Florida Psychotherapeutic Medication Guidelines for Children and Adolescents

2015

Florida Medicaid Drug Therapy Management Program for Behavioral Health

medicaidmentalhealth.org
# Table of Contents

- **Introduction** .................................................................................................................................................................................. 2
- **Principles of Practice Regarding the Use of Psychotropic Medication in Children under Age 6** .......... 6
- **General Procedures for Monitoring Side Effects of Antipsychotic Medication in Children and Adolescents** .............................................................................................................................. 9
- **Attention Deficit Hyperactivity Disorder (ADHD) in Children under Age 6** ................................................................. 10
- **Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old** .................................................................................................................................................. 12
- **Aggression (Severe) in Children under Age 6** ........................................................................................................................... 18
- **Aggression (Chronic, Impulsive) in Children and Adolescents Ages 6 to 17 Years Old** ............................................................... 20
- **Anxiety Disorders in Children under Age 6** ................................................................................................................................. 23
- **Anxiety Disorders in Children and Adolescents Ages 6 to 17 Years Old** .............................................................................. 24
- **Bipolar Disorder (Acute Mania or Mixed Episodes) in Children and Adolescents Ages 6 to 17 Years Old** ........................................... 30
- **Insomnia Disorder in Children and Adolescents** ............................................................................................................................ 33
- **Major Depression in Children under Age 6** ................................................................................................................................. 35
- **Major Depression in Children and Adolescents Ages 6 to 17 Years Old** .............................................................................. 36
- **Obsessive Compulsive Disorder (OCD) in Children Ages 6 to 17 Years Old** ...................................................................................... 40
- **Post-Traumatic Stress Disorder (PTSD) in Children under Age 6** ...................................................................................... 43
- **Post-Traumatic Stress Disorder (PTSD) in Children and Adolescents Ages 6 to 17 Years Old** .................................................... 44
- **Schizophrenia (Early Onset)** ............................................................................................................................................................ 46
- **Tic Disorders in Children and Adolescents Ages 6 to 17 Years Old** ...................................................................................... 49
INTRODUCTION

It is reported that one in five children has a diagnosable mental health problem, and that nearly two-thirds get little help or treatment. The consequences of children not receiving timely mental health care are far-reaching and include school failure, involvement in the criminal justice system, and suicide. This reality poses a great burden on children, their families and society at-large.

Since childhood is a period of rapid growth and development, the diagnosis and treatment of mental disorders must be approached with these changes in mind. While some problems that children experience are temporary and will not require extensive or long-term treatment, other problems that begin in childhood are very serious and disabling with life-long implications.

The treatment of children and adolescents with mental health problems can be challenging to clinicians since empirically-supported treatments and are not always readily available. These challenges can be especially frustrating to the clinician in the absence of clear and robust treatment recommendations.

PURPOSE

The goals of the 2015 Florida Psychotherapeutic Medication Guidelines for Children and Adolescents are to provide a guide to clinicians in using psychotherapeutic medication to treat children and adolescents with behavioral health conditions. The guidelines are intended as a starting point and provide rational approaches to help address some very challenging conditions and provide guidance for the appropriate prescribing of powerful psychotherapeutic medications. As always the clinician and the patient partnership prevails in the choice of treatment.

The guidelines cover a range of conditions that providers may encounter in their clinical practice including: ADHD, anxiety disorders, severe or chronic bipolar disorder, impulsive aggression, and depression. In addition, this year we have expanded the guidelines to include the treatment of obsessive-compulsive disorder (OCD), insomnia disorder, post-traumatic stress disorder in preschool-age children, early onset schizophrenia, and tic disorders.

The current guidelines were developed by a panel comprised of national and state experts in the fields of psychiatry and mental health including academics, psychiatrists, pediatricians, and clinicians working at community mental health centers in the state. In bringing together a diverse group of individuals to serve on the expert panel, we sought to produce a set of guidelines that are sensitive to the practice realities that clinicians encounter each day.

We are grateful to our dedicated panel of experts who have provided their expertise, editorial comments, and invaluable advice. A list of expert panel members and presentations are available on the Medicaid Drug Therapy Management Program website http://medicaidmentalhealth.org. We are also would like to thank all external reviewers who took the time to make comments and point out areas needing clarity. The Florida Agency for Healthcare Administration is to be commended for its pursuit of providing evidence-based treatment recommendations.
The 2015 *Florida Psychotherapeutic Medication Guidelines for Children and Adolescents* are based on a thorough review of the research literature by the expert panel. When the scientific literature is absent or findings are mixed, the guidelines note and explain the absence of clear findings, and advise caution in treatment.

The guidelines are organized by “levels” of treatment recommendations beginning with Level 0 which is comprised of a thorough clinical assessment. Subsequent levels (Levels 1, 2, 3, etc.) are based on the strength of the scientific evidence and expert consensus regarding a particular agent or treatment option. The expert panel considered both safety and efficacy when assigning a treatment option to a level. Thus, a Level 1 treatment option has the strongest empirical basis and safety profile than subsequent levels.

The clinician is encouraged to begin treatment at Level 1. However, any decision regarding treatment should be based on clinical judgment that takes into account patient symptoms, needs, and family treatment preferences.

**Disclaimer**

The *Florida Psychotherapeutic Medication Guidelines for Children and Adolescents* are based on current scientific knowledge and clinical consensus at the time of publication. The guidelines are reviewed and updated every two years to incorporate the latest scientific evidence on psychopharmacologic treatment and management of behavioral health disorders in children.

In addition, these guidelines may not apply to all children. Therefore, the guidelines should be adapted and tailored to the individual characteristics and needs of the child, as well as the treatment preferences of the family.

The use of these guidelines in whole or in part is entirely the responsibility of the clinician. The authors bear no responsibility for treatment decisions and outcomes based on the use of the guidelines.
To the General Pediatrician or Other Health Professional Interested in Using These Guidelines

The Guidelines for the Use of Psychotropic Medications for children on Florida’s Medicaid plans were developed by child psychiatrists and other providers using the best available literature and evidence base when available, along with their own extensive experience. However, as there are not enough child psychiatrists available to treat the many children with mental health disorders, the guidelines may also be used by other health professionals who want to treat these children. Many neurologists and developmental pediatricians are also using these guidelines, but there are still more children and families out there who have difficulty obtaining their services in a timely fashion. These families are turning to their general pediatricians or other primary care providers for help.

A workgroup of general and developmental pediatricians reviewed these guidelines with the goal to determine which ones may be most appropriate for use by non-trained child psychiatrists. The workgroup members were in agreement that certain diagnoses, such as schizophrenia, bipolar disorder, obsessive-compulsive disorder, and others, are outside the purview of most general pediatricians. Other disorders, such as Attention Deficit Disorder, Insomnia Disorders, and Anxiety Disorders, may be within the comfort zone of some general pediatricians who have additional experience with these children and medications. We encourage pediatricians who feel they have the comfort and knowledge to treat these children to use these guidelines. We would also like to remind pediatricians that there is a Child Psychiatry Access Line available to give guidance: 1-866-487-9507.

Many pediatricians may not want to use these guidelines at all for reasons such as lack of training, lack of comfort, and lack of appropriate payment. That is understandable, and the hope is that more support and training will be made available over time to increase the mental health services available to children in Florida. Meanwhile, we hope these guidelines will give you some initial resources to improve the mental health of children in the Medicaid program in the state of Florida.

Jennifer Takagishi, MD
Expert Panel Member, 2014
Level 0
Conduct comprehensive multi-informant, multi-modal, multi-disciplinary assessment for those with positive screen.

Use validated measures for assessing psychiatric symptoms and impairment in young children.

**Recommended measures of early childhood symptoms include:**

- Ages 16 to 30 months: Modified Checklist for Autism in Toddlers (M-CHAT)
- Ages 2 to 4 years old and 4 to 11 years old: Strengths and Difficulties Questionnaire (SDQ)
- Ages 3 to 21 years old: The Child /Adolescent Psychiatry Screen (CAPS)
- Ages 4 to 11 years old: Home Situations Questionnaire (HSQ)

Links to measures listed above are available at [http://medicaidmentalhealth.org/resourcesLinks/diagnosticTreatmentScales.cfm](http://medicaidmentalhealth.org/resourcesLinks/diagnosticTreatmentScales.cfm)

**A comprehensive mental health assessment includes:**

- A comprehensive assessment of the full range of psychiatric symptoms and disorders, as well as impairment from these symptoms and disorders.
- A full developmental assessment.
- A full medical history including a sleep history.
- A relevant medical work-up, physical examination, and nutritional status evaluation.
- An assessment of family psychiatric history which includes past and current history of parental psychiatric illnesses, substance abuse and treatment history of parents, parental figures (e.g., stepparent), siblings, and other relatives.
- An assessment of family structure and functioning, parent-child relationship and interaction.
- An assessment of environmental risk factors and stressors including history of abuse (physical, sexual, neglect), traumatic life events, domestic violence, economic instability, etc.
## Level 1
Always start with psychosocial treatment. Parental involvement is essential with involvement by other caregivers or school-based interventions as needed.
- Monitor the child’s response to treatment using reliable and valid measures of changes in targeted symptoms.
- Except in rare cases, attempt a course of at least 12 weeks of psychosocial interventions before considering medication.

## Level 2
If medications are being considered, first reassess diagnosis and diagnostic formulation.

If a decision is made to initiate medication:
- Initiate with monotherapy. Start low, go slow.
- Except in rare cases, use monotherapy.
- After 6 to 9 months of stabilization, plan down titration trial to determine if the medication is still needed and effective, (taper or discontinuation trial).
- Continue psychosocial treatment during treatment with medication.
- Use of psychotherapeutic medication in children under the age of 24 months is not recommended unless there are rare and extenuating circumstances.
The use of antipsychotic medications in preschoolers (children under six years old) which is generally “off-label”, is not recommended and should only be considered under the most extraordinary circumstances. Disruptive aggression in autism is one such circumstance. Adequately powered studies have not been conducted in preschoolers.

Before considering pharmacological treatment for preschoolers the following guidelines are strongly recommended:

1. Perform a developmentally-appropriate, comprehensive psychiatric assessment with diagnoses, impairments, treatment target and treatment plans clearly identified and documented.
2. Comprehensive assessment must include evaluation of parental psychopathology and treatment needs, as well as family functioning.
3. Psychosocial treatments should precede the use of psychotropic medications and should continue if medications are prescribed.

Antipsychotic Dosing Information for Children under Age 6 (Should only be used under rare circumstances)

The dosing information is based on expert opinion and therefore is Level C evidence.

