

A Guide for Patients and Families

Care for your Upper and Lower Limbs Cast

Why do I need a cast?

Casts are a common form of treatment to hold fractured bones in their proper place so that healing can take place over time, thus reduce pain. It may also be used to relieve pain from severe sprains. They would need to stay on your arm or leg for 4 to 12 weeks, depending on the severity of your injury.

Different types of casts and splints can be applied. Plaster of Paris slabs are applied during the early stages of treatment to hold the fractured bones in their proper place. Synthetic casts will be applied once the broken bones have started to heal.

What are casts and splints?

Casts and splints are used to protect, support and prevent movement of broken bones or joints during the healing process.



What are the different types of casts and splints?



Half Cast / Backslab

Put on temporary while waiting for the swelling of the limb(s) to subside.



Full Cast

Applied after the swelling has been reduced. However, this cast may be removed and changed when it becomes too loose or tight.



Ready-made Thermoplastic Splints

Removable splints may be used when the fracture is healing and becomes more stable.



Ranger Knee Brace

May be used once the fracture has healed or is deemed stable.

How to care for my cast?

Proper care of the cast is important for faster recovery and prevention of infections.

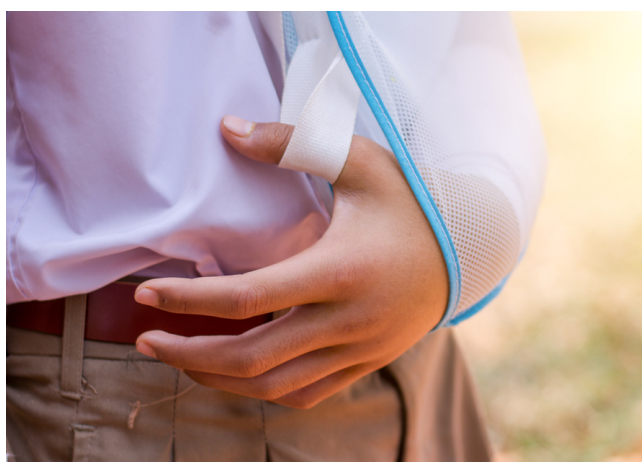
- Your cast may take 30 minutes or up to 48 hours to dry and set (depending on the material).
- Swelling may occur during the first 72 hours.
- Avoid contact with water.
- Protect your cast with plastic wrapping while bathing or washing.



- Check the blood circulation in the injured arm/leg by pressing and holding the nail of one finger/toe till the nail bed turns white. When the colour returns upon releasing the pressure, it means that the blood circulation is fine.
- Do not trim or remove the cast or put powder, sprays or foreign objects to relieve itchiness as it will cause skin irritation or infection.

- Use the sling to raise your injured arm to the level of your heart when sitting or standing. It will help to reduce swelling.
- Rest the injured arm on pillows when lying down so that it is at the same level of your heart. It will help to reduce swelling.
- Check regularly that your fingers can close and open freely, and are not turning blue or have increased in swelling.

Arms





- Rest the injured leg on pillows when lying down so that it is at the same level of your heart. It will help in reducing swelling.
- Avoid bearing weight on the injured leg. Use crutches or walking aids for support if you need to walk.
- Rest the injured leg on a chair when sitting so that it is at the same level of your hip. It will help reduce swelling.
- Check regularly that your toes can wiggle freely, and are not turning blue or have increased in swelling.
- Do not walk using your injured leg unless the doctor says it is okay to do so.

When should you seek help?

Perform daily checks on the colour and exposed areas of skin and fingers that are not covered in cast.

Do seek help immediately when you experience the following:

When the cast feels too tight even after keeping it elevated

Numbness or tingling sensation

Skin becomes cold, pale and with a bluish tinge

Skin underneath or around the edge of the cast feels sore

There is an unpleasant smell or discharge

Increased pain or swelling

When the cast is:

- Loose
- Damaged
- Cracked
- Wet and does not dry
- Has rough edges that hurt



Arms

What can you do to reduce swelling?

Swelling of the arms may cause pressure injury when your arm is in the cast.

Keeping your arm upright and above the heart will help the blood flow back to the heart and reduce the swelling.



- Use an arm sling to support the arm. You should only stop using the arm sling when advised by the doctor/nurse.
- Keep your arm in an upright position when sitting down or when it is not supported by an arm sling.
- Keep your arm above the heart level while lying in bed or supported with pillows when not using the arm sling.

Legs

Swelling of the legs may cause pressure injury when your arm is in the cast. Keeping your casted leg above heart level (i.e. elevated) will help reduce pressure and swelling. Perform daily checks on the cast and exposed areas of skin that are not covered by the cast.

Do seek help immediately when you experience the following:

Cast feels/is:
Too tight even after
keeping it elevated

Cast feels/is:
Too loose (e.g. slips
down to the ankle)

Damaged or
cracked

Uncomfortable due
to rough edges

Wet with no signs
of drying

Unpleasant due
to the smell
or discharge



Skin underneath or around the edge of the cast feels:

- More pain or swollen than before
- Sore and numb (tingling sensation)



- When lying down, adjust the bed such that the casted leg lies above heart level.



- If you are unable to adjust the bed, use a pillow to support the casted leg above heart level.



- When sitting down, rest the casted leg on a chair.

How should you take care of the cast?



- **Do not** put things in the cast when you feel itchy as this may cut your skin and cause an infection.
- Relieve the itch by blowing air on both ends using a hairdryer on cool mode.
- **Do not** apply powder into the opening as it may irritate the skin under the cast.
- Powder can also cake up when in contact with the moisture from the skin.
- **Do not** trim or cut the cast as it will weaken the support of the cast.



- **Do not** keep the cast leg in the same position for more than 2 hours.
- Frequent re-positioning of the casted leg is encouraged.
- **Do not** place the casted leg on the floor for more than 30 mins.
- It will cause swelling.

Water can irritate the skin and weaken the cast. Keep the cast out of the rain and dry when taking a shower.

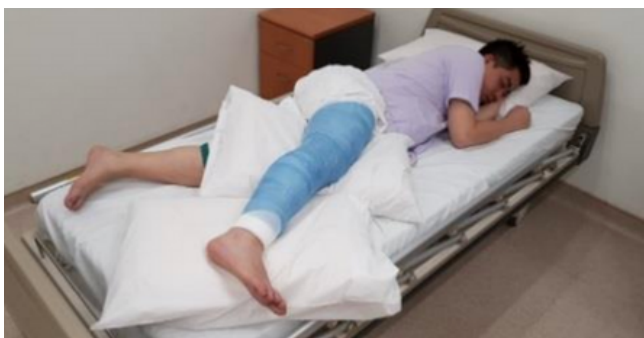
When taking a shower:



- **Do not** lower the leg to below knee level as water might enter into the cast through the gap around the thigh.
- Before entering the shower, protect the cast with a plastic bag or cling wrap. Keep the foot above knee level to prevent the cast from getting wet. Use wet wipes or a towel if you need to clean your foot.

Turning positions:

- The following are some positions that you can try when lying in bed.
- These positions can help to reduce and distribute pressure away from the casted leg.
- **Do not stay in the same position for more than 2 hours.**



Turn to your side with the casted leg facing up, supported by a pillow.



Face up with a the casted leg elevated (above heart level), supported by a pillow.



Turn to your side with the non-casted leg facing up, supported by a pillow.

Daily exercises

Exercise any joints that are not covered by the cast such as your elbow and fingers to help improve the blood flow and the healing process.



- Straight arm raises.



- Put your hand behind the head.



- Put your hand behind the back.



- Closing your palm.



- Opening your palm.