Please note: This guidance is based on the work of the World Health Organization (www.who.int) and may be updated annually. Check "Feedback & Updates" periodically.

Anxiety disorders (overanxious anxiety disorder, generalized anxiety disorder, panic disorder, separation anxiety disorder, agoraphobia, social phobia, avoidant disorder, post-traumatic stress disorder [PTSD], obsessive-compulsive disorder [OCD], specific phobias) are among the most common mental health disorders in children and adolescents. From 6% to 20% of youth meet the diagnostic criteria for any of the anxiety disorders,[1] approximately half experiencing impairment of daily functioning.[2] Anxiety disorders often occur concomitantly with chronic medical conditions[3] and with other psychiatric disorders—especially depression.[4] Because of the prevalence and clinical significance of anxiety among children and the potential effectiveness of primary care interventions, the American Academy of Pediatrics recommends that pediatric primary care clinicians achieve competence in the care of children experiencing anxiety.[5]

Screening Results Suggesting Anxiety

Pediatric Symptom Checklist (PSC)-35: Total score ≥24 for children 5 years and younger; ≥28 for those 6 to 16 years; and ≥30 for those 17 years and older AND further discussion of items related to anxiety confirms a concern in that area.

PSC-17: Internalizing subscale is ≥5 AND further discussion of items related to anxiety confirms a concern in that area.

Strengths and Difficulties Questionnaire (SDQ): Total symptom score of >19; emotional symptom score of 7 to 10 (see instructions at www.sdqinfo.com/ScoreSheets/e2.pdf); impact scale (back of form) score ≥2 indicates some degree of impairment; AND further discussion of items related to anxiety confirms a concern in that area.

Symptoms and Clinical Findings Suggesting Anxiety

History from youth or parent suggests

- Normal fears are exaggerated or persistent (eg, strangers, dark, separation, new social situations, unfamiliar animals or objects, public speaking).
- Fears are keeping child from developmentally appropriate experiences (eg, school refusal, extreme shyness or clinging, refusal to sleep alone).
- Tantrum, tearfulness, acting-out behavior, or another display of distress occurs when child is asked to engage in feared activity.
- Child worries about harm coming to self or loved ones or fears something bad is going to happen.
- Behavior changes such as the following[5] followed a traumatic experience such as abuse, witness to violence, loss of a loved one, or medical trauma:
  - **Infants and toddlers:** Crying, clinging, change in sleep or eating habits, regression to earlier behavior (eg, bed-wetting, thumb sucking), repetitive play or talk
  - **3- to 5-year-olds:** Separation fears, clinging, tantrums, fighting, crying, withdrawal, regression to earlier behavior (eg, bed-wetting, thumb sucking), sleep difficulty
  - **6- to 9-year-olds:** Anger, fighting, bullying, irritability, fluctuating moods, fear of separation or being alone, fear of recurring events, withdrawal, regression to earlier behavior, physical complaints (eg, stomachaches, headaches), school problems (eg, avoidance, academic difficulty, difficulty concentrating)
  - **10- to 12-year-olds:** Crying, aggression, irritability, bullying, resentment, sadness, withdrawal, fears, suppressed emotions, sleep disturbance, concern about physical health, physical complaints, academic problems or decline
  - **13- to 18-year-olds:** Numbing, reexperiencing, avoidance of feelings, resentment, loss of trust, depression, withdrawal, mood swings, irritability, anxiety, anger, exaggerated euphoria, acting out, substance use, fear of similar events, appetite and sleep changes, physical complaints, academic decline, school refusal

- Somatic features accompany worries—palpitations, stomachaches, headaches, breathlessness, difficulty getting to sleep, nausea, feeling wobbly ("jelly legs"), butterflies.
- *Panic attacks* occur in response to feared objects or situations or happen spontaneously. These are unexpected and repeated periods of intense fear, dread, or discomfort along with symptoms such as racing heartbeat, shortness of breath, dizziness, light-headedness, feeling smothered, trembling, sense of unreality, fear of dying, losing control, or losing one's mind. Panic attacks frequently develop without warning and last minutes to hours.

Conditions That May Mimic or Co-occur With Anxiety

Differentiate From Normal Behavior
Anxiety is a universal experience. It is often difficult to diagnose anxiety disorder in young children because a moderate level of anxiety is normative at certain developmental stages.