<table>
<thead>
<tr>
<th>Dosing Information</th>
<th>Drug Name</th>
<th>Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Risperidone</td>
<td>Starting dose: 0.125 mg/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum dose: 1.5 mg/day</td>
</tr>
<tr>
<td></td>
<td>Aripiprazole</td>
<td>Starting dose: 1 mg/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maximum dose: 7.5 mg/day</td>
</tr>
</tbody>
</table>
Conduct side effect and metabolic assessments and laboratory tests that are clinically relevant, comprehensive, and based on established guidelines.

- Monitor for metabolic syndrome criteria when prescribing atypical antipsychotics (Schreiber and Flint, 2014). Three of five criteria met:
  - Waist circumference greater than 90% for age
  - BP if <10 years old, then >90% for blood pressure
  - BP if >10 years old then >130 systolic or >85 diastolic
  - Triglycerides greater than 150 or greater than 95% for age
  - HDL <40 or <5% for age
  - Fasting blood glucose >100 (If metabolic abnormalities, refer to primary care physician)

- Monitor for extrapyramidal side effects (EPS) associated with second-generation antipsychotic use.
  - The Abnormal Involuntary Movement Scale (AIMS)
  - The Extrapyramidal Symptom Rating Scale (ESRS)
  - Dyskinesia Identification System: Condensed User Scale (DISCUS)

  Links to measures listed above are available at [http://medicaidmentalhealth.org/resourcesLinks/diagnosticTreatmentScales.cfm](http://medicaidmentalhealth.org/resourcesLinks/diagnosticTreatmentScales.cfm)

- Provide accessible information to parents and families about identifying and managing side effects, including lifestyle and nutritional changes, monitoring labs, etc.

**References**

### Level 0
Conduct comprehensive assessment and provide psychoeducation about ADHD, including clearly defined treatment expectations. Consider co-morbid developmental language disorder, other learning disabilities (LD), or Autism Spectrum Disorders (ASD).

Facilitate family engagement, psychoeducation about ADHD (evidence-based behavior and educational interventions and medication treatments), and treatment preference assessment. Treatment response should be monitored using rating scales and appropriate safety assessments (vital signs, height, and weight).

### Level 1
Provide parent management/skills training/or other behavioral intervention at home and/or school for a minimum of 12 weeks.

### Level 2
Initiate monotherapy with methylphenidate formulation.

### Level 3
If methylphenidate is unsuccessful, could consider monotherapy with atomoxetine.

### Level 4
Consider amphetamine formulations which have FDA indication for ages 3 to 5 years old, but limited clinical trial evidence base; may also consider alpha-2 agonists; but no published data is available.

- After 6 months of any sustained improvement on any effective medication treatment, taper in order to determine the lowest effective dose and possibility of discontinuation.

### Not Recommended:
- Antipsychotic medication to treat core symptoms of ADHD in absence of Autism Spectrum Disorders (ASD).
- Concurrent use of two or more alpha-2 agonists.
### Attention Deficit Hyperactivity Disorder (ADHD) in Children under Age 6 (continued)

#### ADHD Medication Treatment for Children under Age 6

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Starting Dose Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Methylphenidate Formulations</strong>:</td>
<td></td>
</tr>
<tr>
<td>Short Acting:</td>
<td>1.25 t.i.d. titrate as needed to doses not exceeding 1 mg/kg/day</td>
</tr>
<tr>
<td>Ritalin®, Methyllin®, Methylin® Chewable Tablets,</td>
<td>Recommendations extrapolated from the Preschool ADHD Treatment Study (PATS)</td>
</tr>
<tr>
<td>Methylin® Oral Solution</td>
<td></td>
</tr>
<tr>
<td><strong>Atomoxetine</strong>:</td>
<td>10mg/day – titrate as needed to doses not to exceed 1.4mg/kg/day</td>
</tr>
<tr>
<td>(Strattera®)</td>
<td>Recommendations extrapolated from the Kratochvil et al. 2011 study</td>
</tr>
<tr>
<td><strong>Amphetamine Formulations</strong>:</td>
<td>2.5 mg/day – titrate as needed to doses not exceeding 0.5 mg/kg/day</td>
</tr>
<tr>
<td>Short Acting:</td>
<td>Amphetamine target dose is generally one-half to two-thirds of methylphenidate dose</td>
</tr>
<tr>
<td>Mixed amphetamine salts (Adderall®)</td>
<td></td>
</tr>
<tr>
<td>d-amphetamine (Zenzedi®, DextroStat® ProCentra® Oral Solution)</td>
<td></td>
</tr>
<tr>
<td><strong>Alpha-2 Agonists</strong>:</td>
<td>Starting dose not to exceed:</td>
</tr>
<tr>
<td>Clonidine</td>
<td>0.05 mg/day (Clonidine)</td>
</tr>
<tr>
<td>Guanfacine</td>
<td>0.5 mg/day (Guanfacine)</td>
</tr>
<tr>
<td>Monitor carefully for excessive sedation, increased irritability</td>
<td></td>
</tr>
<tr>
<td>Recommendations based on expert opinion</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. No FDA indication for children younger than 6 years old; based on Preschool ADHD Treatment Study results (Greenhill et al., 2006)
3. FDA indication for ADHD treatment of children 3-5 years old, but no clinical trial study results available.
4. No FDA indication for ADHD except Guanfacine XR in children 6 years and older; no clinical trial study results available for alpha-2 agonist use for ADHD in children below age 6 years old.

There is no new data on extended release stimulants in preschoolers, but the 2007 American Academy of Child and Adolescent Psychiatry guideline algorithm included extended-release formulations to address compliance concerns (Pliszka et al., 2007).
# Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old

## Level 0
Comprehensive assessment including a detailed developmental and symptom history.
- **ADHD Rating Scale-IV.**
- **Vanderbilt ADHD Diagnostic Parent and Teacher Rating Scales**

Links to rating scales available at [http://medicaidmentalhealth.org/](http://medicaidmentalhealth.org/)

Facilitate family engagement, psychoeducation about ADHD (evidence-based behavior and medication treatments, and educational interventions), and treatment preference assessment.

Ensure that treatment response is monitored using rating scales and appropriate safety assessments (vital signs, height, and weight).

## Level 1
Psychostimulant monotherapy (methylphenidate class or amphetamine class, either short or long acting). If first choice is ineffective try alternate preparation (see table of ADHD medications). If supplementation of long acting with short acting psychostimulant required for sufficient coverage, stay within same drug class.

## Level 2
2a. Atomoxetine or monotherapy with extended release alpha-2 agonist.
2b. If partial stimulant response, consider combination of extended release alpha-2 agonist with psychostimulant.

## Level 3
Immediate release alpha-2 agonist.

## Level 4
Diagnostic reconsideration if none of the above agents result in satisfactory treatment. Consider bupropion or tricyclic antidepressant (desipramine not recommended due to safety concerns). Consider other alpha-2 agonist not tried at Level 3 (can be used as monotherapy or combination with other ADHD medication classes). Despite limited evidence these medications may be considered.

### Not Recommended:
- Antipsychotic medication to treat core symptoms of ADHD.
- Concurrent use of two or more alpha-2 agonists.
- Concurrent use of two stimulant classes.
**Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old (continued)**

**FDA Approved ADHD Medications in Children and Adolescents Ages 6 to 17 Years Old**

<table>
<thead>
<tr>
<th>Generic Class/Brand Name</th>
<th>Typical Starting Dose</th>
<th>FDA Max Dose/Day</th>
<th>Off-Label Max Dose/Day</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Methylphenidate preparations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Short-acting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focalin*</td>
<td>2.5 mg b.i.d.</td>
<td>20 mg</td>
<td>50 mg</td>
<td>Short-acting stimulants often used as initial treatment in children (&lt;16 kg), have disadvantage of b.i.d. - t.i.d. dosing to control symptoms throughout the day.</td>
</tr>
<tr>
<td>Methylin*</td>
<td>5 mg b.i.d.</td>
<td>60 mg</td>
<td>&gt;50 kg: 100 mg</td>
<td></td>
</tr>
<tr>
<td>Ritalin*</td>
<td>5 mg b.i.d.</td>
<td>60 mg</td>
<td>&gt;50 kg: 100 mg</td>
<td></td>
</tr>
<tr>
<td><strong>Intermediate-acting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metadate ER*</td>
<td>10 mg q.a.m.</td>
<td>60 mg</td>
<td>&gt;50 kg: 100 mg</td>
<td>Longer acting stimulants offer greater convenience, confidentiality, and compliance with single daily dosing but may have greater problematic effects on evening appetite and sleep.</td>
</tr>
<tr>
<td>Metadate CD*</td>
<td>20 mg q.a.m.</td>
<td>60 mg</td>
<td>&gt;50 kg: 100 mg</td>
<td></td>
</tr>
<tr>
<td>Methylin ER*</td>
<td>10 mg q.a.m.</td>
<td>60 mg</td>
<td>&gt;50 kg: 100 mg</td>
<td></td>
</tr>
<tr>
<td>Ritalin LA*</td>
<td>20 mg.q.a.m.</td>
<td>60 mg</td>
<td>&gt;50 kg: 100 mg</td>
<td></td>
</tr>
<tr>
<td>Ritalin SR*</td>
<td>10 mg q.a.m.</td>
<td>60 mg</td>
<td>&gt;50 kg: 100 mg</td>
<td></td>
</tr>
<tr>
<td><strong>Long-acting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concerta*</td>
<td>18 mg q.a.m.</td>
<td>72 mg</td>
<td>108 mg</td>
<td></td>
</tr>
<tr>
<td>Daytrana* patch</td>
<td>Begin with 10 mg patch q.d., then titrate up by patch strength 5 mg q.a.m.</td>
<td>30 mg</td>
<td>Not yet known</td>
<td>Metadate CD*, Ritalin LA* and Focalin XR* caps may be opened and sprinkled on soft food. Concerta*, should not be crushed, chewed or broken. Swallow whole with liquids, non-absorbable tablet shell may be seen in stool.</td>
</tr>
<tr>
<td>Focalin XR*</td>
<td>5 mg q.a.m.</td>
<td>30 mg</td>
<td>50 mg</td>
<td></td>
</tr>
<tr>
<td>Quillivant XR*</td>
<td>Begin with 20 mg q.a.m., then titrate up by 10-20 mg at weekly intervals</td>
<td>60 mg</td>
<td>Not yet known</td>
<td>Quillivant XR* is an extended release once-daily suspension.</td>
</tr>
</tbody>
</table>
### FDA Approved ADHD Medications in Children and Adolescents Ages 6 to 17 Years Old (continued)

