

## MEDICATION INFORMATION FOR PARENTS

### Anticonvulsants

_____	is taking	_____
Patient's name		Medication
_____		
Doctor's name		
If you have any questions about this medicine, please call		
_____		_____
		Name
_____		
_____		_____
Telephone during business hours		Telephone for emergencies at other times

#### General Information About Medication

Each child and adolescent is different. No one has exactly the same combination of medical and psychological problems. It is a good idea to talk with your child's doctor about the reasons a medicine is being used.

It is very important that the medicine be taken exactly as the doctor instructs. However, everyone forgets to give a medicine on time once in a while. It is a good idea to ask the doctor in advance what to do if this happens. Do not stop or change a medicine without asking the doctor first.

If the medicine seems to stop working, it may be because it is not being taken regularly. Your child may be "cheeking" or hiding the medicine or forgetting to take it (especially at school). The doses may be too far apart, or your child may need a different dose. Something at school, at home, or in the neighborhood may be upsetting your child, or your child may need special help for learning disabilities or tutoring. Please discuss your concerns with your child's doctor. **Do not just increase the dose!**

All medicines should be kept out of the reach of children and should be supervised by an adult. If someone takes too much of a medicine, call your child's doctor, the poison control center, or a hospital emergency room.

Each medicine has a "generic" or chemical name. Just like laundry detergents or paper towels, some medicines are sold by more than one company under different brand names. The same medicine may be available under a generic name and several brand names. The generic medications are usually less expensive than the brand name ones. The generic medications have the same chemical formula, but they may or may not be exactly the same strength as the brand-name medications. Also, some brands of pills contain dye that can cause allergic reactions. It is a good idea to talk to your child's doctor and the pharmacist about whether it is important to use a specific brand of medicine.

All medicines can cause an allergic reaction. Examples are hives, itching, rashes, swelling, and trouble breathing. Even a tiny amount of a medicine can cause a reaction in patients who are allergic to that medicine. Be *sure* to talk to your child's doctor before restarting a medicine that has caused an allergic reaction.

Taking more than one medicine at the same time may cause more side effects, or one of the medicines may not work as well. Always ask your child's doctor, nurse, or pharmacist before adding another medicine, either prescription or over-the-counter. Be sure that each doctor knows about all of the medicines your child is taking. Also tell the doctor about any vitamins, herbal medicines, or diet supplements your child may be taking. Some of these may have side effects alone or when taken along with medication.

Everyone taking medicine should have a physical examination at least once a year.

If you suspect your child is using drugs or alcohol, please tell the doctor right away.

Pregnancy requires special care in the use of medicine. Please tell the doctor immediately if you suspect your child is pregnant.

Printed information like this applies to children and adolescents in general. If you have questions about the medicine, or if you notice anything unusual, please ask your child's doctor or nurse. As scientific research advances, knowledge increases and advice changes. Even experts don't always agree. Many medicines have not been approved by the U.S. Food and Drug Administration for use in children. For this reason, use for a particular problem or age group often is not listed in the *Physicians' Desk Reference*. This does not necessarily mean that the medicine is dangerous or does not work, only that the company that makes the medicine has not applied for permission to advertise the medicine for use in children. Usually this is because it is expensive to do the tests needed to apply for approval for use in children.

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## What Are Anticonvulsants?

*Anticonvulsants* were first used to treat seizures (fits, convulsions). Now they are used also for behavioral problems or bipolar disorder (manic-depressive disorder) whether or not the patient has seizures. They also may be used when the patient has a history of severe mood changes, sometimes called mood "swings." A list of the anticonvulsants used as mood stabilizers follows:

<b>Brand name</b>	<b>Generic name</b>
Tegretol	carbamazepine (tablets, chewable tablets, suspension)
Tegretol-XR	carbamazepine extended-release (tablets)
Carbatrol	carbamazepine extended-release (capsules)
Depakene	valproic acid (capsules, syrup)
Depakote Sprinkle	divalproex sodium (capsules)
Depakote ER	divalproex sodium extended-release (tablets)
Klonopin	clonazepam
Lamictal	lamotrigine (tablets, chewable tablets)
Neurontin	gabapentin (tablets, capsules, oral solution)
Topamax	topiramate

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## How Can These Medicines Help?

Anticonvulsants can reduce aggression, anger, and severe mood swings.

## How Do These Medicines Work?

Anticonvulsants are thought to work by stabilizing a part of the brain cell (the cell membrane or envelope) or by increasing the concentrations of certain chemicals in the brain (such as GABA [ $\gamma$ -aminobutyric acid]).

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## How Will the Doctor Monitor These Medicines?