- **8 to 9 months:** Peak of stranger anxiety (children are usually able to separate easily by 3 years).
- **5 to 8 years:** May have increase in worry about harm to parents or attachment figures.
- **School-aged children of any age:** Anxiety and distress at the time of high-stakes testing; initial reluctance to socialize in new situations.

Children with anxiety disorders have excessive fear and distress in response to everyday situations. Verbal older children and adolescents are usually able to describe their anxiety, but evaluating reports of younger children's anxiety may be challenging if the parent giving information is also anxious, so *it is important to communicate directly with all children about these symptoms and to observe physiologic symptoms (eg, increased heart rate, shortness of breath, numbness, tingling)*.

Learning problems or disabilities. If symptoms of anxiety are associated with problems of school attendance or performance, the child may be experiencing academic difficulties. (See Learning Difficulties guidance for exploring this possibility.)

Somatic complaints. Anxious children may present with a variety of somatic complaints, eg, gastrointestinal symptoms, headaches, chest pain. These may elicit medical workups if they are not recognized. Conversely, acute or chronic medical conditions or pain syndromes may cause anxiety.

Depression. This can be very difficult to distinguish from anxiety. Depression coexists in half or more of anxious children. Marked sleep disturbance, disturbed appetite, low mood, or tearfulness in the absence of direct anxiety provocation could indicate that a child is depressed.

Bereavement. The vast majority of children will experience the death of a family member or friend sometime in their childhood. Other losses may also trigger grief responses—separation or divorce of parents, relocation, change of school, deployment of a parent in military service, breakup with a girlfriend or boyfriend, or remarriage of a parent. Such losses are traumatic. They may result in feelings of insecurity and anxiety immediately following the loss or exacerbate existing anxiety. Furthermore, they may make the child more susceptible to impaired functioning at the time of subsequent losses. See also the discussion of PTSD on the next page.

Autism spectrum disorders including pervasive development disorder and Asperger syndrome. Children who have these difficulties also have problems with social relatedness (eg, poor eye contact, preference for solitary activities), language (often stilted), and range of interest (persistent and intense interest in a particular activity or subject). They often will have very rigid expectations for routine or parent promises and become anxious or angry if these expectations are not met.

Exposure to adverse childhood experiences (ACE). Children who have experienced or witnessed trauma, violence, a natural disaster, separation from a parent, parental divorce or separation, parental substance use, neglect, or physical, emotional, or sexual abuse are at high risk of developing emotional difficulties such as adjustment disorder or PTSD. Determination of the temporal relationship between the trauma and onset of anxiety symptoms is essential. Denial of trauma symptoms does not mean trauma did not occur; questions about ACE should be repeated as a trusting relationship is established.

Psychosis. Symptoms associated with psychosis, such as hallucinations or delusions, may occur in children with PTSD. They may also occur infrequently with adolescent onset of bipolar disorder and are features of schizophrenia, which may also have its onset in adolescence. The teen may manifest fear without disclosing the hallucinations or delusions.

Physical illness. Medical issues that can mimic or provoke anxiety symptoms include thyroid disease, hypoglycemia, side effects of medications (eg, bronchodilators), and endocrine tumors (pheochromocytoma). Drug or alcohol withdrawal is a consideration for teens (the latter potentially a medical emergency).

Selective mutism. Consider this if a child who has had normal language development suddenly stops talking in certain situations (most often in school and to adults outside the home). This can be confused with children making a language transition, eg, a child raised speaking Spanish who is suddenly placed in an English-speaking class.

Tools for Further Assessment of Anxiety

Screen for Child Anxiety Related Disorders 2 (SCARED), parent and child versions: Best for generalized anxiety, panic disorder, significant somatic symptoms, separation anxiety, social anxiety, or significant school avoidance. Tool designed for children 8 years and older.

Spence Children's Anxiety Scale: Tool designed for children 2½ to 6½ years (parent report) and youth 8 to 12 years (self-report).

Individual evaluation—necessary for OCD and PTSD.