<table>
<thead>
<tr>
<th>Generic Class/Brand Name</th>
<th>Typical Starting Dose</th>
<th>FDA Max Dose/Day</th>
<th>Off-Label Max Dose/Day</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amphetamine preparations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Short-acting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adderall*</td>
<td>5 mg q.d.- b.i.d.</td>
<td>40 mg</td>
<td>&gt;50 kg: 60 mg</td>
<td>Short-acting stimulants often used as initial treatment in children (&lt;16 kg), but have disadvantage of b.i.d.- t.i.d. dosing to control symptoms throughout the day.</td>
</tr>
<tr>
<td>DextroStat*</td>
<td>5 mg q.d.- b.i.d.</td>
<td>40 mg</td>
<td>&gt;50 kg: 60 mg</td>
<td></td>
</tr>
<tr>
<td>Procentra Oral Solution*</td>
<td>5 mg q.d.- b.i.d.</td>
<td>40 mg</td>
<td>&gt;50 kg: 60 mg</td>
<td></td>
</tr>
<tr>
<td><strong>Long-acting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dexedrine Spansule*</td>
<td>5-10 mg q.d.- b.i.d.</td>
<td>40 mg</td>
<td>Not yet known</td>
<td>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 foods.</td>
</tr>
<tr>
<td>Adderall XR*</td>
<td>10 mg q.d. (6-12 yrs. 20 mg (13-17 yrs.)</td>
<td>30 mg</td>
<td>&gt;50 kg: 60 mg</td>
<td></td>
</tr>
<tr>
<td>Vyvanse® (lisdexamfetamine)</td>
<td>30 mg q.d.</td>
<td>70 mg</td>
<td>Not yet known</td>
<td></td>
</tr>
</tbody>
</table>
### ADHD Medications NOT FDA APPROVED in Children and Adolescents Ages 6 to 17 Years Old

<table>
<thead>
<tr>
<th>Generic Class/Brand Name</th>
<th>Typical Starting Dose</th>
<th>FDA Max Dose/Day</th>
<th>Off-Label Max Dose/Day</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selective norepinephrine reuptake inhibitor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strattera® (atomoxetine)</td>
<td>&lt; 70 kg: 0.5 mg/kg/day for 4 days; then 1 mg/kg/day for 4 days; then 1.2 mg/kg/day</td>
<td>Lesser of 1.4 mg/kg or 100 mg</td>
<td>Lesser of 1.8 mg/kg or 100 mg</td>
<td>These are not a Schedule II medications. Consider if active substance abuse or severe side effects of stimulants (mood lability, tics). Give q.a.m. or divided doses b.i.d. (for effects on late evening behavior). Do not open capsule. Monitor closely for suicidal thinking and behavior, clinical worsening, or unusual changes in behavior.</td>
</tr>
<tr>
<td>Alpha- adrenergic agonist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intuniv® (guanfacine ER)</td>
<td>1 mg q.d. then titrate up by 1 mg increments once per week</td>
<td>Lesser of 0.12 mg/kg or 4 mg q.d.</td>
<td>Lesser of 0.17 mg/kg or 4 mg q.d.</td>
<td>These are not a schedule II medication. Maximum dose limitations may result in low weight-based doses for adolescents and reduced efficacy. Sedation, somnolence and fatigue are common and tend to decline over time. Consider baseline ECG before starting. Tablets should not be crushed, chewed or broken before swallowing because this will increase the rate of release. Do not administer with high fat meals due to increased exposure. May not see effects for 4-6 weeks. Review personal and family cardiovascular history. Taper off to avoid rebound hypertension. When discontinuing, the total daily dose should be tapered in decrements of no more than 0.1 mg every 3 to 7 days.</td>
</tr>
<tr>
<td>KAPVAY® (clonidine ER)</td>
<td>0.1 mg/day at bed time</td>
<td>0.4 mg/day in divided dose of 0.2 mg b.i.d.</td>
<td>0.4 mg/day</td>
<td></td>
</tr>
</tbody>
</table>
### ADHD Medications NOT FDA APPROVED in Children and Adolescents Ages 6 to 17 Years Old

<table>
<thead>
<tr>
<th>Generic Class/Brand Name</th>
<th>Typical Starting Dose</th>
<th>Max Dose/Day</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alpha-2 adrenergic agonist</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Catapres* (Clonidine) | < 45 kg: 0.05 kg q.h.s., titrate in 0.05 mg increments b.i.d., t.i.d. q.i.d.;
> 45 kg: 0.1 mg q.h.s.; titrate in 1mg increments b.i.d. t.i.d., or q.i.d. | 27- 40.5 kg: 0.2 mg;
40.5 - 45 kg: 0.3 mg;
>45 kg: 0.4 mg | The following applies to both alpha-2 adrenergic agonists:
May be used alone or as adjuvant to another medication class for ADHD.
Do not combine different alpha-2-adrenergic agents with each other
Effective for impulsivity and hyperactivity; modulating mood level; tics worsening from stimulants; sleep disturbances. |
| Tenex* (Guanfacine) | < 45 kg: 0.5 mg q.h.s; titrate in 0.5 mg increments b.i.d.; t.i.d.; q.i.d.;
> 45 kg: 1 mg q.h.s.; titrate in 1mg increments may dose in b.i.d., t.i.d., q.i.d. | 27 - 40.5 kg: 2 mg;
40.5 - 45 kg: 3 mg;
>45 kg: 4 mg | May not see effects for 4-6 weeks. Review personal and family cardiovascular history.
Consider pre-treatment ECG. Taper off to avoid rebound hypertension. |
| **Antidepressants** | | | |
| Wellbutrin* (Bupropion) | Lesser of 3 mg/kg/day or 150 mg/day as 75 mg twice daily | Lesser of 6 mg/kg or 300 mg/day. Dose should not exceed 150 mg per dose. | Lowers seizure threshold; contraindicated if current seizure disorder or bulimia. Usually given in divided doses, b.i.d. or t.i.d. for children and adolescents, for both safety and effectiveness. |
| Wellbutrin SR* | | 150 mg per dose | |
| Wellbutrin XL* | | 450 mg daily | XL form is once a day dosing only. |
| Tofranil* (Imipramine) | 1 mg/kg/day | Lesser of 4 mg/kg or 200 mg | Obtain baseline ECG before starting imipramine. |
| Pametor* (Nortriptyline) | 0.5 mg/kg/day | Lesser of 2 mg/kg or 100 mg | Obtain baseline ECG before starting nortriptyline. |
References


# Aggression (Severe) in Children under Age 6

## Level 0
Comprehensive diagnostic assessment (see [Principles of Practice](#)).

## Level 1
Psychosocial intervention.
- Evidence-based psychotherapeutic interventions such as Parent Management Training (PMT) or Parent-Child Interaction therapy (PCIT) is the first line treatment for 3 to 6 months.
- Multimodal intervention such as Multisystemic therapy (MST), used in school age children may be tried (Rosato et al., 2012).
- Behavioral therapy such as token economies and contingency management, and Applied Behavioral Analysis (ABA therapy) may be tried (as useful in aggression in Autism Spectrum population).

## Level 2
Initial medication treatment should target the underlying disorder(s) (when available, follow evidence-based guidelines for primary disorder).
- Always treat primary disorder fully first before addressing aggression with other pharmacologic agents.
- Treat comorbid ADHD as per ADHD guidelines pg. 11.
- Treat comorbid Anxiety and Depressive Disorders per guidelines.
- Treat comorbid Mood Disorders.

## Level 3
Only in cases of severe impairment, severe aggression, or failure of psychosocial treatment:
- Monotherapy with methylphenidate formulation, then amphetamine formulation or low dose alpha-2 agonists, then atomoxetine.
- May want to consider combination therapy of stimulant with alpha-2 agonist or stimulant with atomoxetine.

## Level 4
If failure to respond to Level 2 and/or 3, or insufficient response consider:
- Low dose risperidone, aripiprazole
  - Discontinuation trial after 6 months of any effective medication treatment.

## Not Recommended:
- Use of medication without a trial of concurrent psychosocial treatment.
References
### Level 0

Conduct a thorough initial evaluation and diagnostic work-up for aggression and any potentially underlying disorder before initiating treatment.

- Consider screening tools:
  - Ages 3 to 21 years old: [Child/Adolescent Psychiatry Screen (CAPS)](http://medicaidmentalhealth.org/)
  - Ages 4 to 17 years old: [Strengths and Difficulties Questionnaire (SDQ) for parents and teachers](http://medicaidmentalhealth.org/)

Screening tools available at [http://medicaidmentalhealth.org/](http://medicaidmentalhealth.org/)

- Assess treatment effects and outcomes with standardized measures, such as the [Modified Overt Aggression Scale (MOAS)](http://medicaidmentalhealth.org/) is highly encouraged.
- When acute aggression is present, conduct a risk assessment and, if necessary, consider referral to a psychiatrist or an emergency department for evaluation.
- Continuously track and re-assess aggression problems and triggers.
- Obtain additional collateral information as needed and obtain a relevant medical work-up, physical examination, and nutritional status evaluation.
- Provide psychoeducation for patients and families.
- Develop an appropriate treatment plan with the patient/family and obtain buy-in.
- Help the family establish community supports.

### Level 1

Engage the child and family in taking an active role in implementing psychosocial strategies and help them to maintain consistency with psychosocial, psychoeducational, and other evidence-based treatments interventions:

- Parent Management Training (PMT), Parent-Child Interaction therapy (PCIT), behavioral therapies such as ABA therapy and behavioral modification and contingency management
- Multimodal interventions: Multisystemic therapy
- Cognitive behavioral therapy (anger management)
- Family therapy

### Level 2

Re-evaluate if Level 1 interventions are not successful.

- Monotherapy with methylphenidate formulation, then amphetamine formulation or low dose alpha-2 agonist, then atomoxetine.
- May want to consider combination therapy of stimulant with alpha-2 agonist or stimulant with atomoxetine.
### Level 3
Re-evaluate if Level 2 interventions are not successful.

- Consider adding an antipsychotic medication to ongoing psychosocial and/or pharmacological treatments (after an adequate trial), taking into account the latest evidence on efficacy and safety of individual agents.
  - Risperidone or aripiprazole are recommended at low doses.
- Use recommended titration schedules and deliver medication trial at adequate dose and duration before changing or adding medication. Before changing, make sure that medications have been administered for an appropriate dose and duration and that adequate psychosocial interventions addressing adherence have been implemented. Monitor and manage adverse effects and non-response.

