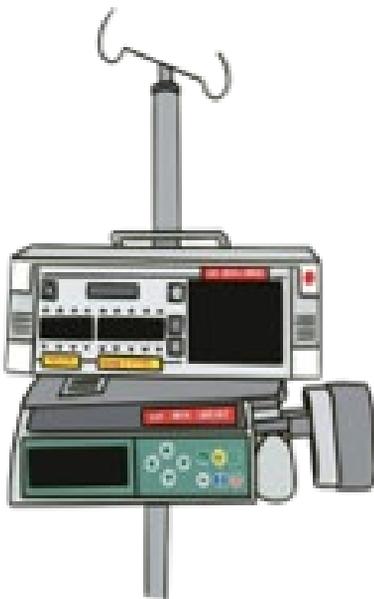
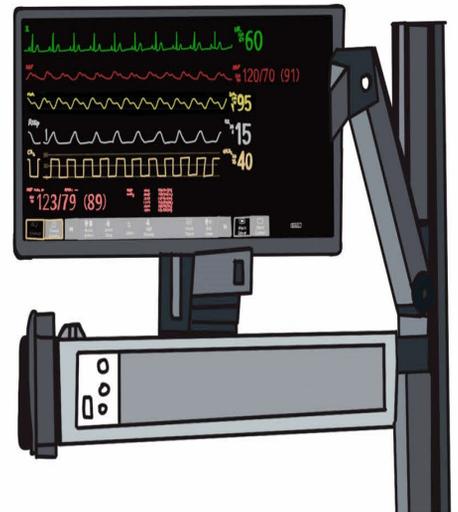
Alarms and beeps help nurses and doctors monitor your loved one.

Don't worry about these sounds.

Our team knows what each alarm means and will respond quickly when needed.

Bedside Monitor

This shows your loved one's vital parameters such as heart rate, blood pressure, oxygen saturation, breathing rate and more.



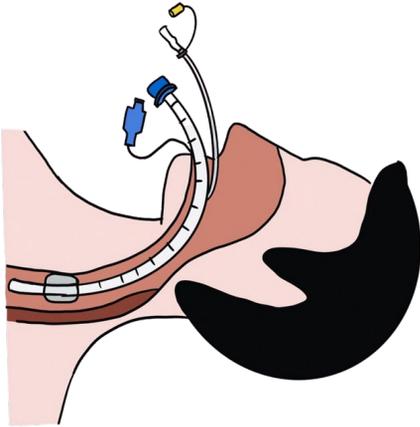
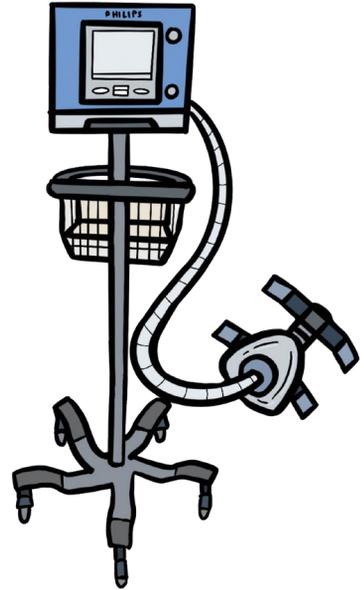
Intravenous Pump

This delivers fluids and medicines for your loved one through their blood vessels (veins).

General ICU

Non-invasive Ventilation

A machine that helps your loved one breathe by pushing air into their lungs through a face mask.

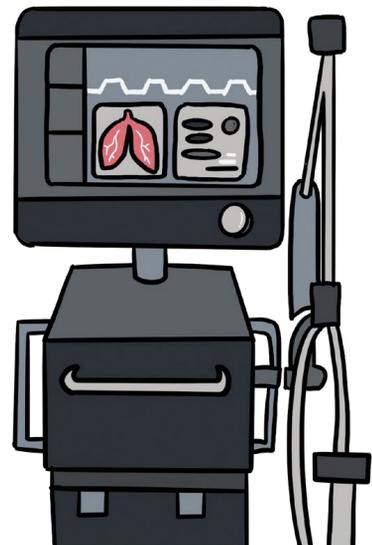


Endotracheal Tube

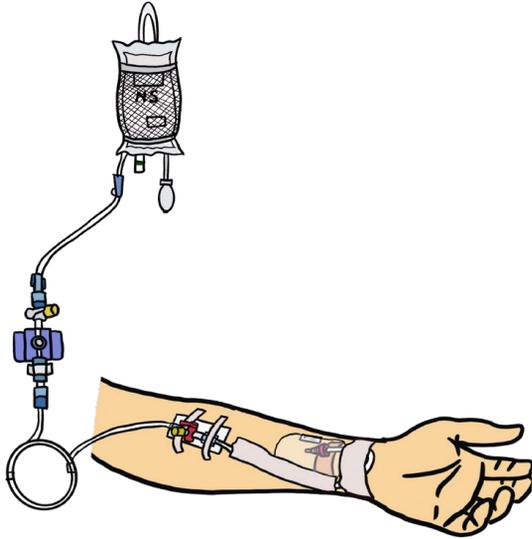
Also known as the breathing tube.
This is inserted through your loved one's mouth into their wind pipe and connected to a ventilator that supports breathing.
It passes through their vocal cord (voice box), so your loved one will not be able to eat or talk until the tube is removed.