- **Consider OCD in the presence of marked rituals or compulsive behaviors.** Most children have phases of ritualized behavior that can usually be distinguished from OCD by the degree of distress caused if a ritual is interrupted and the number of rituals present at any one stage. These children may complain of getting stuck on certain thoughts.
- **Consider PTSD if the onset of anxiety was preceded by an extremely distressing experience(s)** such as witnessing violence, experiencing abuse, losing a loved one, undergoing medical trauma, or suffering chronic sexual or physical abuse. Parents may be unaware of exposures to trauma such as bullying at school or in the community, and there may be major traumas in the family (eg, serious illness in a parent, pending divorce) that are similarly not discussed or disclosed; consequently, clinicians will need to interview children and parents separately to elicit a complete history. The 3 hallmark symptom clusters in PTSD are reexperiencing (often repetitive play in children), avoidance of memories or situations that recall the trauma, and hypervigilance (eg, increased worry about safety, startling or anxiousness at unexpected sounds or events). Children most at risk for developing PTSD following trauma or loss are those with preexisting mental health conditions, those whose caregivers are experiencing emotional difficulties, those facing preexisting or consequent family life stressors such as divorce or loss of job, those with previous loss or trauma experiences, those repeatedly exposed to media coverage of traumatic events, and those with a limited support network.[4] Clinicians can provide the child with a safe and comfortable environment to express his or her feelings and allow the child to control the interview, taking breaks or discontinuing as needed. Even children with limited symptoms of PTSD after a trauma can benefit from treatment.

Evidence-Based and Evidence-Informed Interventions for Anxiety (as of April 2010)

Updates are available at www.aap.org/mentalhealth.

Psychosocial Interventions for Generalized Anxiety Disorders[6]

- **Level 1 (best support):** cognitive behavior therapy (CBT), CBT and medication, education, exposure, modeling
- **Level 2 (good support):** assertiveness training, CBT for child and parent (child and parent receive CBT separately, focusing on each of their concerns), CBT with parents (includes parent and child, focusing on the child's concerns), family psychoeducation, hypnosis, relaxation

Psychosocial Interventions for Traumatic Stress[6]

- **Level 1 (best support):** CBT with parents (includes the parent as well as the child, focusing on the child's concerns)
- **Level 2 (good support):** CBT (individual or group)

US Food and Drug Administration–Approved Psychopharmacologic Interventions (as of April 2010)

For up-to-date information about Food and Drug Administration (FDA)-approved interventions, go to www.fda.gov.

- **OCD:** selective serotonin reuptake inhibitor (SSRI) (sertraline, fluvoxamine), clomipramine
- **Other anxiety disorders:** none FDA-approved for children

Treatment of Panic Attacks

- **Early treatment,** including psychosocial and psychopharmacologic therapy, is useful and may prevent progression to agoraphobia and other problems such as depression and substance abuse.[7]

Selected Informational Links

- American Academy of Pediatrics Children's Mental Health in Primary Care Web site (www.aap.org/mentalhealth).
- American Academy of Child & Adolescent Psychiatry (AACAP) Web site (www.aacap.org).
- *Caring for Kids After Trauma and Death: A Guide for Parents and Professionals.* Institute for Trauma and Stress at the NYU Child Study Center (http://webdoc.nyumc.org/aboutourkids/files/articles/crisis_guide02_w_spanish.pdf). This publication provides an extensive bibliography and resource list for professionals on bereavement, trauma, and PTSD.
- US FDA Web site (www.fda.gov).

Plan of Care for Children With Anxiety

Engage child and family in care.

Engaging Children and Families in Mental Health Care: A Process for Pediatric Primary Care Clinicians*

Reinforce strengths of child and family. Follow the mnemonic HELP to

- ❑ Build trust and optimism.
- ❑ Reach agreement on incremental next steps and, ultimately, therapeutic goals.
- ❑ Develop plan of care (see the following clinical guidance).
- ❑ Collaboratively determine role of primary care clinician, eg, provide intervention(s); provide initial intervention while awaiting family's readiness for or access to specialty care; coordinate with specialist(s), child care, school, or agencies; monitor progress; encourage child and family's positive view of treatment.

**Without engagement, most families will not seek or persist in care. Process may require multiple primary care visits.*

Encourage healthy habits.

Encourage exercise, outdoor play, balanced and consistent diet, sleep (critically important to mental health), avoidance of exposure to frightening or violent media, special time with parents, acknowledgment of child's strengths, and open communication about worries with a trusted adult.

Reduce stress: consider the environment

(eg, family social history, parental depression screening, results of any family assessment tools administered, reports from child care or school).

Is an external problem causing the child to be anxious (eg, bullying at school, academic difficulties, disruption at home)? Take steps to address the problem.

Is the child's worry about a parent's welfare legitimate because of a serious illness, domestic violence, or parent impairment? Address environmental issues, enlisting the help of school personnel or social services as appropriate to the situation.