The doctor will review your child's medical history and physical examination before starting anticonvulsant medicines. Your child may need to take a test called an electroencephalogram or EEG. This simple test takes about an hour. It will show a picture of your child's brain waves so that the doctor will know if your child's brain rhythm is normal. The doctor will need to do blood tests, both before starting the medicine and every month or so afterward, to make sure that the medicine is at the right dose and that no side effects are present. Blood should be drawn first thing in the morning, 10–12 hours after the last dose and before the morning dose. Blood tests are not usually needed before starting Klonopin (clonazepam). For all these medicines, the doctor will want to have regular appointments with your child to monitor progress, to adjust the dose, to watch for side effects, and to evaluate whether the medicine should be stopped or whether other treatments are needed.

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## What Side Effects Can These Medicines Have?

Any medicine can have side effects, including an allergy to the medicine. A skin rash, hives, swelling, or trouble breathing may be an allergy. Because each patient is different, the doctor will monitor your child closely, especially when the medicine is started. Your child's doctor will work with you to increase the positive effects and decrease the negative effects of the medicine. Please tell the doctor if any of the following side effects appear or if you think that the medicine is causing any other problem. (Not all of the rare or unusual side effects are listed.)

### Tegretol (Carbamazepine)

#### Common Side Effects

These side effects are more common when first starting the medicine. If your child shows any of the following side effects, tell the doctor within a week or two:

- Double or blurred vision
- Sleepiness (don't allow your child to drive, ride a bicycle or motorcycle, or operate machinery)
- Dizziness
- Clumsiness or decreased coordination
- Nausea or upset stomach (have your child take medicine with food)
- Mild decrease in the number of white blood cells
- Hair loss (grows back when the carbamazepine is stopped)
- Increased risk of sunburn (have your child wear sunblock or protective clothing or stay out of the sun)
- Skin rash (may indicate an allergic reaction)

## **Tegretol (Carbamazepine) (continued)**

### **Behavioral and Emotional Side Effects**

Call the doctor within a day or two if your child experiences any of the following side effects:

- Anxiety or nervousness
- Agitation or mania
- Impulsive behavior
- Irritability
- Increased aggression
- Hallucinations (hearing voices or seeing things that are not there)
- Motor or vocal tics (fast, repeated movements or sounds)

### **Very Rare, but Serious, Side Effects**

- Decrease in the number of blood cells
- Lung irritation
- Worsening of seizures
- Severe skin rashes

### **Possibly Dangerous Side Effects**

**Call the doctor *immediately* if your child experiences any of the following side effects:**

- Feeling sick or unusually tired for no reason
- Loss of appetite
- Yellowing of the skin or eyes
- Dark urine or pale bowel movements
- Swelling of the legs or feet
- Greatly increased or decreased frequency of urination
- Unusual bruising or bleeding
- Sore throat or fever
- Mouth ulcers
- Vomiting
- Skin rash, especially with fever
- Severe behavioral problems

## **Depakene (Valproic Acid)/Depakote (Divalproex Sodium)**

### **Common Side Effects**

These side effects are more common when first starting the medicine. Tell the doctor within a week or two if your child experiences any of the following side effects:

- Upset stomach (this can be helped by taking medicine with food, or ask the doctor about a different form of the medicine)
- Increased appetite

## Depakene (Valproic Acid)/Depakote (Divalproex Sodium) (*continued*)

### Common Side Effects (*continued*)

- Weight gain
- Thinning hair
- Tremor (shakiness)
- Drowsiness, sleepiness, or tiredness (don't allow your child to drive, ride a bicycle or motorcycle, or operate machinery)
- Increased facial or body hair
- Irregular menstrual periods

### Behavioral and Emotional Side Effects

Call the doctor within a day or two if your child experiences any of the following side effects:

- Increased aggression
- Increased irritability

### Very Rare, but Serious, Side Effects

- Liver failure\*
- Inflammation of the pancreas\*
- Enlargement of ovaries
- Severe acne

### Possibly Dangerous Side Effects

**Call the doctor *immediately* if your child experiences any of the following side effects:**

- Feeling weak or sick or unusually tired for no reason
- Loss of appetite (for more than a few hours)
- Yellowing of skin or eyes
- Dark urine or pale bowel movements
- Swelling of the legs, feet, or face
- Greatly increased or decreased frequency of urination
- Unusual bruising or bleeding
- Sore throat or fever
- Mouth ulcers
- Vomiting (for more than a few hours)
- Persistent stomachache (more than 20 minutes)
- Skin rash
- Seizure (fit, convulsion)
- Severe behavioral problems
- Mental confusion

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\*Liver and pancreas problems are almost never seen except in children younger than 6 years old who are taking more than one medicine.