Ventilator

This is the machine that connects to the breathing tube to support your loved one's breathing.



General ICU



Intra-Arterial Catheter

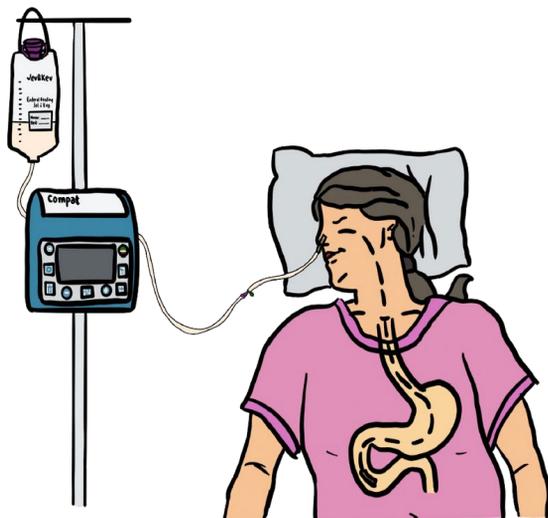
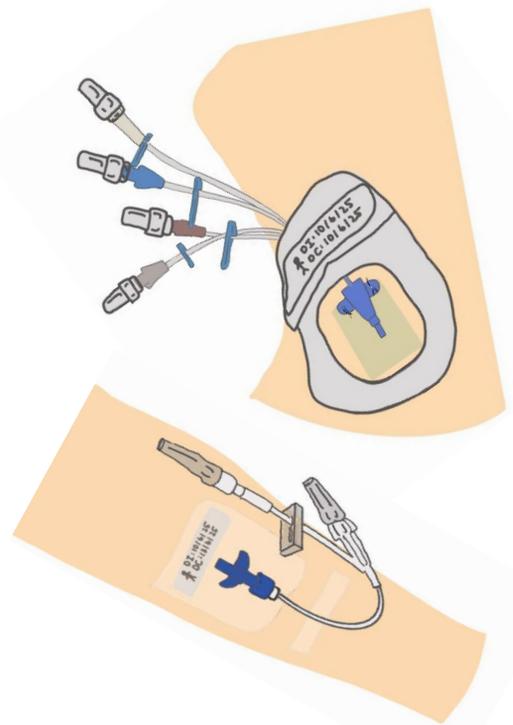
This is inserted into the blood vessel called the artery.

It allows the nurses and medical team to take blood and continuously monitor your loved one's blood pressure.

Intra-Venous/ Central Venous Catheter

A multi-port catheter that is inserted at the neck or groin area.

This allows nurses to deliver fluid and medicine into the vein.

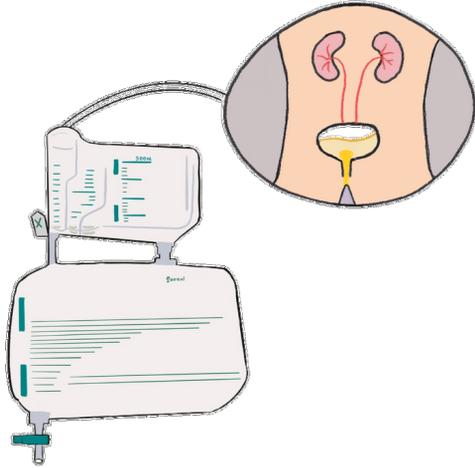


Nasogastric Tube

A tube that goes through the nose/mouth into the stomach.

Medicines and milk feed are given through here.

General ICU

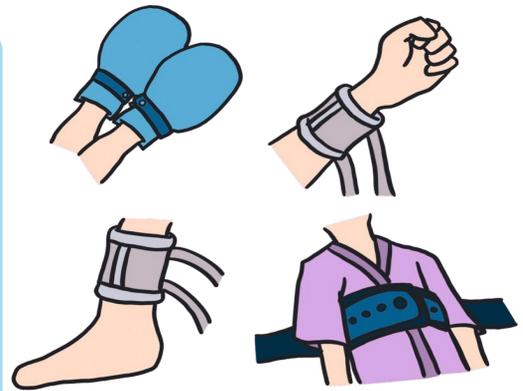


Indwelling Catheter

Urine catheter is inserted into your loved one's bladder to drain urine into a drainage bag. This allows nurses to measure their urine closely.

