

Having an MRI

(magnetic resonance imaging)



Your doctor has prescribed this exam to take images of the inside of your body. This fact sheet explains the exam and how to prepare for it.

Why do I need to have this exam?

It can help find the cause of a health problem that can't be seen with a simple physical exam.

You may also need to have other tests (e.g., ultrasound, x-ray). They can help to confirm the diagnosis or to choose the right treatment.

How is this exam done?

You are placed lying down on an exam table, which then moves you into the MRI machine. The machine produces powerful magnetic waves that are used to create images of your body in 2 or 3 dimensions.

Sometimes a special liquid (contrast material) is injected into the veins before or during the exam. This allows certain details to be seen more clearly on the images.

Are there any risks?

MRI poses no risk to your health. In very rare cases, the contrast material may cause a severe allergy.

Are there any contraindications to this exam?

Yes, the machine uses a large magnet. People who have certain metal implants cannot have this exam. Their implants could become hot or move during the exam.

Before the exam, you'll be asked to fill out a questionnaire to find out if you have, for example:

- a pacemaker or implantable heart device
- an aneurysm clip
- a blood glucose sensor
- a stent
- a piercing

Depending on your answers, the exam may be modified or cancelled.

You'll also be asked if you're pregnant. If you are, the exam may be modified or postponed.



Could I have any problems?

The main potential problems are:

- > **Fear of being enclosed (claustrophobia).** For some people, this can cause stress or fear once inside the machine. If this is your case, tell the clerk who gives you the appointment. The team will take this into account. Also tell your doctor, who can prescribe tranquilizers if needed. Don't forget to bring them with you on the day of the exam.
- > **Noise.** The machine makes loud noises. For this reason, you'll be given earplugs before the exam and sometimes headphones.
- > **Discomfort.** A very small number of people have a headache or feel dizzy during the exam. This can happen if you're sensitive to noise or magnetic fields. But it's very rare.

How should I prepare?

Depending on the organs to be examined, you may be given instructions to follow before the exam, such as not eating, or putting in a suppository. If this is the case, you'll be told this when you're given the date and time of your appointment.

How long does the exam take?

It's quite variable: it can range from 10 minutes to an hour and a half. Most often, it takes about 30 minutes.

If you're on dialysis and you're going to have a contrast injection: plan to have dialysis within 24 hours after the injection, or tell the clerk who gives you the appointment. They can arrange to modify the exam.

What happens during the exam



- 1 When you arrive, you fill out a questionnaire. Then you remove all your clothes (except your briefs and socks) as well as any jewelry or metal accessories. You then put on a hospital gown.



- 2 A technologist makes sure it's safe for you to have the exam, and then explains how the procedure will be done.



- 3 You lie down on the exam table. The technologist places an alarm bell in your hand. If there's a problem, all you have to do is ring the bell to let them know.



4 The technologist has you wear earplugs, then gives you headphones so they can talk to you during the examination.



5 Finally, the technologist places a plastic antenna where the images will be taken. This antenna is used to focus the magnetic field.



6 When you're ready, the table enters the MRI machine. Several sequences of images are taken, each lasting 2 to 3 minutes. **You must not move during the sequences.** This is important, in order to have clear images.

The technologist can't hear you during the exam. If you need help, press on the alarm bell.



7 After each sequence, the technologist checks to see if everything is going well and tells you how long the next sequence will take. The technologist may also give you instructions (e.g., hold your breath).

When all the required images are taken, the exam is done.

Where should I go for the exam?

Go to the CHUM Radiology Service.

> **D Pavilion, 3rd floor, room 350**
1051 Sanguinet St.
Montreal, Quebec H2X 0A9

When will I have my results?

Your doctor will give you the results of the exam at your next appointment.

