



Information Guide

Orthopedics

Immobilization with plaster of Paris or fiberglass (synthetic)

Plaster

A plaster is a rigid mold (made of plaster or synthetic resin) applied to a limb or part of the body to immobilize it following a fracture, sprain, or dislocation.

Useful information about your plaster:

• Avoid any pressure points that may cause indentations in your plaster.

For the upper limb: do not move the wrist or elbow before the plaster is hardened, which takes approximately 1 hour for fiberglass and 48 hours for plaster of Paris. It is advisable to wear a sling during this period when moving around. When lying on your back, elevate your arm so that the elbow is higher than the shoulder, and the hand is higher than the elbow.

For the lower limb: extend the leg and elevate it above the hip using two pillows when sitting or lying down. Avoid pressure on the heel. If you have a walking heel, you may walk with your plaster after receiving medical authorization. You should wait 48 hours if you have a plaster of Paris or 2 hours if you have a fiberglass plaster. Otherwise, you should not put any weight on your plaster, let alone walk on it. Use crutches, a cane, or a walker to move around.

How to be comfortable with a plastered limb?

During the first two weeks after the plaster is applied, it is normal to experience pain, and it is essential to take the prescribed medication to ensure comfort. You may also notice swelling in the immobilized limb.

To reduce swelling and pain:

In the initial days, swelling and pain may be significant. Position yourself day and night so that the immobilized limb is elevated above the heart level. Take pain medication as instructed by the doctor.

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To maintain proper blood circulation in your immobilized limb:

- Move your fingers and/or toes frequently.
- Elevate your immobilized limb as often as possible: for the foot and leg, elevate them to the level of the heart, and for the hand, elevate it to the level of the shoulder.
- Avoid excessive heat, salt, and alcoholic beverages.

To keep your plaster in good condition:

- Keep your plaster dry (wet plaster can deform, disintegrate, or crack). Never immerse it in water.
- Avoid any activity that could damage it (avoid hitting or bumping it).
- Protect your plaster with a waterproof protective boot available at an orthopedic appliance store.
- Never rub or scratch the immobilized limb.

To keep your skin healthy around and under the plaster:

- Avoid inserting foreign objects under the plaster and keep the skin dry to avoid skin problems and itching.
- Check daily for plaster crumbs or foreign objects that may slip inside. They can cause irritation.
- Use a cool air dryer if itching persists.

What NOT to do:

- X Do not introduce alcohol, powder, pencil, or stick under the plaster (risk of injury to the skin under the plaster).
- X Do not place pieces of cotton or paper on the edges of the plaster (reduces blood circulation).
- X Do not walk on wet surfaces, even if you have a walking heel (risk of getting the plaster wet or risk of falling).
- X Never cut or level the plaster as there is a significant risk of injury.

NOTE: Wet plaster promotes the development of itching and unpleasant odors and can lead to sores under the plaster.

Tips for bathing:

- Wrap the plaster in a towel.
- Seal it with a waterproof bag or a hermetic waterproof envelope available at an orthopedic appliance store or pharmacy.
- Use warm water when bathing to avoid sweating under the plaster.
- To take a bath, position yourself to keep the plastered limb out of the water (e.g., a turned-over basin), fill the bath once you are comfortably seated, and drain the water before getting out.

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Perform muscle exercises:

To prevent muscle weakness in your limb (unless otherwise instructed by a doctor); perform frequent contractions of the muscles under the plaster. Contract for 5 seconds, release, and repeat. Do this exercise for 5 minutes every hour.

Examples of exercises:

Plaster forearm:

- Move and stretch your fingers.
- Make a fist.
- Flex and extend your elbow.
- Move your shoulder.

Plaster arm and forearm:

- Move, stretch, and bend your fingers.
- Move your shoulder.

Plaster leg:

- Move your toes (unless there is toe surgery).
- Flex and extend your knee.
- Keep your leg straight, pushing the knee into the mattress, and tighten your buttocks.
- Keep your leg straight and lift it about 15 cm by squeezing your thigh.

Walking safely without the risk of falling with a plastered foot or leg:

To walk safely, you must use crutches, a walker, or a cane.

When to seek help?

Pay attention to the following changes and consult a healthcare professional if these symptoms persist:

- The pain in your plastered limb increases and remains very intense despite taking the prescribed pain medication.
- Unusual and sharp pain or a sensation of burning, tingling, and/or cramping in your immobilized limb.
- Swelling increases, and your limb becomes too tight in the plaster.
- Your plaster slips and does not stay in place.
- Feeling cold, numbness, whitish or bluish discoloration of fingers/toes, difficulty moving your extremities.
- Persistent fever for 24-48 hours without apparent cause.
- Discharge from a wound at the site of the immobilized limb.

If you experience any of these discomforts:

- Position yourself so that the immobilized limb is elevated above the heart level.
- Move your fingers and/or toes.
- If there is no improvement after these interventions, call the responsible nurse from 8 am
 to 4 pm from Monday to Friday (except holidays) or go to the nearest emergency
 department.

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Plaster removal:

Plaster removal is painless. A special saw uses vibration to cut the plaster, with very little risk of cutting the skin. You may feel warmth during the cutting process.

Clean the skin under the plaster with water and soap after removal. If necessary, apply moisturizing cream. Resume your activities according to the doctor's instructions.

Hôtel-Dieu de Québec (HDQ): 418-525-4444 ext. 15256

Saint-François d'Assise hospital (HSFA): 418-525-4444 ext. 53038

Centre Hospitalier de l'Université Laval (CHUL): 418-525-4444 ext. 48640

Enfant-Jésus hospital (HEJ): 418-525-4444 ext. 63636

Personal notes :				

This guide makes recommendations in accordance with the scientific information available at the time of its publication, i.e. February 27th, 2025. However, these recommendations are in no way a substitute for the judgment of a clinician. If you have any questions, we invite you to contact your healthcare professional. If in one way or another you misuse the information contained in this document, the CHU de Québec cannot be held responsible for any damages of any kind in this regard.



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