

MEDICATIONS USED TO TREAT ADHD (Alphabetical by class)

Generic Class Brand Name	Typical Starting Dose	FDA Max/day	Titration & Timing of Doses	Predominant Adverse Effects	Comments	
Amphetamine Preparations						
Short Acting						
Adderall Dexedrine Dextrostat	3-5 yr.: 2.5mg qday 6+ yr.: 5mg qday-bid	40mg	3-5 yr.: May increase daily dose in 2.5mg increments at weekly intervals 6+ yr.: May increase daily dose in 5mg increments at weekly intervals	Decreased appetite, insomnia, headaches, increased heart rate	<ul style="list-style-type: none"> Short-acting stimulants often used as initial treatment in small children but have disadvantage of BID to TID dosing to control symptoms throughout the day. Longer-acting stimulants offer greater convenience, confidentiality, and compliance with single daily dosing but may have greater problematic effects on evening appetite and sleep. Adderall XR cap may be opened and sprinkled on soft food. Check BP at each visit due to potential for cardiovascular effects, including hypertension. Vyvanse may be opened and sprinkled in water and taken immediately. 	
Long-acting						
Adderall XR	6+ yr.: 10mg qday	30mg	May be increased 5mg-10mg daily at weekly intervals	Decreased appetite, insomnia, headaches, increased heart rate		
Dexedrine Spansule	6+ yr.: 5mg qday-bid	40mg	Increase in increments of 5mg per day at weekly intervals	Decreased appetite, insomnia, headaches, increased heart rate		
Vyvanse	30mg qday	70mg	May be increased by 10-20mg at weekly intervals	Upper abdominal pain, decreased appetite, dizziness, dry mouth		
Methylphenidate Preparations						
Short Acting						
Focalin (dexmethylphenidate)	2.5mg BID	20mg	Adjust in increments of 2.5-5mg/d weekly	Headache, decreased appetite, restlessness, abdominal pain, increased heart rate	<ul style="list-style-type: none"> Short-acting stimulants often used as initial treatment in small children but have disadvantage of BID to TID dosing to control symptoms throughout the day. Methylin is available in chewable tablets and oral solutions. Longer-acting stimulants offer greater convenience, confidentiality, and compliance with single daily dosing but may have greater problematic effects on evening appetite and sleep. Metadate CD, Ritalin LA and Focalin XR capsules may be opened and sprinkled over applesauce. That dose should be taken immediately. Concerta tab should be swallowed whole with liquids. It is a non-absorbable tablet and may be seen in stool. Apply Daytrana 2 hours before desired effect and remove 9 hours after application. If switching from methylphenidate to Focalin (dexmethylphenidate) use one-half the total daily dose of the racemic methylphenidate with a maximum daily dose of 20mg. Quillivant XR oral suspension 25mg/5ml (5mg/ml). Shake vigorously for 10 seconds before use. 	
Methylin Ritalin	5mg BID	60mg	Adjust in increments of 2.5-5mg/dose (depending on weight) AM & noon; add 4pm dose if needed	Decreased appetite, insomnia, headaches, increased heart rate		
Intermediate-acting						
Metadate ER Methylin ER Ritalin SR	10mg QAM	60mg	Add a 2pm dose or add a 5mg or 10mg IR tablet in AM and/or at 4pm	Decreased appetite, insomnia, headaches, increased heart rate		
Metadate CD Ritalin LA	20mg QAM	60mg	Adjust in increments of 10mg/d at weekly intervals			
Long-acting						
Concerta	18mg QAM	6-12 yr.: 54mg 13-17 yr.: 72mg	Children 6+ yr.: May adjust dose at weekly intervals in 18mg increments.	Decreased appetite, insomnia, headaches, increased heart rate		
Daytrana (transdermal system)	10mg patch qday	30mg	Children 6+ yr.: May increase to next highest transdermal patch strength no more frequently than every week	Decreased appetite, insomnia, headaches, increased heart rate, allergic contact dermatitis		
Quillivant XR	20mg QAM	60mg	Children 6+yr.: May increase to the next highest transdermal patch strength no more frequently than every week	Dizziness, decreased appetite, nausea, insomnia, increased heart rate.		