Restrainers

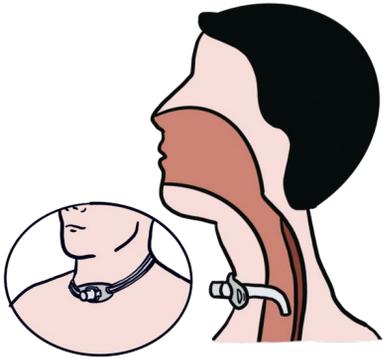
These are used to protect your loved one from accidentally pulling out important lines or getting out of bed unsupervised, which can cause harm to themselves. Restraints are used only when needed to keep them safe.



Sequential Calf Pump

This connects to the sleeves that are wrapped around your loved one's legs. It pumps air through plastic tubes, so it applies pressure on their legs to improve blood circulation and minimise the blood clots from forming when your loved one cannot move around.

Ward 3B Surgical ICU/ Ward 6B Medical ICU

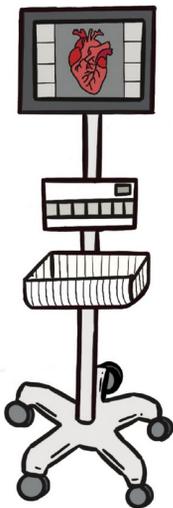
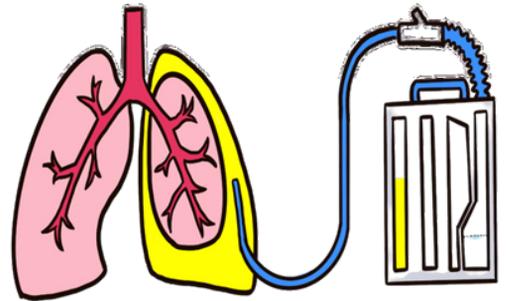


Tracheostomy

This is a small plastic tube placed through an opening made in the neck to help your loved one breathe.

Chest Tube

This is a plastic tube placed through a chest wall into the space around the lung. It helps to remove trapped air, blood or fluid to make breathing easier.

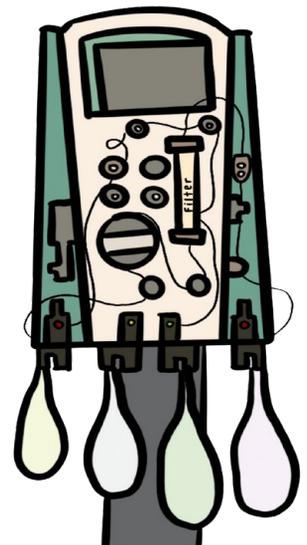


Continuous Cardiac Monitor

A device that monitors your loved one's heart function to help guide treatment.

Dialysis Machine

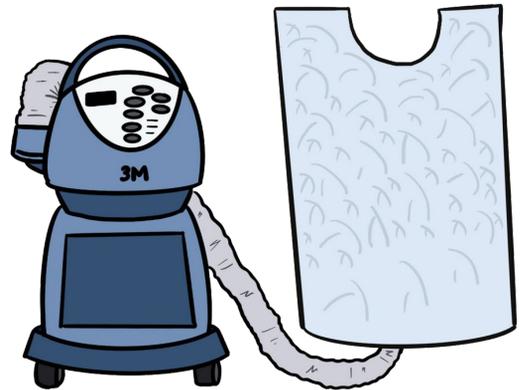
This machine helps to filter your loved one's blood to remove excess water and toxins when their kidneys are not functioning properly.



Ward 3B Surgical ICU/ Ward 6B Medical ICU

Warming Blanket

This delivers warm air to help increase your loved one's body temperature when it is too low.

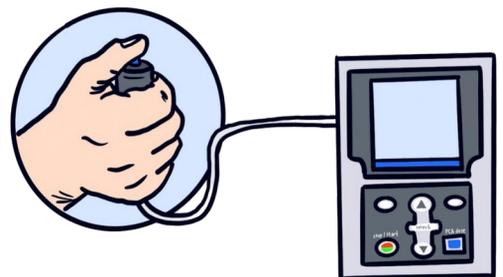


Drain

A tube that is inserted at the surgery site to remove fluid that may build up after the operation.

