

Table of anti-epileptic medication used for treating epilepsy in children under the age of 12

Drug (Generic Name)	Available as (Brand Name)	Usual total daily dosage * Indicates Usual starting dose mg/kg/day (mg of AED per kg of the child's weight per day)	Doses/day	Treatment	Possible side effects include
ACETAZOLAMIDE	Diamox: Tablets 250mg. Slow release Capsules 250mg.	5* 10-20	2	May be used for menstrual related seizures, certain episodic disorders and to enhance certain other anti-epileptic drugs e.g. carbamazepine.	Lack of appetite, loss of weight, drowsiness, depression, pins and needles in hands and feet, joint pains, increased urine output, thirst, headache, dizziness, fatigue and irritability.
CARBAMAZEPINE	Carbamazepine tablets BP: 100mg, 200mg, 400mg. Tegretol: Tablets 100mg, 200mg, 400mg. Chewtabs 100mg, 200mg. Liquid sugar free 100mg/5mL. Suppositories 125mg, 250mg. Tegretol Retard: Tablets 200mg, 400mg.	5* 10-25	2 (Tegretol Retard is given twice a day; liquid is given 3 times a day.)	Effective against generalised tonic-clonic and partial seizures. Ineffective against absences. May worsen myoclonic and absence seizures.	Skin rash, if allergic to carbamazepine. Blurred vision, double vision, unsteadiness and nausea may occur initially or if the dose is too high. Dizziness and headaches.
CLOBAZAM	Frisium: Tablets 10mg.	0.125* 0.25 (Over 12 yrs old 10-15mg.)	2	Effective against generalised tonic-clonic and partial seizures, but tolerance develops in about one third of children.	Drowsiness may occur but this drug is less sedating than clonazepam or diazepam. Fatigue, irritability and depression.
CLONAZEPAM	Rivotril: Tablets 0.5mg, 2mg.	25 mcg/kg* 0.1-0.3 for under 12 months 0.3-1 for 1-5 yrs old 1-2 for 5-12 yrs old	2/3	Effective against generalised tonic-clonic and partial seizures, absences, myoclonic seizures, Lennox-Gastaut syndrome, infantile spasms and status epilepticus.	Drowsiness and sedation are quite common but these may wear off and tolerance (decline in effectiveness with time) tends to develop. Increased respiratory tract secretions. Fatigue, aggression and overactive restlessness.
ETHOSUXIMIDE	Emeside: Syrup 250mg/5mL. Zarontin: Syrup 250mg/5mL.	10* 15-35	2	Effective against generalised absences and may be used for epilepsies with similar EEG changes to absences.	Nausea, headache and drowsiness.
GABAPENTIN	Neurontin: Capsules 100mg, 300mg, 400mg. Tablets 600mg, 800mg.	10* 30-60	3 (Twice daily is adequate)	Recommended in partial seizures where previous treatment has been ineffective. May make myoclonic and/or absence seizures worse.	Drowsiness, dizziness, headache, fatigue, double vision, unsteadiness and shaky movements.
LAMOTRIGINE	Lamictal: Tablets 25mg, 50mg, 100mg, 200mg. Dispersible tablets 2mg, 5mg, 25mg, 100mg.	0.1 to increase over 6 weeks to 0.5 when sodium valproate is taken as well*. 0.5-8.0 when sodium valproate is taken as well. 0.5 to increase over 6 weeks to 2 when taken alone or with any other AEDs*. 2-12 when taken alone or with any other AEDs	2	Effective against partial, absence, generalised tonic-clonic seizures and Lennox-Gastaut syndrome.	Skin rash particularly if rapid dose increase, if allergic to lamotrigine. Drowsiness, double vision, dizziness, headache and flu-like symptoms, if the dose is too high. Possibly insomnia. Tremor may occur when used with sodium valproate. This may reduce if either medication is adjusted.
LEVETIRACETAM	Kepra: Tablets 250mg, 500mg, 1000mg. Oral solution 100mg/mL	10* 10-60	2	Can be used in children with partial or generalised seizures over 4 years of age.	Dizziness, nausea, sedation and behaviour change.
NITRAZEPAM	Suspension: 2.5mg/5ml suspension.	0.25* 0.5	2/3	Infantile spasms.	Confusion, dependence, shaky movements, muscle weakness and loss of memory.
OXCARBAZEPINE	Trileptal: Tablets 150mg, 300mg, 600mg.	10* 10-50 (Not licensed for children under 6 yrs old.)	2	Partial and generalised seizures.	Skin rash if allergic to oxcarbazepine. Double vision, unsteadiness, headache, nausea and confusion.
