

What is Attention Deficit Hyperactivity Disorder (ADHD)?

It is a disorder characterized by symptoms of inattentiveness, hyperactivity, and impulsiveness, which are not appropriate to the child's age. ADHD usually manifests in children by the age of 3 and it affects up to 5% of school age children.

What are the sign and symptoms of ADHD?

Inattentiveness:

- Not attentive to details or makes careless mistakes in schoolwork, work, or other activities
- Difficulty sustaining attention in tasks or play activities
- Does not seem to listen when spoken to directly
- Does not follow through on instructions and fails to finish schoolwork, chores or duties
- Has difficulty organizing tasks and activities
- Avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort
- Loses things necessary for tasks or activities
- Forgetful in daily activities

Hyperactivity:

- Often fidgets with hands or feet or squirms in seat
- Often leaves seat in classroom or in other situations in which remaining seated is expected
- Runs about or climbs excessively in situations in which it is inappropriate
- Has difficulty playing or engaging in leisure activities quietly
- Often "on the go" or often acts as if "driven by a motor"
- Talks excessively

Impulsivity:

- Often blurts out answers before questions have been completed
- Has difficulty awaiting turn
- Interrupts or intrudes on others

What are the medications used to treat ADHD?

Stimulants, non-stimulants, antidepressants and antihypertensive agents are used to treat ADHD.

Stimulants:

The most commonly used drugs for ADHD are the stimulants. These drugs are considered first-line agents. Stimulants are effective in treating inattentiveness, impulsivity, and hyperactivity. Specific agents include:

- Concerta (methylphenidate)
- Ritalin immediate and extended release (methylphenidate)
- Adderall immediate and extended release (amphetamine)
- Metadate CD or ER (methylphenidate)
- Dexadrine (dextroamphetamine)
- Dextrostat (dextroamphetamine)
- Cylert (pemoline)

Common side-effects of the stimulant class:

- Loss of appetite: occurs in 41% of children
- Trouble sleeping: 28% occurrence
- Irritability: 26% occurrence
- Nausea: 23% occurrence
- Headache: 10% occurrence
- Weight loss
- Stuffy nose
- Nervousness

What happens if my child takes too much of their Stimulant medication?

In any situation such as this, the poison control center at 1-800-222-1222 should be contacted. Do NOT induce vomiting.

Non-Stimulants:

This class only consists of one drug, Strattera.

Strattera (atomoxetine) may cause side effects such as:

- Loss of appetite (most common)
- Upset stomach
- Nausea and vomiting

- Dizziness
- Tiredness
- Mood swings

What happens if my child takes too much of their Non-Stimulant medication?

In any situation such as this, the poison control center at 1-800-222-1222 should be contacted. Do NOT induce vomiting.

Antidepressants:

Antidepressants are considered second line agents for ADHD, and are used in individuals that did not respond to stimulants, experienced intolerable side effects from stimulants or tics developed or worsened. Tricyclic antidepressants (TCA's) are useful in treating hyperactivity and inattentiveness, but lack efficacy for impulsiveness.

The most commonly used tricyclic antidepressants for ADHD include:

- Imipramine
- Desipramine
- Nortriptyline
- Amitriptyline

TCA's may cause a variety of side effects, including:

- Fatigue and sedation
- Constipation
- Dry mouth
- Blurred vision

What if my child takes too much of their tricyclic antidepressants?

The poison control center should be contacted immediately at 1-800-222-1222

Do NOT induce vomiting.

Antihypertensives:

Another medication that is used to treat ADHD is found in the antihypertensive class. The drug is Clonidine, and it is generally used in conjunction with stimulants and is rarely used alone because it is effective for impulsivity and hyperactivity only.

Clonidine's side effects include:

- Sedation
- Dry mouth
- Blurred vision
- Constipation
- Heart effects

An important point to recognize is if Clonidine is discontinued it should be tapered off over time under supervision of physician and not discontinued abruptly.

What if my child takes too much Clonidine?

If it is suspected that the child took too much the poison control center should be contacted immediately at 1-800-222-1222. Do NOT induce vomiting.

Tips for Parenting Children with ADHD

1. Positive reinforcement for positive behavior
2. Follow through with punishments for negative behavior
3. Set up a system to give rewards for good behavior
4. Simplify and shorten directions for activities and chores
5. Keep expectations at achievable level
6. Help the child develop their natural talents
7. Try to keep a routine schedule of daily activities and home life