### Level 4
If failure to respond to Level 3 or insufficient response, try a different antipsychotic (either risperidone or aripiprazole).

- If failure to respond to risperidone or aripiprazole, consider other antipsychotics for which less evidence exists.

### Level 5
Combination of a mood stabilizer with atypical antipsychotic, but not of two antipsychotics (unless during cross-titration or plateau switch).

- Avoid using more than 2 antipsychotic medications for aggression simultaneously, unless all possible alternatives have been exhausted, especially the combination or intensification of psychosocial interventions in conjunction with a single medication for aggression (manage comorbidities appropriately).
- For a partial response to an initial first-line antipsychotic, consider augmentation with a mood stabilizer: Most evidence exists for lithium.
- May consider other mood stabilizers for which less evidence exists.
- When patient responds only partially to a first-line antipsychotic medication, first reassess the diagnosis, adequacy of behavioral interventions, pharmacotherapy for any identified primary or comorbid disorder, and dose/duration of the medication trial. Then, it may be appropriate to consider adding a mood stabilizer.
## Level of Evidence and Dosing Recommendations

<table>
<thead>
<tr>
<th>Drug</th>
<th>Level of Evidence</th>
<th>Starting Dose (mg)</th>
<th>Max Dose (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clonidine, Guanfacine, Guanfacine ER</td>
<td>B</td>
<td>See ADHD guidelines</td>
<td>See ADHD guidelines</td>
</tr>
<tr>
<td>Methylphenidate/Amphetamines</td>
<td>B</td>
<td>See ADHD guidelines</td>
<td>See ADHD guidelines</td>
</tr>
<tr>
<td>Atomoxetine</td>
<td>B-</td>
<td>See ADHD guidelines</td>
<td>See ADHD guidelines</td>
</tr>
<tr>
<td>Risperidone</td>
<td>A</td>
<td>Child: 0.1-0.25 mg/day</td>
<td>Child: 2 mg/day, Adolescent: 4 mg/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adolescent: 0.50 mg/day</td>
<td></td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>A</td>
<td>1-2.5 mg/day</td>
<td>Child: 10 mg/day, Adolescent: 15 mg/day</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>A-</td>
<td>Child: 0.25-0.5 mg/day</td>
<td>Child: 4-6 mg/day, Adolescent: 6-10 mg/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adolescent: 0.5 mg/day</td>
<td></td>
</tr>
<tr>
<td>Ziprasidone</td>
<td>B-</td>
<td>20 mg/day</td>
<td>40-60 mg/day</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>B</td>
<td>Child: 1.25-2.5 mg/day, Adolescent: 2.5-5.0 mg/day</td>
<td>Child: 15 mg/day, Adolescent: 20 mg/day</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>B</td>
<td>Child: 12.5 mg po bid, Adolescent: 25 mg po bid</td>
<td>Child: 400 mg/day, Adolescent: 600 mg/day</td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>A-</td>
<td>Child: 25 mg/day, Adolescent: 25-50 mg/day</td>
<td>Child: 200 mg/day, Adolescent: 400 mg/day</td>
</tr>
<tr>
<td>Valproate</td>
<td>B+</td>
<td>10-15 mg/kg/day in divided doses, Blood level: 80-125 mcg/mL</td>
<td>Dose determined by blood level. Max blood level should be 125 mcg/mL</td>
</tr>
<tr>
<td>Carbamazepine</td>
<td>C</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Lithium</td>
<td>A</td>
<td>Blood level: 0.6 mEq/L</td>
<td>Max blood level should be 1.2 mEq/L</td>
</tr>
<tr>
<td>Paliperidone</td>
<td>C</td>
<td>Child: 1.5 mg/day, Adolescent: 1.5-3 mg/day</td>
<td>Child: 6 mg/day, Adolescent: 12 mg/day</td>
</tr>
</tbody>
</table>

**Not recommended due to adverse effects; ◊ Ratings based on extrapolation from ADHD, ASD or irritability studies, aggression, disruptive behavior studies

A = 2RCTs or more
B = Small RCT or more than one open label study
C = Open label or case series
Anxiety Disorders in Children under Age 6

**Level 0**
Comprehensive assessment (see [Principles of Practice](#)) that includes history of stressors, trauma, parental anxiety, and observation of child-parent interactions.

- Rating scales specifically for young children with anxiety symptoms are limited but the [Preschool Anxiety Scale (parent report)](http://medicaidmentalhealth.org/) is available at [http://medicaidmentalhealth.org/](http://medicaidmentalhealth.org/).
- Child and parent rating of anxiety symptom severity and impairment with feelings thermometer or faces barometer.

**Level 1**
Start with psychotherapy for at least 12 weeks that includes the parents and exposure-based cognitive behavioral therapy (CBT) adapted to young children.

- Assess primary caregivers for anxiety disorders and referral for treatment if impacting child’s treatment progress.
- Address parental accommodation to child’s symptoms of anxiety.

**Level 2**
If poor or partial response to psychosocial treatment after at least 12 weeks, consider combination treatment with fluoxetine and concurrent psychotherapy for children 4 to 5 years old.

- Review black-box warning with parents and monitor for suicidality.
- 8 to 10 week trial of fluoxetine if well tolerated starting at 1-2mg/day.
- Maximum dosing of 5-8 mg/day.
- Increased risk for disinhibition and behavioral activation in young child.
- Discontinuation trial after 6 to 9 months of effective medication treatment with gradual downward titration.

Less than 4 years old, see [Principles of Practice](#).

**Level 3**
If fluoxetine is not successful, consider sertraline or fluvoxamine in combination with concurrent psychotherapy. Start with low dosing and monitor closely.

**Not Recommended for Children Under Age 6 with Anxiety Disorders:**

- The use of medication without psychosocial treatment.
- Use of tricyclic antidepressants (TCAs) or alpha-agonists.
- Ongoing use of benzodiazepines. May be used short-term for extreme anxiety with medical or dental procedures.

The data for treating anxiety disorders with psychopharmacologic medication in young children is limited. Thus, exercise caution in prescribing pharmacological treatment below age 6.
Anxiety Disorders in Children and Adolescents Ages 6 to 17 Years Old

Level 0
A comprehensive assessment includes:

✦ Assessment of risk factors including: stressors, trauma, bullying, social support systems, coping skills, learning disorders, and school issues.
✦ Assessment of family coping skills, parenting styles (overprotective or overcontrolling), and family accommodations that support child’s symptoms.
✦ Evaluation of medical conditions and comorbid psychiatric disorders.
✦ Evaluation of severity of anxiety symptoms and impairment from anxiety disorder.
✦ Assessment of parental and family history of anxiety disorders and psychiatric treatment.
✦ Evaluation of severity of anxiety symptoms and impairment from anxiety disorder.

✧ Screening and monitoring for anxiety symptoms with multi-informant, validated rating scales for childhood anxiety (parent and child report) such as Self-Report for Childhood Anxiety Related Disorders (SCARED) and Spence Children’s Anxiety Scale (SCAS). Available at http://medicaidmentalhealth.org/resourcesLinks/diagnosticTreatmentScales.cfm.

✧ Assessment of baseline somatic symptoms prior to medication trials.

Note: The Anxiety Disorders Interview Schedule for Children (ADIS-C) may assist clinicians to differentiate the specific anxiety disorders (Silverman and Albano, 1996).

Level 1
If mild to moderate anxiety disorder:

✦ 1a. Provide family with psychoeducation regarding anxiety disorders and cognitive behavioral therapy (CBT).

✧ Initiate treatment with exposure-based cognitive behavioral therapy.

✦ 1b. If CBT is not available, first consider evidence-based psychosocial interventions.

✧ Provide family with psychoeducation regarding anxiety disorders and CBT.

✦ Train parents to monitor child’s anxiety symptoms (e.g. feelings thermometer or faces barometer) and set up behavioral program with positive reinforcement for child’s efforts and progress in addressing anxiety symptoms and decreasing avoidance.

✦ If parental anxiety disorders interfere with treatment progress, provide referral for parent.
Anxiety Disorders in Children and Adolescents Ages 6 to 17 Years Old (continued)

Level 2
If moderate to severe anxiety disorder or inadequate response to CBT alone:
◆ 2a. Initiate monotherapy treatment with fluoxetine or sertraline.
◆ Combination therapy with CBT and selective serotonin reuptake inhibitor (SSRI).
◆ Review black box warning with family and monitor for treatment emergent suicidality.
◆ 2b. If first SSRI trial is not successful, try another SSRI in the same group (fluoxetine or sertraline).

Level 3
If moderate to severe anxiety disorder and Levels 1 and 2 are not successful:
◆ 3a. Consider another SSRI, such as fluvoxamine, escitalopram or citalopram (not paroxetine) alone or in combination with CBT, and monitor for treatment emergent suicidality.
◆ 3b. If Level 3a is not successful then consider venlafaxine monotherapy or in combination with CBT. Monitor height, weight, blood pressure, pulse, and treatment emergent suicidal ideations.

Level 4
If Levels 1, 2 and 3 are not successful, then re-evaluate diagnosis or refer to a specialist.

Notes:
1. Despite limited evidence, may consider monotherapy or augmentation with other medications if partial or poor response with SSRIs or venlafaxine. Potential agents include: buspirone, alpha-2 agonist, clomipramine, and low dose benzodiazepine.
2. Benzodiazepines should be reserved for short-term use, long-term use is not recommended.
None of these medications are FDA approved for use in youth with non-OCD anxiety disorders.

Clinicians should realize that data below age 6 for treating anxiety disorders is limited and caution in using pharmacological treatment below age 6 is warranted.

(*indicates placebo-controlled studies in children 6 to 17 years with anxiety disorders).