PHENOBARBITONE	Phenobarbitone BP: Tablets 15mg, 30mg, 60mg. Elixir 15mg/5mL.	4* 4-8	2	Effective against generalised tonic-clonic and partial seizures. Status epilepticus, neonatal seizures.	Drowsiness may occur initially, sedation and slowing of mental performance may persist. Fatigue, listlessness, tiredness, depression, rash, insomnia and irritability. Hyperactivity, aggression and subtle impairment of memory, mood and learning capacity.
PHENYTOIN	Phenytoin BP: Tablets 100mg. Epanutin: Capsules 25mg, 50mg, 100mg, 300mg. Chewable Infatabs 50mg. Suspension 30mg/5mL.	4* 4-8 (Doses vary considerably depending on age.)	2	Effective against generalised tonic-clonic and partial seizures. Status epilepticus. Blood testing is essential when using phenytoin as the relationship between dose and blood level is complex.	Skin rash if allergic to phenytoin. Drowsiness, unsteadiness and slurred speech may occur if the dose is too high. Coarsening of facial features, overgrowth of gums, growth of excess hair and acne may be problems with prolonged therapy, as can some anaemias (treated with folic acid). Shaky movements, unsteady gait, rapid involuntary movement of the eye and sedation.
PRIMIDONE	Mysoline: Tablets 250mg.	5* 20-30	2	Partial and generalised tonic-clonic seizures.	Fatigue, listlessness, tiredness, depression, psychosis, overactive restlessness and irritability.
SODIUM VALPROATE	Sodium valproate BP: Tablets 200mg, 500mg. Oral solution 200mg/5mL. Epilim: Tablets 200mg, 500mg. Crushable tablets 100mg. Liquid sugar free 200mg/5mL. Syrup 200mg/5mL. Epilim Chrono: Tablets 200mg, 300mg, 500mg.	5* 20-40	2 (Epilim Chrono is given once a day.)	Effective against generalised tonic-clonic and partial seizures and absences.	Hair loss occurs in some people but this is not usually severe and is usually reversible if the dose is reduced. Weight gain may occur with increased appetite. Liver damage due to sodium valproate is very uncommon. Gastric problems, hyperactivity and behaviour problems. The use of sodium valproate has been associated with increased incidence of polycystic ovaries and menstrual irregularities but needs to be evaluated further. Drowsiness and shaky movements are infrequent side effects.
TIAGABINE	Gabitril: Tablets 5mg, 10mg, 15mg.	5 mg/day not per kg* 5-30 mg/day not kg (Not licensed for children under 12 yrs old.)	3	Recommended in partial seizures when previous treatment has been ineffective. May make myoclonic seizures worse.	Dizziness, fatigue, anxiety, tremor, concentration difficulties, depression of mood, agitation and jerkiness of limbs.
TOPIRAMATE	Topamax: Tablets 25mg, 50mg, 100mg, 200mg. Sprinkle capsules: 15mg, 25mg, 50mg.	0.5-1.0* 6.0 - 12.0	2	Recommended in partial and generalised seizures. Severe myoclonic epilepsy in infancy. For children over 2 years old.	Headache, drowsiness, dizziness, pins and needles in hands and feet and loss of weight. Increased risk of kidney stones. Slowing of mental performance and of language may occur but minimised if dose started low and increased slowly. Cases of eye reactions have rarely been associated with topiramate occurring within 1 month of starting treatment.
VIGABATRIN	Sabril: Tablets 500mg. Powder (sugar free) 500mg/sachet.	40* Up to 20-100mg for refractory patients or 150mg for infantile spasms.	2	Can be considered for resistant partial seizures if visual fields can be monitored. First line for infantile spasms. May worsen absences and myoclonic seizures.	Drowsiness, nausea, behaviour and mood changes. Psychotic reactions have been reported. Visual field defects have been reported in one in three adults taking vigabatrin in the long term. Visual fields should be measured every six months while taking vigabatrin.

* These are the recommended starting doses for each anti-epileptic drug. If you have any queries contact your doctor or pharmacist.

Table II : Emergency Drug Treatment

Drug (Generic Name)	Available as (Brand Name)	Dose	Treatment	Possible side effects
DIAZEPAM	Stesolid: rectal tubes 5mg, 10mg. Diazepam Rectubes: 2.5mg, 5mg, 10mg.	0.5mg/kg	For emergency use only in status epilepticus.	Drowsiness, unsteadiness, blurred vision, amnesia and vertigo.