Selective Norepinephrine Reuptake Inhibitor					
Strattera (atomoxetine)	0.5mg/kg/d for 4 days; then 1 mg/kg/d for 4 days; then 1.2 mg/kg/d	Lesser of 1.4mg/kg or 100mg	Children and Adolescents weighing ≤ 70kg: After 3 days of dosing, increase 1.2mg/kg/day. Give once daily or may be evenly divided into 2 doses, in morning and evening Patients weighing > 70kg: After 3 days of dosing, increase to 80mg daily or may be evenly divided into 2 doses, in morning and evening	Nausea, vomiting, GI pain, anorexia, somnolence, dizziness, skin rash, pruritis Increased heart rate or blood pressure, urinary retention, rare severe liver injury Capsule should not be opened as atomoxetine is an ocular and mucous membrane irritant	<ul style="list-style-type: none"> • Not a Schedule II medication. • Consider if active substance abuse or severe side effects of stimulants (mood lability, tics). • Monitor closely for suicidal thinking and behavior, clinical worsening, or unusual changes in behavior. • The full effect may not be appreciated for up to 4 weeks on a given target dose.
Other (selective alpha-2 adrenergic agonist)					
Guanfacine	<45kg: 0.5mg QHS >45 kg: 1mg QHS	27-40.5kg: 2mg 40.5-45kg: 3mg >45kg: 4mg	Titrate in 0.5mg increments BID, TID, QID Titrate in 1mg increments BID, TID, QID	Drowsiness, dry mouth, constipation	<ul style="list-style-type: none"> • Guanfacine does not have a specific FDA indication for treatment of ADHD.
Intuniv (extended-release guanfacine)	1mg qday	4mg/day	May increase by 1mg/day at no less than weekly intervals	Drowsiness, dizziness, dry mouth, abdominal pain, constipation	<ul style="list-style-type: none"> • Swallow whole: chewing or crushing the tablet will markedly enhance the drug's release. • Avoid high fat meals due to increased absorption of the drug. • Do not substitute for immediate-release guanfacine on a mg-per-mg basis due to different pharmacokinetic profiles.
Clonidine	<45kg: 0.05mg QHS >45 kg: 0.1mg QHS	27-40.5 kg: 0.2mg 40.5-45 kg: 0.3mg >45kg: 0.4mg	Titrate in 0.05mg increments BID, TID, QID Titrate in 0.1mg increments BID, TID, QID	Drowsiness, hypotension	<ul style="list-style-type: none"> • Clonidine does not have a specific FDA indication for treatment of ADHD.
Kapvay (extended-release clonidine)	0.1mg QHS	0.4mg/day	May increase in increments of 0.1mg/d at weekly intervals	Drowsiness, headache, fatigue, insomnia	<ul style="list-style-type: none"> • Swallow whole. Never crush, chew or cut. • Do not substitute for the extended-release tablets on a mg-per-mg basis with other clonidine formulations because of differing pharmacokinetic profiles. • When discontinuing, taper dose in increments of no more than 0.1mg every 3 to 7 days.

Adapted from:

Institutes for Clinical Systems Improvement (ICSI) (2007). *Health Care Guidelines: Diagnosis and Management of Attention Deficit Hyperactivity Disorder in Primary Care for School-Age Children & Adolescents* (March 2007). Retrieved December 31, 2007 from <http://www.icsi.org/adhd/adhd2300.html>

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American Academy of Pediatrics. *ADHD: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents*. Published in PEDIATRICS Vol. 128 No. 5 November 2011. www.pediatrics.org

Therapeutic Research Center. *Pharmacist's Letter*. (2013) www.PharmacyTechniciansLetter.com

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