

# Anxiety Disorders in Children and Adolescents 6-17 years

## 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). Both free at <http://www.wpic.pitt.edu/research> and <http://www2.psy.uq.edu.au/~sues/scas/>
- 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 (Sikverman & Albano, 1996).*

## Level 1

If mild to moderate Anxiety Disorder:

- 1a. Provide family with psychoeducation regarding anxiety disorders and cognitive-behavior therapy (CBT).
- Initiate treatment with exposure-based cognitive-behavior therapy.
- 1b. If CBT is not available, first consider evidence-based psychosocial interventions.  
Provide family with psychoeducation regarding anxiety disorders and CBT.
- Train to monitor child's anxiety symptoms (eg. 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.

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## Level 2

If moderate to severe AD or inadequate response to CBT alone:

- 2a. Initiate monotherapy treatment with fluoxetine or sertraline.
  - Combination therapy with CBT and 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 AD and levels 1 and 2 are not successful:

- 3a. Consider another SSRI, such as fluvoxamine, citalopram or escitalopram, 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.

## Note:

Despite limited evidence, may consider monotherapy or augmentation with other medications if partial or poor response with SSRIs or venlafaxine: low-dose benzodiazepines, alpha-2 agonist, buspirone, clomipramine.

Benzodiazepines should be reserved for short-term use, long-term use is not recommended.

# Medications for the Treatment of Anxiety Disorders

- 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 6-17 years with anxiety disorders).

Drug Name	Young Child (4-6)	Child (6-12 years)	Adolescent
<b>*Fluoxetine</b> Starting Dose: Maximum Dose:	1-2 mg/day 5-10 mg/day	2.5-5 mg/day 20-40 mg/day	5-10 mg/day 40-60 mg/day
<b>*Sertraline</b> Starting Dose: Maximum Dose:	5 mg/day 50-75 mg/day	10-12.5 mg/day 100-150 mg/day	25 mg/day 150-200 mg/day
<b>*Fluvoxamine</b> Starting Dose: Maximum Dose:	5 mg/day 50-75 mg/day	12.5-25 mg/day 100-200 mg/day	25 mg/day 150-300 mg/day
<b>Citalopram</b> Starting Dose: Maximum Dose:	No data	5 mg/day 20-40 mg/day	10 mg/day 40 mg/day (check ECG above 40mg for QTc prolongation)
<b>Escitalopram</b> Starting Dose: Maximum Dose:	No data	2.5 mg/day 10-20 mg/day	5 mg/day 20 mg/day
<b>*Venlafaxine</b> Starting Dose: Maximum Dose:	No data	37.5 mg/day 75-112.5 mg/day (25-39kg)	37.5 mg/day 150 mg/day (40-49 kg) 225 mg/day (>50 kg)

**Note:**

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.

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## Additional Clinical Information

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

## 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, aggression.

### Substance Abuse 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.

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## Autism Spectrum Disorders (ASD) and Developmental Disorders (DD):

- Can modify CBT for anxiety disorders with ASD, 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, irritability present.
- Stimulants: for problems with inattention, concentration, and hyperactivity.
- Guanfacine or clonidine: for impulsivity, explosiveness, restlessness. Assess for trauma history.
- Atypical antipsychotics (risperidone, aripiprazole): for irritability, aggression, 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 (eg, insomnia, decreased appetite, vomiting, activation, withdrawal symptoms, 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 for Parents:

- Helping Your Anxious Child (Rapee, Wignall, Spence, Cobham, 2008).
- Keys to Parenting Your Anxious Child (Manassis, 2008).
- Helping Your Child With Selective Mutism (McHolm, Cunningham, Vanier 2005).

## Resources for Adolescents:

- My Anxious Mind: A Teen's Guide to Managing Anxiety and Panic (Tompkins & Martinez, 2009).
- Riding the Wave Workbook for adolescents with panic disorder (Pincus, Ehrenreich & Spiegel, 2008).

## Resources for Children:

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

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)