## Klonopin (Clonazepam)

### Common Side Effects

These side effects are more common when first starting the medicine. Tell the doctor within a week or two if your child experiences any of the following side effects:

- Difficulty with balance
- Drowsiness or sleepiness (don't allow your child to drive, ride a bicycle or motorcycle, or operate machinery)

### Behavioral and Emotional Side Effects

Call the doctor within a day or two if your child experiences any of the following side effects:

- Irritability
- Excitement
- Increased anger or aggression
- Trouble sleeping or nightmares
- Memory loss

### Serious Side Effects

**Call the doctor or go to an emergency room *immediately* if your child experiences any of the following side effects:**

- Uncontrollable behavior
- If combined with alcohol, may lead to severe sleepiness, unconsciousness, or **DEATH**

## Lamictal (Lamotrigine)

### Common Side Effects

These side effects are more common when first starting the medicine. Tell the doctor within a week or two if your child experiences any of the following side effects:

- Sleepiness (don't allow your child to drive, ride a bicycle or motorcycle, or operate machinery)
- Dizziness
- Headache
- Blurred vision
- Double vision
- Unsteadiness
- Nausea

### Behavioral and Emotional Side Effects

Call the doctor within a day or two if your child experiences the following side effects:

- Anxiety or nervousness
- Agitation or mania

### **Lamictal (Lamotrigine) (continued)**

#### Possibly Dangerous Side Effects

Call the doctor *immediately* if your child experiences any of the following side effects:

- Vomiting
- Rash (Some extreme cases develop into a disorder called Stevens-Johnson syndrome, a serious and potentially life-threatening condition. This is more likely when combined with Depakene or Depakote.)
- Change in color of urine or frequency of urination

### **Neurontin (Gabapentin)**

#### Common Side Effects

These side effects are more common when first starting the medicine. Tell the doctor within a week or two if your child experiences any of the following side effects:

- Sleepiness (don't allow your child to drive, ride a bicycle or motorcycle, or operate machinery)
- Dizziness
- Unsteadiness
- Rapid, involuntary movements of the eyes
- Tremor
- Double vision
- Fatigue

#### Behavioral and Emotional Side Effects

Tell the doctor within a week if your child experiences any of the following side effects:

- Worsening of behavioral problems
- Temper tantrums, increased anger and/or aggression
- Irritability

### **Topamax (Topiramate)**

#### Common Side Effects

These side effects are more common when first starting the medicine. Tell the doctor within a week or two if your child experiences any of these side effects:

- Confusion (more of a problem than with other anticonvulsants)
- Sleepiness (don't allow your child to drive, ride a bicycle or motorcycle, or operate machinery)
- Dizziness
- Vision problems
- Unsteadiness
- Speech problems
- Slowed movements
- Skin feeling like "pins and needles"

## Topamax (Topiramate) (continued)

### Common Side Effects (continued)

- Nervousness
- Nausea
- Memory problems
- Tremor (shakiness)

### Behavioral and Emotional Side Effects

Call the doctor within a day or two if your child experiences any of the following side effects:

- Nervousness, anxiety
- Irritability

### Possibly Dangerous Side Effects

**Call the doctor *immediately* if your child experiences any of the following side effects:**

- Clumsiness or poor coordination
- Bloody or cloudy urine
- Unexplained fever, chills, or sore throat
- Sharp back pain
- Blurred vision or eye pain

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## What Could Happen if These Medicines Are Stopped Suddenly?

Stopping carbamazepine or valproic acid suddenly causes uncomfortable withdrawal symptoms. Stopping clonazepam (Klonopin) suddenly could cause seizures (fits, convulsions), especially if your child is being treated for seizures.

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## How Long Will These Medicines Be Needed?

The length of time a person needs to take an anticonvulsant depends on what disorder is being treated. For example, someone with an impulse-control disorder usually takes an anticonvulsant only until behavioral therapy begins to work. Someone with bipolar disorder may need to take anticonvulsants for many years. Please ask your doctor about the length of treatment needed.

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## What Else Should I Know About These Medicines?

If anticonvulsants are taken with other medicine(s), the level of the medicines in the blood could get too high, which could cause side effects. Also, the other medicine might not work as well as it is supposed to. Always check with your child's doctor before starting or stopping any medicines or changing their dose.

Carbamazepine interacts with many other medicines. Taking it with another medicine may make one or both not work as well or may cause more side effects. Be sure that each doctor knows about all of the medicines being taken. It is best to avoid using erythromycin with carbamazepine.