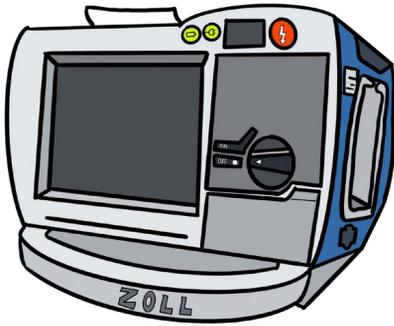
Patient Controlled Analgesia

This is used to manage pain, especially after surgery. It allows your loved one to give themselves pain medicine at controlled doses by pressing on the control button.



Ward 6A

Coronary Care Unit



Cardiac Monitor

This monitors your loved one's heart rhythm and delivers electrical currents if it detects a dangerous heartbeat, helping the heart return to a normal rhythm.

Intra-Aortic Balloon Pump

The balloon pump helps your loved one's heart rest and pump blood more effectively.

It works by pumping a small balloon placed in the aorta, the large blood vessel near the heart.



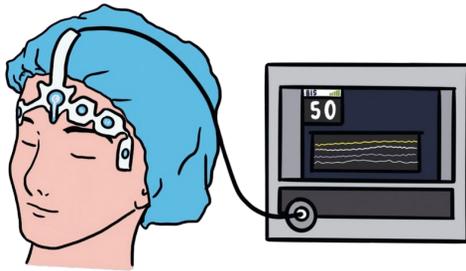
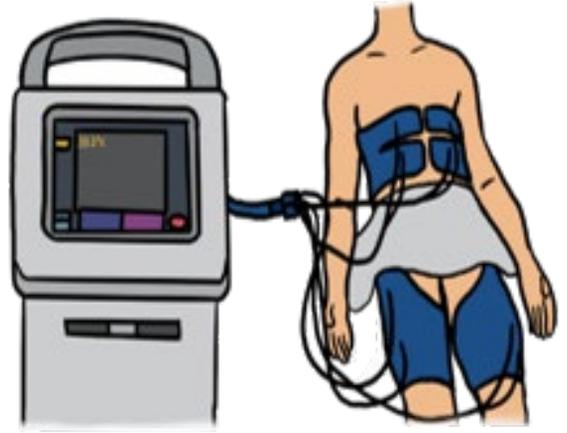
Intravascular Cooling Device

A line is inserted into the vein over the groin. This device accurately controls your loved one's body temperature by adjusting the temperature of their blood.

Ward 6A Coronary Care Unit

Skin Cooling Machine

Special pads are applied on your loved one's body surface to control and achieve their body to a certain temperature.



Brain Activity Monitor

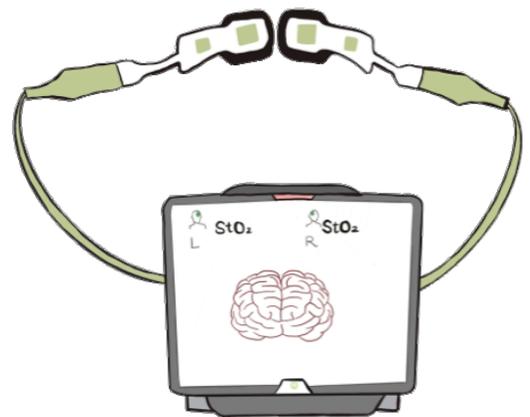
This measures brain activity to determine how sedated your loved one is.

This helps doctors and nurses adjust the medicines.

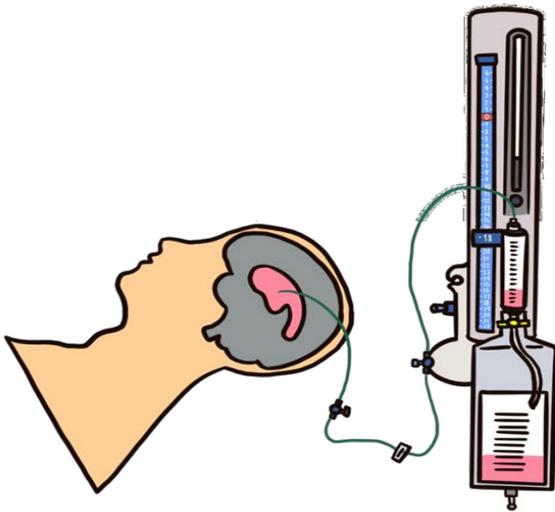
Cerebral Oximetry

This monitors how much oxygen is reaching your loved one's brain.

This ensures their brain gets enough oxygen for recovery.



Ward 3A Neurology Ward



External Ventricular Drain

A small tube placed in the fluid spaces of your loved one's brain.

This help to drains extra fluid or blood around the brain and measure pressure inside their head.

Intra-cranial Pressure Monitor

This monitors pressure inside your loved one's brain and helps to watch for swelling or changes after a brain injury or surgery.



Credits

A HEALS-ICU initiatives

In collaboration with

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Senior Staff Nurse Lau Hei Man

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Special Thanks to

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