

ADVANTAGES VS DISADVANTAGES OF DEVICE-BASED MONITORING

Advantages:

- Alerts caregivers to check on the individual during the seizure
- Prevents injuries by enabling early intervention during a seizure
- Assists in tracking the frequency of seizures
- Provides peace of mind for caregivers
- Identifies potential life-threatening situations
- Helps with the individual's independence

Disadvantages:

- May not pick up on specific seizure types
- Seizures may be missed
- Frequent false alarms are possible
- Technical problems are possible

TEAM CONTACT INFORMATION

For further information about device availability and usage for seizure monitoring, please consult your healthcare provider.

For information on the brochure and results, please contact Dr. Julia Jacobs-LeVan's team by scanning the QR code to the right:



SEIZURES USING DEVICES FOR MONITORING



DEVICE SPECIFICATIONS

Device Name	Canadian Availability	Cost	Website
Emfit Movement Monitor	Yes	Monitor: \$594 USD Optional Remote alarm: \$45 Medical grade AC adapter: \$45 Shipping: \$65	https://www.epiusa.net/
EpiMonitor (Embrace Plus included), EmbraceMini & Embrace Plus Empatica	Yes	Empatica devices are currently unavailable for purchase (research & clinical use only). EpiMonitor Embrace Plus available in USA only (requires prescription & subscription fee)	https://www.empatica.com/
Owlet Devices	Yes; Owlet BabySat <u>only</u> available in USA	Owlet Dream Duo 2 \$560 CAD Owlet Dream Sock \$419 Owlet Cam 2 \$200	https://owletcare.ca/
SAMi	Yes	Complete Kit: ~\$1375 USD Camera only: \$449, Router Kit: \$729, SAMi-3 Camera & iPad Kits: ~\$1162 Shipping ~\$133	https://www.samialert.com/
Vital Sign Monitors	Yes	Can be found online for ~\$150+	Not Applicable
¹ Pulse Oximeters	Yes	Can be found online for ~\$35+	Not Applicable

¹**Disclaimer:** This device has been reported to be used by caregivers but is not recommended for seizure monitoring.

DIFFERENCES AMONG DEVICES

1. The heart rate detector detects heart rate changes specifically triggered by a seizure.
2. The surface EMG detects seizures with a motor component and can distinguish seizure types (epileptic vs. non-epileptic).
3. Motion detectors (actigraphy & accelerometer) detect movement (actigraphy) and changes in the velocity/trajectory of movement (accelerometry).
4. Electrodermal activity detectors are watch-like accessories that detect changes in skin conductance.
5. Pulse oximeters and vital sign monitors can detect a drop in oxygen saturation and create an alert.
6. Smart watches can detect heart rate, oxygen saturation, etc. and create an alert via connected apps.
7. Cameras might detect abnormal motions and do not have to be worn on the body.

MONITORING DEVICES SUMMARY TABLE

Monitoring devices are constantly being developed, and it is important to receive up-to-date information! below.

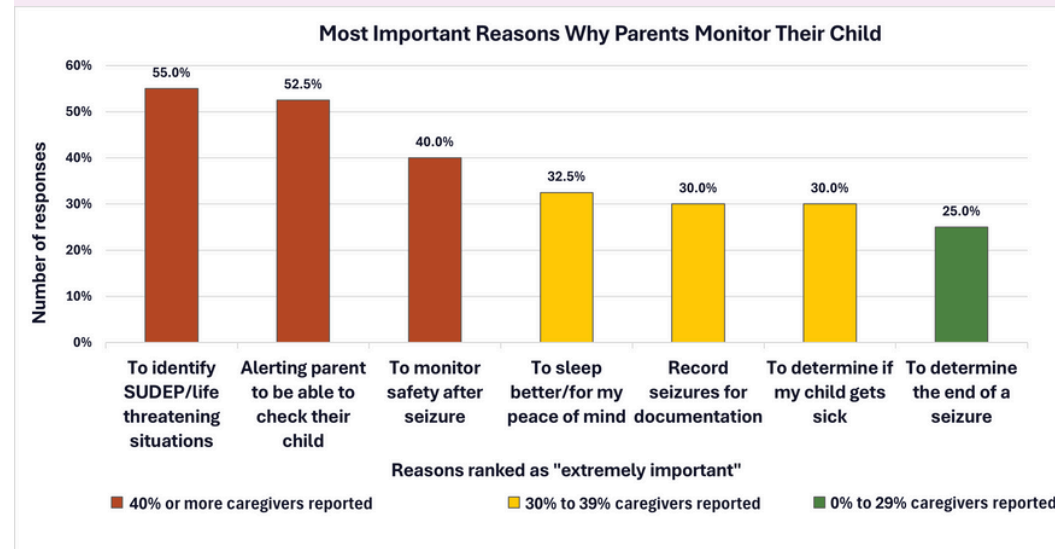
For a simple overview of devices, costs, and availability in Canada, please scan the QR code to the right:



DETECTING YOUR CHILD'S SEIZURES

Have you ever wondered about your child's safety during seizures, and if you may be missing any?

We know this is important for many families.
So, we asked them why!



The optimal device for a particular person with epilepsy depends on the main purpose of the device, personal preferences, age, and seizure type. This brochure will give you an overview of the different devices available in Canada that you can try. Please remember to consult with your healthcare provider.

SEIZURE MONITORING DEVICES IN CANADA