Is the parent anxious or depressed or impaired because of substance abuse? Has the parent suffered trauma or loss? Anxious children very often have an anxious or a depressed parent. Advise parents to minimize their own displays of fear or worry when the child is present. A referral to adult mental health services might also be appropriate.

Acknowledge and reinforce protective factors, eg, good relationships with at least one parent or important adult, pro-social peers, concerned or caring family, help-seeking, connection to positive organization(s).

Offer initial intervention(s).

Guide parents in managing child's fears.

- Identify the child's fear(s) and reach consensus with child and family on the goal of reducing symptoms.
  - Teach the child and parent cognitive behavioral strategies to improve coping skills (eg, deep breathing, muscle relaxation, positive self-talk, thought stopping, thinking of a safe place).
  - Use reading material or Web course as appropriate to literacy level.
- One of the best-validated approaches to anxiety and phobias is to gradually increase exposure to feared objects or experiences. The eventual goal is to master rather than avoid feared things.

√ Increasing Exposure

Start out with brief exposure to the feared object or activity and gradually make it longer.

- ❑ Imagine or talk about the feared object or activity or look at pictures.
- ❑ Learn to tolerate a short exposure.
- ❑ Tolerate a longer exposure in a group or with a coach.
- ❑ Tolerate the feared activity alone but with a chance to get help if needed.

During these trials parents need to stay as calm and confident as possible—if they become distressed, it will be a cue for the child to become distressed.

- For some children who are vulnerable to anxiety disorder, it is necessary to promptly return the child to the anxiety-producing situation. School phobia is an example.

√ Managing School Phobia

- ❑ Rule out bullying, trauma, learning difficulties, and medical conditions that may be contributing to stress and fear.
- ❑ Partner with school personnel to manage the child's return to school.
- ❑ Gently but firmly insist that the child attend school, coupled with positive feedback and calm support.
- ❑ Refer to mental health specialist if absence becomes prolonged or parents are reluctant to support the child's return.

- If anxiety is secondary to environmental stress, support the parent to protect the child, to buffer stress, and to help the child master his or her anxiety.
- Help the child rename the fear (ie, "annoying worry").
- Help the child become the boss of the worry.
- Reward brave behavior.

√ Tips for Reward System

- Give small rewards (including positive feedback) for displaying brave behavior.
- School-aged children respond well to star charts. The guidelines for using star charts for brave behavior are
- ❑ Focus on only 1 or 2 behaviors at a time.
- ❑ Have 1 star chart per behavior.
- ❑ Negotiate rules for the star chart, eg, sleeping in own bed for one night = 1 star; 4 stars = trip to the pool.
- Ignore mistakes and failures—do not even mark them on the star chart.
- Simply continue awarding stars when they are earned.

Attend to overall parenting style.

- Children can become anxious if parents are inconsistent about rules and expectations.
- Determine whether there are catastrophic consequences for failure ("I know Dad will get angry if I bring home a bad grade").
- Explore the child's sense of responsibility for the family's stresses ("I know that the only reason Mom and Dad work hard is so I can go to a better school, so I'm afraid that if I don't do well…").

Offer child and parents resources to educate and assist them with self-management.

Brochure

Your Child's Mental Health: When to Seek Help and Where to Get Help

Toolkit

Jellinek M, Patel BP, Froehle MC, eds. Tips for parenting the anxious child. In: *Bright Futures in Practice. Mental Health, Volume 2. Tool Kit*. Arlington, VA: National Center for Education in Maternal and Child Health; 2002:96–97

Book

Rapee RM, Wignall A, Spence SH, Cobham V, Lyneham H. *Helping Your Anxious Child: A Step-By-Step Guide for Parents.* 2nd ed. Oakland, CA: New Harbinger Publications; 2008

Web sites

HealthyChildren.org Web site (www.healthychildren.org). Accessed April 13, 2010

US Department of Health and Human Services, Food and Drug Administration. Medication Guide Web site. Available at: http://www.fda.gov/Drugs/DrugSafety/ucm085729.htm. Accessed April 13, 2010

Monitor child's progress toward therapeutic goals.

- See report "Enhancing Pediatric Mental Health Care: Strategies for Preparing a Primary Care Practice" for monitoring methods.
- Child care, preschool, or school reports can be helpful in monitoring progress.
- SDQ (parent, teacher) and PSC can be helpful in monitoring progress with symptoms and functioning.
- Provide contact numbers and resources in case of emergency.

