

OVERVIEW OF DEVELOPMENTAL SCREENING TOOLS

Types of developmental screening tools include: "Parent Questionnaire," "History/Interview," "Direct Elicitation," and "Observation." The following is a Screening Tools Overview available to physicians. *Note: A complete list of tools, ordering information, and a discussion of the pitfalls of screening can be found at www.dbpeds.org.*

1. Ages and Stages Questionnaire (ASQ)

<u>Original sample</u>	Original work in 1981 (2008 children) to include medical risk sample and environmental risk sample. Revised 1991, 1994
<u>Validation</u>	Gesell, Bayley, Stanford-Binet, McCarthy, Batelle--Overall agreement 83%
<u>Sensitivity</u>	72%
<u>Specificity</u>	86%
<u>Ages Tested</u>	4-60 months
<u>Format</u>	Each questionnaire has 30 questions <i>completed by the parent</i> . Review 5 areas: Communication, gross motor, fine motor, problem solving, personal/social.
<u>Scoring</u>	Answers are "yes," "sometimes," "not yet." These are given a score that is totaled and compared to cutoff points.
<u>For More Information</u>	www.brookespublishing.com Paul H. Brookes Publishing P.O. Box 10624 Baltimore, MD 21285-0624 (May be photocopied; see further details under "Screening Tools".)

2. Bayley Infant Neurodevelopmental Screener (BINS)

<u>Original sample</u>	High-risk nursery follow-up clinical sample Non-clinical sample of 600
<u>Validation</u>	Bayley, Batelle, and Denver II
<u>Sensitivity</u>	Excellent
<u>Specificity</u>	Excellent
<u>Ages Tested</u>	3, 6, 9, 12, 18, 24 months
<u>Format</u>	Requires non-distracting environment with parent present and tester seated across from infant. Chair, table, and kit are needed. At greater-than-16-months, the infant is required to walk, run, and climb stairs.
<u>Scoring</u>	Yields low, moderate, or high risk; high is to be referred for diagnostic testing; moderate may be referred, or at a minimum re-screened in 3 months
<u>For More Information</u>	www.harcourtassessment.com , Tools & Resources, Quick Find- A to Z Product List

3. Parents' Evaluation of Developmental Status (PEDS)

<u>Original sample</u>	Standardized on 971 children across the U.S.
<u>Validation</u>	Validated on 771 children

<u>Sensitivity</u>	74%-80%
<u>Specificity</u>	74%-80%
<u>Ages Tested</u>	0-8 years; (12 age ranges)
<u>Format</u>	Parent questionnaire, 10 questions
<u>Scoring</u>	Responses are "no," "yes," "a little." "Yes" and "a little" are considered positive responses. Decision pathways A-E to refer or do a second-stage screen with ASQ, BINS, Batelle, or Child Development Inventory based on score.
<u>For More Information</u>	www.pedstest.com Ellsworth & Vandermeer Press, LLC P.O. Box 68164 Nashville, TN 37206 (Cannot be copied. Refills must be ordered.)

4. **Child Development Inventory (CDI)**

<u>Original sample & Validation</u>	More specific information can be obtained by ordering the CDI booklet from their website at www.childdevrev.com
<u>Sensitivity</u>	Greater than 75% across studies in detecting children with difficulties
<u>Specificity</u>	70% in detecting normally developing children
<u>Ages Tested</u>	3-72 months
<u>Format</u>	Direct elicitation or interview. Three separate instruments with 60 yes or no questions
<u>Scoring</u>	A single cutoff tied to 1.5 standard deviations below the mean
<u>For More Information</u>	www.childdevrev.com

5. **Brigance**

<u>Original sample & Validation</u>	A national sample was used and was validated against a range of measures. For more specific information, please refer to Diagnostique, vol. 24, no.1-4, pages 41-52, 1998-1999.
<u>Sensitivity</u>	70-80% across ages to giftedness and to developmental and academic problems
<u>Specificity</u>	70-82% across ages to giftedness and to developmental and academic problems
<u>Ages Tested</u>	0-90 months
<u>Format</u>	One form for each 12-month age range (total of 9 forms). Direct elicitation and observation. 0-2 year age range can be administered by parent. Domains to include speech-language, motor, readiness, and general knowledge for the younger ages. Older ages include reading and math.
<u>For More Information</u>	www.curriculumassociates.com

6. **Pediatric Symptom Checklist (PSC)**

<u>Original sample & Validation</u>	"In a number of validity studies, PSC case classifications agreed with classifications of the Children's Behavior Checklist, Clinical Assessment Scale ratings of impairment, and the presence of psychiatric disorder in a variety of pediatric and subspecialty settings representing diverse socioeconomic backgrounds." For
--	---

	more specific information on this citation and the studies, please refer to the Web site psc.partners.org/psc
Sensitivity	80-95% (all studies but one showed this level of sensitivity)
Specificity	60-100% (scattered across studies)
Ages Tested	4-16 years
Format	35 short statements of problem behaviors to include both externalizing and internalizing. Responses never =0, sometimes=1 and often=2. Final scores to indicate need for referral and to identify attentional, internalizing and externalizing problems.
For More Information	www.dbpeds.org/pdf/psc.pdf

TOOLS YOU CAN USE

	ASQ	BINS	PEDS	CDI	BRIGANCE	PSC
Type/Ages	Parent Questionnaire 2 mos.–5 yrs.	Direct Elicitation 3 mos.–24 mos.	Parent Questionnaire 0–8 yrs.	Parent Questionnaire 3 mos.–6 mos.	Direct Elicitation 21 mos.–7.5 yrs.	Parent Questionnaire
Staff Required	Para-prof.	MA or Equiv.	Para-prof.	Para-prof.	Prof.	Para-prof.
Time (Score)	5 min.	10-15 min.	5 min.	10 min.	10-15 min.	7 min.
Cost (Per Kit)	\$190	\$195	\$39	\$41	\$249	Free Download
Refills	OK to copy	Needed	\$30-50			OK to Copy
Language	English & Spanish	English	English & Spanish	English & Spanish	English & Spanish	English
Reading Level	4 th -6 th Grade	NA	5 th Grade		NA	