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Young Child (4 – 6 Years)</th>
<th>Child (6 – 12 Years)</th>
<th>Adolescent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fluoxetine</strong></td>
<td>1-2 mg/day</td>
<td>2.5-5 mg/day</td>
<td>5-10 mg/day</td>
</tr>
<tr>
<td>Starting Dose:</td>
<td>Maximum Dose:</td>
<td>5-10 mg/day</td>
<td>20–40 mg/day</td>
</tr>
<tr>
<td>5-10 mg/day</td>
<td>10-40 mg/day</td>
<td>40-60 mg/day</td>
<td></td>
</tr>
<tr>
<td>(limited data)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sertraline</strong></td>
<td>5 mg/day</td>
<td>10-12.5 mg/day</td>
<td>25 mg/day</td>
</tr>
<tr>
<td>Starting Dose:</td>
<td>Maximum Dose:</td>
<td>50-75 mg/day</td>
<td>100–150 mg/day</td>
</tr>
<tr>
<td>5 mg/day</td>
<td>100–200 mg/day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(limited data)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fluvoxamine</strong></td>
<td>5 mg/day</td>
<td>12.5-25 mg/day</td>
<td>25 mg/day</td>
</tr>
<tr>
<td>Starting Dose:</td>
<td>Maximum Dose:</td>
<td>50-75 mg/day</td>
<td>100–200 mg/day</td>
</tr>
<tr>
<td>5 mg/day</td>
<td>150–300 mg/day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(limited data)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Escitalopram</strong></td>
<td>1-2 mg/day</td>
<td>2.5 mg/day</td>
<td>5 mg/day</td>
</tr>
<tr>
<td>Starting Dose:</td>
<td>Maximum Dose:</td>
<td>5-10 mg</td>
<td>10-20 mg/day</td>
</tr>
<tr>
<td>5-10 mg/day</td>
<td>20-40 mg/day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(limited data)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Citalopram</strong></td>
<td>No data</td>
<td>5 mg/day</td>
<td>10 mg/day</td>
</tr>
<tr>
<td>Starting Dose:</td>
<td>Maximum Dose:</td>
<td>20-40 mg/day</td>
<td>40 mg/day</td>
</tr>
<tr>
<td>Maximum Dose:</td>
<td></td>
<td>(check ECG above 40 mg for QTc prolongation)</td>
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</tr>
<tr>
<td><strong>Venlafaxine</strong></td>
<td>No data</td>
<td>37.5 mg/day</td>
<td>37.5 mg/day</td>
</tr>
<tr>
<td>Starting Dose:</td>
<td>Maximum Dose:</td>
<td>75-112.5 mg/day</td>
<td>150 mg/day</td>
</tr>
<tr>
<td>Maximum Dose:</td>
<td></td>
<td>(25-39kg)</td>
<td>(40-49 kg)</td>
</tr>
<tr>
<td>37.5 mg/day</td>
<td>225 mg/day</td>
<td>(&gt;50 kg)</td>
<td></td>
</tr>
<tr>
<td>No data</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The FDA does not currently provide any dosing guidelines for venlafaxine in children or adolescents and does not recommend its use in this population due to mixed results in efficacy trials.
**ADDITIONAL CLINICAL INFORMATION**

- After reaching the lowest therapeutic dose, can increase SSRI dose after one month if well tolerated and significant symptoms remain.
- Can consider discontinuation trial of SSRI after 12 months of effective medication treatment, during low stress period, and with gradual downward taper. Monitor for relapse.
- May titrate to lowest therapeutic dose once weekly.

**ANXIETY DISORDERS AND COMORBID DISORDERS**

- **ADHD:**
  - Stimulant medications can be combined with SSRIs for comorbid ADHD.
  - Strattera, guanfacine and other ADHD medications may be helpful for the subset of children who may not tolerate stimulants.

- **Depression and bipolar disorder:**
  - Fluoxetine is first-line medication for comorbid unipolar depression.
  - Antidepressants, including SSRIs, may be poorly tolerated in children with anxiety (or depression) and family history of bipolar disorder. Use caution.
  - For children with comorbid bipolar disorder, the bipolar disorder needs to be stabilized first. Adding an SSRI needs to be considered cautiously after CBT for the anxiety disorder has been tried.
  - Alternatives to SSRI medications for anxiety disorder symptoms may be considered early in treatment, such as guanfacine for autonomic symptoms.
  - Use benzodiazepines with caution as they can increase disinhibition, mood lability, irritability, or aggression and may have potential for abuse.

- **Substance use disorder (SUD):**
  - Both anxiety disorders and SUD can be treated at the same time. Some substances increase anxiety & panic symptoms and can complicate treatment.
  - Use caution with benzodiazepines in presence of SUD, especially those with short half-life and increased risk for abuse and dependence.
  - Integrate additional psychotherapy components: Motivational strategies and CBT to identify triggers for cravings, develop alternative coping skills to reduce substance use.

- **Autism spectrum disorders (ASD) and developmental disorders (DD):**
  - Can modify CBT for anxiety disorders with ASD and/or DD.
  - SSRIs for anxiety/irritability and obsessive-compulsive behaviors distressing to the child, but not all ritualized or repetitive behaviors. Consider when obsessive features, rigidity of thought, perseveration, rituals, anxiety, depression, and/or irritability present.
  - Stimulants for problems with inattention, concentration, and hyperactivity.
  - Guanfacine or clonidine for impulsivity, explosiveness, and/or restlessness. Assess for trauma history.
  - Atypical antipsychotics (risperidone, aripiprazole) for irritability, aggression, and other severe symptoms. Assess for comorbid mood disorder.
Not Recommended for Childhood Anxiety Disorders:

- Paroxetine is not recommended as first or second line treatment for childhood anxiety disorders due to concerns about increased adverse effects (e.g., insomnia, decreased appetite, vomiting, activation, withdrawal symptoms, and increased risk for suicidal ideations) relative to other SSRIs.

- Using benzodiazepines (BZO) as first-line, monotherapy for long-term treatment of childhood anxiety disorders is not recommended. BZO short-term use as SSRI takes effect or to address severe anxiety and impairment related to brief medical or dental procedures may be helpful.

**Resources**

**Children**

- What To Do When You Worry Too Much (Huebner, 2005)
- A Boy and a Bear: The Children’s Relaxation Book (Lite, 1996)

**Adolescents**

- Riding the Wave Workbook for Adolescents with Panic Disorder (Pincus, Ehrenreich, and Spiegel, 2008)
- Smartphone applications for youth and their parents that provide access to tools taught in CBT sessions (e.g. Mayo Clinic Anxiety Coach)

**Parents/caregivers**

- Helping Your Anxious Child (Rapee, Wignall, Spence, and Cobham, 2008)
- Keys to Parenting Your Anxious Child (Manassis, 2008)
- Freeing Your Child from Anxiety (Chansky, 2014)
- Helping Your Child with Selective Mutism (McHolm, Cunningham, and Vanier, 2005)
- The Selective Mutism Treatment Guide: Manuals for Parents, Teachers and Therapists (Perednik, 2012)
- When Children Refuse School: A CBT Approach Parent Workbook (Kearney and Albano, 2007)
- Parent training, educational materials and resources at [www.anxietybc.com](http://www.anxietybc.com) and [www.copingcatparents.com](http://www.copingcatparents.com)
Relevant websites
- American Academy of Child and Adolescent Psychiatry (AACAP), [www.aacap.org](http://www.aacap.org). (Facts for Families)
- Anxiety Disorders Association of America (ADAA), [www.adaa.org](http://www.adaa.org)
- Selective Mutism Group-Child Anxiety Network, [www.selectivemutism.org](http://www.selectivemutism.org)
- Association for Behavioral and Cognitive Therapies, [www.abct.org](http://www.abct.org)
- Computer-based CBT treatments (cCBT) for youth with anxiety disorders: BRAVE, BRAVE-ONLINE, and Camp Cope-A-Lot

References
## Bipolar Disorder (Acute Mania or Mixed Episodes) in Children and Adolescents Ages 6 to 17 Years Old

### Level 0

Comprehensive assessment. Use systematic interview covering mania and depression symptoms, family history of psychopathology including depression and mania, and information from teachers if possible to establish duration of manic symptoms over the day.

- Classic bipolar disorder has clear episodes representing a change from usual behavior; DSM-5 symptoms consist of elevated and/or irritable mood and increased energy occurring most of the day, every day; Co-occurring symptoms include grandiosity, decreased need for sleep, rapid speech and flight of ideas (no current validity under age 6).
- If ADHD is comorbid with bipolar I or II disorder, symptoms should intensify with the episode. If it is truly comorbid, mania should be treated and stabilized before treating ADHD.
- If the diagnosis of mania cannot be distinguished from ADHD, and especially combined ADHD and oppositional defiant disorder, ADHD should be treated first with discussion with family members about advantages and disadvantages. Refer to [ADHD guidelines](#).
- If rage outbursts are the primary focus of treatment, track the frequency, intensity, number and duration of episodes. Treat the primary disorder first. Refer to aggression treatment guidelines.
- There are no guidelines on treating Disruptive Mood Dysregulation Disorder.

### Level 1

Monotherapy with one of these three agents:

- Aripiprazole
- Risperidone
- Quetiapine

- For euphoric mania in adolescents, consider lithium.

### Level 2

Monotherapy with atypical antipsychotic listed in Level 1 and augmentation with mood stabilizer(s) (lithium, VPA/divalproex), but not two antipsychotics. Olanzapine has been approved for children ages 13 and older. Monitoring weight is especially important with combinations and with olanzapine.

### Level 3

Monotherapy with antipsychotic (except clozapine) not listed in Level 1 or combination with mood stabilizer(s).

### Level 4

Clozapine or ECT.

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**Notes:**

1. Ocarbazepine is not recommended. There is little consensus to support the use of this agent for acute mania in pediatric patients. The only randomized controlled trial of ocarbazepine failed to find a difference from placebo; only open treatment data available for carbamazepine in children and adolescents. No evidence for topiramate or lamotrigine as acute antimanic agents. Divalproex has not been effective in children with manic symptoms and that also have a high rate of co-occurring ADHD and ODD.

2. Avoid antidepressants; use with caution with comorbid anxiety or OCD.

3. There is insufficient data to provide recommendations for treatment of bipolar depression.
Dosing Recommendations for Atypical Antipsychotics in Bipolar Disorder in Children and Adolescents Ages 6 to 17 Years Old*

*Clinicians should realize that data below age 10 for treating mania and mixed states are limited and caution in using pharmacological treatment below age 10 is warranted.