Involve specialist(s) if child does not respond to initial interventions or if indicated by the following clinical circumstances:

- Child has severe functional impairments at school, at home, or with peers.
- Interventions by primary care clinician have not alleviated symptoms.
- Multiple symptoms of anxiety occur in many domains of life (eg, fearful of new situations, reluctant to do things in public, trouble separating, worries a lot).
- Anxiety threatens to interfere with education or academic progress.
- Symptoms are threatening the achievement of developmentally important goals, (eg, a shy child is reluctant to mix with other children).
- The child or parent is very distressed by the symptom(s).
- There are co-occurring behavior problems. (The combination of shyness, anxiety, and behavior problems is thought to be particularly risky for future behavior problems of a more serious nature.)
- The anxiety was preceded by serious trauma or symptoms suggest PTSD.
- The child seems to have panic disorder or OCD (both of which are potentially amenable to combinations of medication and cognitive therapy); see AACAP guidelines available at www.myguidelinescenter.com if primary care clinician will prescribe medication.

√ Primary care tasks may include the following:

- ❑ Initiating medication or adjusting doses
- ❑ Monitoring response to treatment (Child may improve just knowing that primary care clinician is involved and interested.)
- ❑ Monitoring adverse effects
- ❑ Engaging and encouraging child's positive view of treatment
- ❑ Coordinating care provided by parents, school, medical home, and specialists

Resources for Clinicians

Reports and Articles

American Academy of Child & Adolescent Psychiatry Practice Parameters. Available at: http://www.aacap.org/cs/root/member_information/practice_information/practice_parameters/practice_parameters. Accessed April 13, 2010.

- Anxiety Disorders (Vol 46, February 2007)
- Posttraumatic Stress Disorder (Vol 49, April 2010)

Hawaii Department of Health, Child and Adolescent Mental Health Division, Evidence Based Services Committee. 2004 Biennial Report: Summary of Effective Interventions for Youth with Behavioral and Emotional Needs. Available at http://hawaii.gov/health/mental-health/camhd/library/pdf/ebs/ebs011.pdf. Accessed April 13, 2010

Hawaii Department of Health, Child and Adolescent Mental Health Division, Evidence Based Services Committee. 2007 Biennial Report: Effective Psychosocial Interventions for Youth with Behavioral and Emotional Needs. Availble at: http://hawaii.gov/health/mental-health/camhd/library/pdf/ebs/ebs012.pdf. Accessed April 13, 2010

Barrett PM, Farrell L, Pina AA, Peris TS, Piacentini J. Evidence-based psychosocial treatments for child and adolescent obsessive-compulsive disorder. *J Clin Child Adolesc Psychol*. 2008;37(1):131–155

Huey SJ, Polo AJ. Evidence-based psychosocial treatments for ethnic minority youth. *J Clin Child Adolesc Psychol*. 2008;37(1):262–301

Silverman WK, Ortiz CD, Viswesvaran C, et al. Evidence-based psychosocial treatments for children and adolescents exposed to traumatic events. *J Clin Child Adolesc Psychol*. 2008;37(1):156–183

Silverman WK, Pina AA, Viswesvaran C. Evidence-based psychosocial treatments for phobic and anxiety disorders in children and adolescents. *J Clin Child Adolesc Psychol*. 2008;37(1):105–130

Toolkit

Laraque D, Jensen P, Schonfeld D. *Feelings Need Check Ups Too: Addressing the Mental Health Needs of Children Following Catastrophic Events*: *An Educational Resource for Pediatricians*. Elk Grove Village, IL: American Academy of Pediatrics; November 2006. Available at: http://www.aap.org/profed/childrencheckup.htm Accessed April 13, 2010

Book

Brown RT, Antonuccio DO, Dupaul GJ, et al. *Childhood Mental Health Disorders: Evidence Base and Contextual Factors for Psychosocial, Psychopharmacological, and Combined Interventions*. Washington, DC: American Psychological Association; 2008

Web Sites

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). Offered by the National Child Traumatic Stress Network. Available at: www.nctsn.org/nccts/nav.do?pid=ctr_train_archive. Accessed April 13, 2010

World Health Organization Web site. Available at: http://www.who.int/en. Accessed April 13, 2010

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7. American Academy of Child and Adolescent Psychiatry. Facts for Families. The Anxious Child. No. 47. Updated November 2004. Available at: http://www.aacap.org/cs/root/facts_for_families/the_anxious_child. Accessed April 13, 2010

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