

What is an SEP?

An SEP (somatosensory evoked potential) is a test that records how fast an electrical signal received by the nerves in the arms and/or legs travels up the spinal cord to the brain.

How Can I Help My Child Prepare for the Test?

Do not let your child eat solid foods in the two hours before your appointment time. Clear fluids like water and apple juice are okay.

Dress your child in a short-sleeved top or a top with sleeves that can easily be pushed up past the elbow. Likewise, dress him/her in shorts or pants that can easily be pushed up past the knee.

Plan to get to the hospital at least 20 minutes before your appointment time. It can be hard to find parking. Please come directly to the EEG Department in Room 1B10. If you did not receive a call from the hospital's Admitting Department to register you in advance, you will need to do this when you arrive at the hospital. After you arrive at the EEG department, we will decide when it is best for you to return to Admitting.

Will My Child Be Sedated for the Test?

In order to get the best results, it is important for your child to be very still and relaxed for this test. We can get the very best results when your child is asleep or very, very drowsy. This can be an uncomfortable test and we recommend that

all children be given a mild sedative one hour prior to the time of testing.

Chloral Hydrate is one of the safest sedating medications available for infants and children. Our nurse will ask questions about your child's health to make sure that there are no potential problems with your child being sedated.



If sedation has been ordered for your child, you or a legal guardian must accompany your child to the test. If this is not possible please contact the EEG Department at 604-875-2124 to reschedule.

How Do I Sleep Deprive My Child?

You will be asked to "sleep deprive" your child. The sedation will be more effective if your child is tired when you arrive at the hospital.

Here is a table that tells you how to sleep deprive your child according to his/her age.

Infants	Awake 3 hours prior to appointment time
Children (less than 3 years)	To bed 1 hour later the night before and awake 1 hour earlier on the morning of the test
Children (older than 3 years)	To bed at midnight the night before and awake at 5:00 am the day of the test

It is very important that there is no sleeping after waking up.

What Will Happen at the Test?

The entire appointment will take from 1½ to 2 hours.

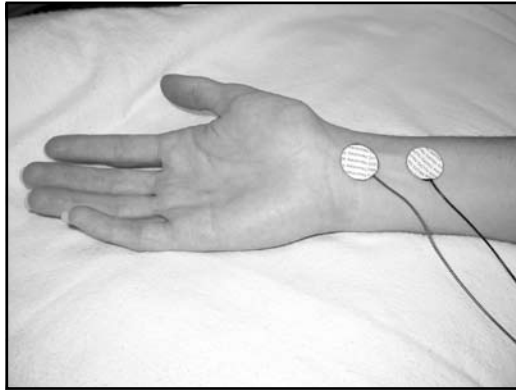
The technologist will ask you details about your child's medical history. You will be asked about your child's:

- birth history
- development (walking, talking)
- schooling
- family medical history
- names and dosages of any prescription or non-prescription medication(s)

If you cannot come to the appointment with your child, please make sure that this information is available to the technologist. If you require the services of an interpreter please make sure that you notify the EEG department at least two days prior to your appointment.

The technologist will apply small sticky pads to your child in these areas:

- the inside of the ankles
- on the side and behind the knees
- two on the back
- one on either collarbone
- two on the inside of each wrist
- one at the back of the neck.



Before applying the sticky pads the technologist will clean each spot with some sandpaper-like tape.

Four electrodes will be attached to your child's head. The technologist will measure your child's head and mark the scalp with a red crayon, and then she will rub each spot with a Q-tip dipped in a special cleaning gel. She will apply the electrodes using a special paste.

Your child will lie on a bed during the test. By this time your child should be feeling very relaxed from the sedation medication.

When we are testing the arms, your child will feel a tingling feeling under the two sticky pads on the inside of each wrist. This tingling feeling will cause the thumbs to twitch. Likewise, when we are testing the legs, your child will feel a tingling

feeling under the two sticky pads on the inside of each ankle. This tingling feeling will cause the toes to twitch.

What Happens After the Test?

The technologist will remove all of the wires. The paste and crayon marks are washed out of the hair with warm water.

The sedation nurse will make sure that there are no adverse reactions to the medication and will give you instructions on what to expect for the rest of the day.

When Will I Know the Results of the Test?

Your child's doctor will have the results about two weeks after the test. You will need to phone his/her office for an appointment (if you do not already have one) to discuss the results.

The technologist cannot give you the results of the test.

**Contact the EEG Department:
Area 1B10
604-875-2124.**

*Developed by the health care professionals
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Somatosensory Evoked Potentials (SEP)



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