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Starting Dose</th>
<th>Maximum Dose</th>
<th>FDA Approved Age Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aripiprazole</td>
<td>2-5 mg/day</td>
<td>30 mg/day</td>
<td>10-17 years old</td>
</tr>
<tr>
<td>Risperidone</td>
<td>Children: 0.25 mg/day Adolescents: 0.5 - 1 mg b.i.d.</td>
<td>Children: 4 mg/day Adolescents: 6 mg/day</td>
<td>10-17 years old</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>Children: 12.5 mg b.i.d. Adolescents: 25 mg b.i.d.</td>
<td>Children: 400 mg/day Adolescents: 600 mg/day</td>
<td>10-17 years old</td>
</tr>
<tr>
<td>Lithium</td>
<td>300 - 600 mg/day Goal: acute mania: Blood level 0.8 – 1.2 mEq/L Goal maintenance: Blood level 0.6 – 1 mEq/L</td>
<td>Blood level: 1.2 mEq/L</td>
<td>12-17 years old</td>
</tr>
<tr>
<td>Valproate</td>
<td>10-15 mg/kg/day in divided dose Goal: 80-125 mcg/mL</td>
<td>Dose determined by blood level. Max blood level should be 125 mcg/mL</td>
<td>Not approved</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>Children: 0.25 mg -0.5 mg/day Adolescents: 0.5 - 1 mg/day</td>
<td>Children: 4 mg/day Adolescents: 10 mg/day</td>
<td>Not approved for pediatric mania</td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>Children: 25-50 mg/day Adolescents: 25 -100 mg/day</td>
<td>Children (under 12): 200 mg/day Adolescents: 500 mg/day</td>
<td>Not approved for pediatric mania</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>2.5-5 mg once daily Weekly titration by 2.5-5 mg increments</td>
<td>20 mg/day</td>
<td>13-17 years old</td>
</tr>
</tbody>
</table>

MINIMIZING SIDE EFFECTS WHEN SWITCHING PSYCHOTROPIC MEDICATIONS:

- Start low! Go slow! And stop slowly! Avoid abrupt stopping, starting, and/or switching to reduce risk of rebound and withdrawal phenomena.
- Do not switch until the primary disorder has been treated according to target disorder guidelines at adequate dose and duration.
- Only stop and/or switch abruptly if a serious adverse effect necessitates it (i.e., severe neutropenia, agranulocytosis, diabetic ketoacidosis, neuroleptic malignant syndrome, acute pancreatitis, lithium toxicity, Stevens-Johnson syndrome, etc.).
- Slow switch using cross-titration is the preferred method; an even slower switch can be done using the plateau-cross titration method, with therapeutic dose overlap of medications (when switching to a less sedating cholinergic medication, or one with a much longer half-life).
- If time permits, do not reduce the first medication by more than 25-50% per 5 half-lives.
**ADDITIONAL CONSIDERATIONS:**

- When switching medications, the more different the binding affinity for the same receptor (between the two drugs), the greater risk for side effects and rebound and withdrawal phenomena (especially sedating; anti-cholinergic; dopaminergic).

- The more different the half-life of the medications with the same physiological effect (desired or undesired), the greater the risk for rebound and withdrawal phenomena. Withdrawal and rebound phenomena are most likely when discontinuing from a short half-life medication.

- Withdrawal and rebound phenomena are most likely to occur when switching from a strongly antihistaminergic (sedating) or anti-cholinergic medication (i.e., clozapine, olanzapine, quetiapine), to a less strong binding medication (i.e., haloperidol, molindone, paliperidone, aripiprazole, ziprasidone); or from a strongly binding anti-dopaminergic (i.e. FGA AP, risperidone paliperidone) to a less strongly binding antipsychotic (i.e., clozapine, quetiapine, clozapine); or a full antagonist, to a partial agonist (aripiprazole).

- Insufficient efficacy or increased side effects may occur during a switch when medications metabolized by cytochrome P450 liver enzymes are paired with a medication that affects that same enzyme.

- Never discontinue lithium or clozapine abruptly to avoid potentially severe rebound of mania or psychoses.

- Quetiapine and mirtazapine can lead to more sedation at lower doses (below 250-300 mg for quetiapine and below 15 mg for mirtazapine) because of its high affinity for histamine receptors. Sedation is offset by increased alpha adrenergic activity at higher doses that counteract this.

**References**


Level 0

Comprehensive assessment

- Primary sleep disorders (OSA, RLS, circadian rhythm disorders)
- Medical, psychiatric and neurodevelopmental co-morbidities
- Concomitant medications, especially psychotherapeutic medication
  - Direct effects on sleep
  - Exacerbation primary sleep disorders
- Sleep practices (e.g., electronic use, caffeine, napping)
- Caregiver role
- Presentation: sleep onset/maintenance

The BEARS Sleep Screening Algorithm screens for major sleep disorders for ages 2 to 18 years and is available at [http://www.meritsleep.com/](http://www.meritsleep.com/)

Sleep diaries available at:


The BEARS Sleep Screening Algorithm that screens for major sleep disorders for ages 2 to 18 years of age, and sleep diaries are available at [http://medicaidmentalhealth.org/resourcesLinks/diagnosticTreatmentScales.cfm](http://medicaidmentalhealth.org/resourcesLinks/diagnosticTreatmentScales.cfm)

Additional considerations:

- Consider chronic sleep loss and primary sleep disorders (Obstructive sleep apnea (OSA), Restless leg syndrome (RLS), and narcolepsy) as potential causes of psychiatric symptoms.
- Consider comorbid chronic sleep loss and primary sleep disorders as potential contributors to psychiatric symptoms.
- Applies to all psychiatric disorders but particularly ADHD and depression.

Note: A polysomnography (sleep study) is best suited to diagnosing a sleep problem like OSA and should not be used to evaluate primary insomnia.

Level 1

Behavioral interventions

- Caregiver-based for younger children
  - Sleep training, bedtime fading, bedtime pass
- CBT-I for older children and adolescents
  - Stimulus control, sleep restriction
- Healthy sleep practices for all
  - Regular sleep schedule, avoidance nighttime screens, limit caffeine, age-appropriate napping
## Level 2

Melatonin 1-5mg at bedtime. Consider recommending the use of **Pharmaceutical grade melatonin, available online**. Although several meta-analyses have not identified significant long-term side effects of melatonin in the pediatric population, concerns based on animal studies about possible effects on pubertal development in humans with long-term use have been raised.

## Level 3

Pharmacotherapy should only be considered for short-term use if:

- Insomnia results in significant impairments in child and/or caregiver daytime functioning.
- Behavioral interventions alone are ineffective OR caregivers unable to implement.

Pharmacotherapy with behavioral treatment may be appropriate for:

- Short-term crisis intervention.
- Insomnia with comorbid high risk psychiatric (ADHD, MDD) or neurodevelopmental conditions (ASD).
- Insomnia exacerbates psychiatric, medical conditions.

**Clonidine 0.025 - 0.3mg qHS**

**Nonbenzodiazepine receptor agonists (NBzRAs) for adolescents.**

- Short-acting for sleep onset.

## Level 4

Appropriate sedating psychotropic medications for patients with psychiatric comorbidities.

**Not Recommended:**

Chloral hydrate; first/second generation antipsychotics

### References


# Major Depression in Children under Age 6

**Level 0**
Comprehensive assessment (see [Principles of Practice](#)).

**Level 1**
Psychotherapeutic intervention (e.g., Dyadic therapy) for 6 to 9 months; assessment of parent/guardian depression and referral for treatment if present.

**Level 2**
If poor response to psychosocial treatment after 6 to 9 months, re-assess diagnosis, primary care giver response to treatment, and/or consider switching to a different or more intensive psychosocial treatment.

*Under 3 years, see [Principles of Practice](#)*

**Level 3**
Consider child psychiatric consultation or second opinion.

**Level 4**
If continued poor response to psychosocial treatment alone, consider combination treatment with fluoxetine and concurrent psychosocial treatment.

**Fluoxetine – 4 to 5 years old**
- **Starting dose:** 1 mg/day
- **Maximum dose:** 5 mg/day
- **Discontinuation trial** after 6 months of any effective medication treatment with gradual downward taper.

**Not Recommended:**
- Use of tricyclic antidepressants (TCAs) or paroxetine.
- The use of medication without psychosocial treatment.

*Note: In preschool children, MDD is very rare (point prevalence is thought to be 0.5%).*
**Level 0**

**Assessment**

- Screening using multi-informant, validated rating scales that include depression and screening for comorbidity (other psychiatric and medical conditions):
  - Center for Epidemiological Studies Depression Scale for Children (CES-DC)
  - Pediatric Symptom Checklist (PSC)
  
  The above scales are available at [http://medicaidmentalhealth.org](http://medicaidmentalhealth.org).

- Specific screen for harm to self or others and access to firearms.

- Positive screen: DSM-5 - based interview evaluation.

- Consider medical reason for depression (e.g., hypothyroidism, B12/folate deficiency, anemia, malnutrition (with or without eating disorder), chronic disorder (diabetes, asthma, inflammatory bowel disease, juvenile rheumatoid disease, infectious mononucleosis, etc.).

- Rule out iatrogenic etiology of depression (i.e., medication side effects/interactions).

- Evaluate past psychiatric and medical history, previous treatment, family conflict and current depression of family and caregivers, bullying, abuse, peer conflict, school issues and substance abuse.

- Consider and rule out presence of bipolar depression. Pointers: Prior (hypo)mania, family history of bipolar disorder, atypical depression with reverse neurovegetative signs, seasonal affective component, brief and recurrent episodes, and melancholic depression in prepubertal child.


**Level 1**

**Initial treatment plan**

- Address environmental stressors such as abuse, bullying, conflict, and caregiver depression.

- Establish a safety plan:
  - Removal of firearms, knives/sharps, and other lethal means such as alcohol, prescription and non-prescription medications.
  - Providing adolescents with mutually agreeable and available emergency numbers and contacts.
  - Engaging a concerned third party familiar with the adolescent

- Active support - 6 week trial (if mild symptoms).
  - Components of active support must include psychosocial interventions and psychoeducation and may include: Self-help materials, active listening/relationship building, school involvement, mood monitoring, pleasant activities, cognitive restructuring, family conflict reduction, sleep hygiene, and exercise.
Level 2
Targeted treatments if symptoms are moderate to severe, impairment continues, and/or no response to active support.

- Start with cognitive behavioral therapy (CBT), Interpersonal therapy (IPT), depression-specific behavioral family therapy.
- Fluoxetine or combination of CBT or IPT psychotherapy with fluoxetine (COMB).
- May consider use of escitalopram or citalopram for age 12 and above.

Qualifiers:
- Mild: Psychosocial interventions only.
- Moderate/Severe: COMB.
- Psychosis: SSRI (fluoxetine, escitalopram, citalopram) plus antipsychotic*.
- Comorbidity: COMB, treat comorbidity.
- Suicidality: intensify surveillance and follow-up; COMB if on antidepressant only or remove antidepressant if otherwise ineffective; if chronic, consider lithium augmentation.

Always Consider:
- Abuse/conflict/bullying
- School functioning
- Peer relationships
- Sleep hygiene/exercise/diet
- Medical conditions (e.g., hypothyroidism, B12/folate deficiency, anemia, malnutrition (with or without eating disorder) and chronic disorders (diabetes, asthma, inflammatory bowel disease, juvenile rheumatoid disease, infectious mononucleosis, etc.).

*Reassess diagnosis first (e.g., bipolar disorder), rule out psychostimulant or substance abuse related psychosis.

Level 3
Inadequate response

- If receiving psychosocial intervention alone, add medication.
- If on medication alone, add psychosocial intervention.
- Non-response to fluoxetine: switch to citalopram, escitalopram.
<table>
<thead>
<tr>
<th><strong>Level 4</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor or non-response</td>
</tr>
<tr>
<td>✦ Refer to mental health specialist.</td>
</tr>
<tr>
<td>✦ Re-assess diagnosis (bipolar disorder, substance use disorder, anxiety disorders, PTSD), rule out medical condition (e.g., hypothyroidism – see above), or medication side effects.</td>
</tr>
<tr>
<td>✦ Increase psychosocial intervention and medication dose if tolerated.</td>
</tr>
<tr>
<td>✦ Augment with alternate psychosocial intervention (either CBT or IPT).</td>
</tr>
<tr>
<td>✦ Consider change in level of care (treatment setting and interventions based on severity of illness).</td>
</tr>
<tr>
<td>✦ For milder form and/or seasonal affective symptoms with light sensitivity, consider bright light therapy.</td>
</tr>
</tbody>
</table>
Level 5
If poor or non-response to Level 4 interventions
- Switch previously used SSRIs to sertraline, bupropion or venlafaxine.
- Consider augmentation of SSRI with bupropion, thyroxine, lithium, buspirone, mirtazapine, aripiprazole, quetiapine, or risperidone (adult data only).
- If psychotic/severe: ECT (for adolescents).

After maximum medical benefit:
- Maintenance for 9 to 12 months.
- Discontinuation over 3 to 4 months (if stable, return to premorbid functioning and no anticipated increase in stressors).
- Factors favoring maintenance treatment:
  - Partial response
  - Prior relapse
  - Suicidality
  - Comorbidity risk for relapse
  - Environmental risk for relapse
  - Family history of relapsing/recurrent major depression
  - Lack of return to full premorbid functioning

Always monitor:
- Adverse events
- Treatment adherence
- Treatment or illness emergent suicidality
- Treatment or inherently emergent comorbidity
- Potential development of (hypo)mania
# Obsessive Compulsive Disorder (OCD) in Children and Adolescents Ages 6 to 17 Years Old

**Level 0**  
Comprehensive assessment that includes screening for OCD symptoms and medical causes*.

_A comprehensive assessment before initiating treatment includes:_
- Duration, type of course (e.g. episodic), and severity
- Family history (for OCD, tics, autoimmunity)
- Physical exam: Movements (tics or chorea), red hands, dysmorphology, inflamed throat
- If new and sudden onset, examine for subclinical infections, especially group A streptococcus and treat
- Review for most common comorbid presentations: ADHD, tics, separation anxiety, and ASD
- Specialty referral as appropriate—child psychiatry or for CBT

*Medical causes:*
- Health status: Infection, endocrine disorder, autoimmune
- Genetic disorder: VCFS, Wilson’s, CNV’s associated with OCD/tics
- Secondary to a medication: Stimulants, atypicals, montelukast, lamotrigine

<table>
<thead>
<tr>
<th>Level 1</th>
<th>If mild to moderate OCD, cognitive behavioral therapy (CBT) with qualified therapist.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>If inadequate response to CBT or OCD is severe, consider monotherapy with sertraline, fluoxetine, or fluvoxamine.</td>
</tr>
<tr>
<td>Level 3</td>
<td>If inadequate response after 10 to 12 weeks of optimized dosing, utilize a different approved SSRIs or consider clomipramine.</td>
</tr>
<tr>
<td>Level 4</td>
<td>If treatment resistant to behavior therapy and/or SSRI, augment with low-dose aripiprazole, resperidone, or clomipramine.</td>
</tr>
</tbody>
</table>
Obsessive Compulsive Disorder (OCD) in Children and Adolescents Ages 6 to 17 Years Old (continued)

Medication Used in the Treatment of OCD

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Starting Dose (mg/day)</th>
<th>Max Dose (mg/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Adolescent</td>
<td>Adolescent</td>
</tr>
<tr>
<td>Fluoxetine</td>
<td>2.5 – 5</td>
<td>10 – 20</td>
</tr>
<tr>
<td>Sertraline</td>
<td>12.5 – 25</td>
<td>25 – 50</td>
</tr>
<tr>
<td>Fluvoxamine</td>
<td>12.5 – 25</td>
<td>25 – 50</td>
</tr>
<tr>
<td>Clomipramine&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.25 – 12.5</td>
<td>25</td>
</tr>
<tr>
<td>*Escitalopram</td>
<td>2.5 – 5</td>
<td>5 – 10</td>
</tr>
<tr>
<td>**Citalopram&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.5 – 10</td>
<td>10 – 20</td>
</tr>
<tr>
<td>**Paroxetine&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.5 – 10</td>
<td>10</td>
</tr>
</tbody>
</table>

<sup>a</sup>No FDA approval for OCD in children
<sup>b</sup>No FDA approval for children
<br><sup>c</sup>Consider EKG monitoring especially if polypharmacy
<br><sup>d</sup>Slow taper upon discontinuation

**OCD TREATMENT PEARLS:**
- OCD medication – time to effect may be long
- SSRI efficacy much less when in the context of comorbid conditions

**SSRIs and Dopamine-2 Blockers in Patients with Tics and OCD:**
- In many patients with tics and OCD, combination pharmacotherapy is required. D2 blockers and SSRIs
- Almost no combination therapy trials in children with OCD/tics
- Most data: risperidone, aripiprazole (low doses, i.e., much lower than those used in psychotic or bipolar disorders)

**Resources**
- **Children/adolescents**
  - Obsessive-Compulsive Disorder: The Ultimate Teen Guide (Rompella, 2009)
  - Breaking Free from OCD: A CBT Guide for Young People and Their Families (Derisley et al., 2008)
- **Parents/caregivers**
  - Talking back to OCD: The Program that Helps Kids and Teens Say “No Way” and parents say “Way to Go” (March, 2006))
  - Freeing your Child from Obsessive Compulsive Disorder (Chansky, 2001)
  - What To Do When Your Child Has Obsessive Compulsive Disorder: Strategies and Solutions (Pinto Wagner, 2002)
Clinicians

- Family-Based Treatment for Young Children with OCD: Therapist Guide (Freeman and Marrs Garcia, 2008)
- Obsessive-Compulsive Disorder and Its Spectrum: A Life-Span Approach (Storch and McKay, 2008)

Relevant websites

- FDA, [www.fda.gov/Drugs/ResourcesforYou/Healthprofessionals](http://www.fda.gov/Drugs/ResourcesforYou/Healthprofessionals)
- International OCD Foundation, [www.ocdfoundation.org](http://www.ocdfoundation.org)
- Association for Behavioral and Cognitive Therapies, [www.abct.org](http://www.abct.org)
- PANDAS Network, [www.pandasnetwork.org](http://www.pandasnetwork.org)
- Beyond OCD, [www.beyondocd.org](http://www.beyondocd.org)
- Developmental-Behavioral Peds, [www.dbpeds.org](http://www.dbpeds.org)
- Teaching the Tiger – A Handbook for Educators, [www.hopepress.com](http://www.hopepress.com)

References


# Post-Traumatic Stress Disorder (PTSD) in Children under Age 6

## Level 0

Comprehensive assessment includes: Focusing on child’s safety, current symptoms and family functioning (see *Principles of Practice*).

- Assessment of ongoing trauma in the context of the environment including: history of abuse (physical, sexual, neglect), traumatic life events, domestic violence, economic instability, etc.
- Review that all safety concerns (i.e., child abuse) have been reported to the appropriate agencies and/or make any mandated reports based on history.
- Perform a comprehensive assessment of psychiatric symptoms and co-morbidities, as well as impairment from these symptoms and disorders.
- Perform a thorough assessment of developmental, medical history, family structure, and parent-child relationship.
- Perform an assessment of family psychiatric history, including past and current history of parental psychiatric illnesses, substance abuse and treatment history of parents, parental figures (e.g., step parent), siblings, and other relatives.

## Level 1

- Psychotherapy such as CBT (4 months) or Child Parent Psychotherapy (6 months).

## Level 2

- If poor response, to psychosocial treatment after 4 to 6 months, consider switch to different therapy, assess for ongoing trauma exposure, co-morbidity, and caregiver impairment. Additionally, may consider evidence based methods of behavior management in children with co-morbid behavior problems (Parent Management Training, Parent Child Interaction Therapy).

## Not Recommended:

- The use of medication to treat PTSD in this age group.
**Post-Traumatic Stress Disorder (PTSD) in Children and Adolescents Ages 6 to 17 Years Old**

### Level 0

Comprehensive assessment includes:

- Use of standardized measures:
  - Juvenile Victimization Questionnaire
  - Trauma History component of the University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index (UCLA-PTSD RI)
  - For specific PTSD symptoms, clinicians may use:
    - University of California at Los Angeles Posttraumatic Stress Disorder Reaction index for DSM-5 (a self-report and parent report measure of symptoms)
    - Child PTSD Symptom Scale
  - Links to the measures are available at [http://medicaidmentalhealth.org](http://medicaidmentalhealth.org/)
- Assessment of ongoing trauma in the context of the environment including history of abuse (physical, sexual, neglect), traumatic life events, domestic violence, economic instability, etc.
- Review that all safety concerns (i.e., child abuse) have been reported to the appropriate agencies and/or make any mandated reports based on history.
- A comprehensive assessment of psychiatric symptoms and co-morbidities, as well as impairment from these symptoms and disorders.
- Thorough assessment of developmental, medical history, family structure, and parent-child relationship.
- An assessment of family psychiatric history, including: past and current history of parental psychiatric illnesses, substance abuse and treatment history of parents, parental figures (e.g., step parent), siblings, and other relatives.

### Level 1

Trauma-focused cognitive behavioral therapy (TF-CBT)

### Level 2

Other psychosocial interventions including:

- Prolonged exposure therapy
- Cognitive behavioral therapy for PTSD
- Eye Movement Desensitization and Reprocessing therapy
- KIDNET (a child friendly version of Narrative Exposure Therapy or NET)
Level 3
Re-evaluate and reassess for new or ongoing safety concerns.

- Refer to Principles of Practice.
- For symptoms of sleep problems, intrusive symptoms or increased arousal/reactivity, may consider psychotherapy augmentation with clonidine, guanfacine, prazosin (nightmares and sleep disturbances only).
  - Re-assess diagnosis and refer to specialist if not already done for persistent trauma exposure.
- Assess that family has received supportive treatment.

Not Recommended:
- SSRIs in the absence of comorbidities are not recommended because of several negative trials.
- Benzodiazepines are not recommended.
- No pharmacotherapy has proved to be effective for secondary prevention of PTSD in children.

Notes:
1. Not every trauma results in PTSD.
2. No FDA approved medications listed in Level 3. Limited evidence of efficacy for agents listed in Level 3.

References

Schizophrenia (Early Onset)

Level 0
Comprehensive assessment: Diagnosis based on symptom presentation, mental status examination findings (e.g., responding to internal stimuli, bizarre beliefs, disorganized speech) and course of illness, especially either a decline in function or failure to progress. Many youth report experiences suggestive of psychosis, but do not present with overt disruptions in thinking and behavior characteristic of schizophrenia. Assess potential confounding factors, including any history of significant developmental problems, mood disorders, trauma or substance abuse.

Helpful clinical tools include:

**Structured diagnostic interviews**
- Kiddie-SADS-Present and Lifetime Version (K-SADS-PL)
- Structured Clinical Interview for DSM, Childhood Version (KID SCID)

**Symptom questionnaires**
- Positive and Negative Syndrome Scale (PANSS)
- Brief Psychiatric Rating Scale for Children (BPRS-C)

Links to clinical tools listed above are available at [http://medicaidmentalhealth.org](http://medicaidmentalhealth.org)

Level 1
Monotherapy with an antipsychotic agent FDA-approved to treat schizophrenia in adolescents:

- Risperidone, aripiprazole, quetiapine, paliperidone (ages 13 years and older)
- Haloperidol, perphenazine, thiothixene (ages 12 years and older)

First-line medication choice is based on side effect profile, patient/family preference and cost. For all antipsychotic trials, systematic side effect monitoring is needed, including extrapyramidal side effects and metabolic monitoring per ADA guidelines. Adjunctive agents may be indicated to treat/prevent EPS or metabolic side effects.

A therapeutic trial is generally defined as 4 to 6 weeks with doses up to FDA-approved dosages in adults (with allowances for children < 13 years of age), as tolerated. However, if there is no response after two weeks at a therapeutic dose, consider changing to a different agent (Level 2).

Youth with schizophrenia and their families also need intensive support and case management services, including psychoeducational therapies addressing treatment options, safety planning and relapse prevention; and other resources such as special education and/or vocational programs.

Notes:
1. Risperidone is often used first since the agent has been well studied in pediatric populations, and is available as a generic.
2. Olanzapine is FDA approved to treat schizophrenia in adolescents (ages 13 years and older). However, given the risk of metabolic side effects, olanzapine is not generally recommended as a first-line treatment.
3. Although the traditional neuroleptics, e.g., haloperidol, perphenazine and thiothixene are FDA approved for use in adolescents, they have not been as well studied as the newer second generation medications in the pediatric population.
4. Paliperidone is a metabolite of risperidone and more expensive.
### Level 2
Monotherapy with alternative drug FDA-approved to treat schizophrenia in adolescents (from Level 1 above, or olanzapine) if the first agent tried is not effective or poorly tolerated.

### Level 3
Monotherapy with alternative drug FDA-approved to treat schizophrenia in adolescents (from Level 1 above or olanzapine), or with an antipsychotic FDA-approved for adults*, but not approved for children and adolescents.

**Notes:**
1. For nonresponses to second generation agents, consider trial of first generation agent.
2. Ziprasidone was not found to be superior to placebo for treating adolescent schizophrenia. (Findling et al., 2013), and therefore is not recommended for treating schizophrenia in this age group.
3. Clozapine is reserved for treatment refractory cases (see Level 5).

For patients with treatment failure exacerbated by noncompliance, psychosocial strategies should be enhanced to address adherence, including developing strategies to better monitor medication administration. Treatment with a long-acting depot antipsychotic agent may also be considered. Available agents include risperidone microspheres, paliperidone palmitate, aripiprazole extended-release injectable suspension, olanzapine pamoate*, haloperidol decanoate, fluphenazine decanoate. None of these agents are FDA approved for use in youth.

**Note:** Olanzapine pamoate has been linked with a potentially life-threatening post injection syndrome, [http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm357601.htm](http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm357601.htm)

### Level 4
In combination with antipsychotic monotherapy, adjunctive treatment with a mood stabilizer or an antidepressant may be considered to target comorbid mood symptoms or aggression.

### Level 5
Clozapine trial for treatment refractory cases.

**Notes:**
1. Treatment refractory defined as failing with two or more therapeutic trials of an antipsychotic agent.
2. Clozapine requires an intensive monitoring protocol.

### Level 6
For patients that have failed to respond to multiple different anticonvulsants, diagnostic reevaluation and consultation are indicated. Electroconvulsive therapy (ECT) may be considered for adolescents with schizophrenia who do not adequately respond to, or cannot tolerate, antipsychotic medications; or those suffering from catatonia.
References

### Tic Disorders in Children and Adolescents Ages 6 to 17 Years Old

#### Level 0
Comprehensive assessment: Assess course (age of onset, types of tics, tic frequency, alleviating and aggravating factors) duration and severity. Careful assessment that attends to issues of social (bullying), educational (reading impairment), physical impairment (pain due to tics) as well as complicating comorbidity. Review for most common comorbid presentations: ADHD, tics, separation anxiety, ASD. Health status: Infections (especially group A streptococcus, Mycoplasma, Influenza), endocrine disorders, autoimmune disorders, genetic disorders, Wilson’s, CNV’s associated with OCD/tics; Secondary to a medication: stimulants, lamotrigine. Family history (for OCD, tics, autoimmunity).

- If tics are not causing impairment, educate but no treatment is necessary.
- Specialty referral as appropriate—child psychiatry or neurology or for CBT/HR.

#### Level 1
Mild-moderate impairment, secondary to tics, use habit reversal therapy (HRT) if possible (check [www.tsa-usa.org](http://www.tsa-usa.org) for trained therapists). Alpha-2 agonist (clonidine or guanfacine) especially if ADHD is present.

#### Level 2
Risperidone, aripiprazole or haloperidol, in low doses.

#### Level 3
Trial of medication not already used at Level 1 or a trial of pimozide (there are dosing, drug interaction safety, and QTc concerns with this agent).

#### Level 4
Antipsychotic in combination with SSRI, clonazepam, alpha-2 agonist, or topiramate depending on target symptoms. Severity of illness should drive the use of one or two agents.
Tic Disorders in Children and Adolescents Ages 6 to 17 Years Old (continued)

### Medications Used in the Treatment of Tics: Level of Evidence and Dosing Recommendations

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Level of Evidence</th>
<th>Starting Dose (mg)</th>
<th>Usual Dose (mg/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clonidine</td>
<td>A</td>
<td>0.025 – 0.05</td>
<td>0.10 – 0.30</td>
</tr>
<tr>
<td>Guanfacine</td>
<td>A</td>
<td>0.5 – 1.0</td>
<td>1.0 – 3.0</td>
</tr>
<tr>
<td>Risperidone</td>
<td>A</td>
<td>0.125 – 0.50</td>
<td>0.75 – 3.0</td>
</tr>
<tr>
<td>Aripiprazole</td>
<td>B+</td>
<td>1.0 – 2.5</td>
<td>2.5 – 10</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>A</td>
<td>0.25 – 0.5</td>
<td>1 – 4</td>
</tr>
<tr>
<td>Pimozide*</td>
<td>A</td>
<td>0.5 – 1.0</td>
<td>2 – 8</td>
</tr>
<tr>
<td>Ziprasidone*</td>
<td>B</td>
<td>20</td>
<td>20 – 40</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>B</td>
<td>2.5 – 5.0</td>
<td>2.5 – 12.5</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>B</td>
<td>25</td>
<td>25 – 200</td>
</tr>
<tr>
<td>Fluphenazine</td>
<td>B</td>
<td>0.5 – 1.0</td>
<td>1.5 – 10</td>
</tr>
<tr>
<td>Tetrabenazine</td>
<td>B</td>
<td>25</td>
<td>37.5 – 150</td>
</tr>
</tbody>
</table>

◊ = EKG monitoring; *cyt2D6 testing for doses above 0.05mg/kg/day

A = 2 RCTs or more  
B = Small RCT or more than one open label study  
C = Open label or case series

### Hierarchical Approach in Pharmacotherapy for Tics:

- Mild tics: No medication treatment
- Moderate tics: Alpha-2 agonists, Atypical neuroleptics
- Severe tics: Atypical neuroleptics, Typical neuroleptics (e.g., pimozide, haloperidol, fluphenazine)

### Patient Characteristics Best Suited for Tic Behavioral Therapy

- No severe ADHD
- No substance abuse
- No severe oppositionality
- Stable family environment
- No severe anxiety or mood disturbance
- Age ≥ 9 years (but some success with motivated younger patients)

### Tic Disorders and Comorbidities: ADHD

- Treat the ADHD conservatively
- Tics are not universally worse on stimulant (Bloch et al. 2009; Pringsheim and Steeves 2011; Tourette Syndrome Study Group 2002)
- Alpha-2 agonists show better improvement in tic severity if ADHD is comorbid (Bloch et al. 2009)
Tic Disorders in Children and Adolescents Ages 6 to 17 Years Old (continued)

Tic Treatment Pearls:
- Treating the tics may help comorbid condition (e.g. OCD, ADHD).
- Alpha-2 agonists have demonstrated the most efficacy for tics with comorbid ADHD.
- EKG monitoring and pharmacogenomics with pimozide.

Resources

- Children
  - Matthew and the Tics available at http://www.tsa-usa.org/aPeople/Youth/matthew_tics.html

- Parents/caregivers

- Clinicians

- Relevant websites
  - FDA, www.fda.gov/Drugs/ResourcesforYou/Healthprofessionals
  - Association for Behavioral and Cognitive Therapies, www.abct.org
  - Developmental-Behavioral Peds, http://www2.aap.org/sections/dbpeds/
  - Tic Severity Checklist, www.medicalhomeportal.org/link/4504
  - Teaching the Tiger – A Handbook for (Educators), www.hopepress.com/books/teaching_the_tiger.html
  - Bullying, http://www.stopbullying.gov/
References


medicaidmentalhealth.org

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