



Identification & Evaluation of Autism Spectrum Disorder
 RI Department of Health, Office of Special Healthcare Needs

The Identification & Evaluation of Autism Spectrum Disorder Guidelines was developed by the Rhode Island Department of Health, Office of Special Healthcare Needs in consultation with a group of local and national experts on the evaluation of children and youth with an autism spectrum disorder. The goal of a diagnostic evaluation is to determine diagnosis based on the Diagnostic & Statistical Manual of Mental Disorders-IV-TR (DSM-IV-TR) Criteria for an autism spectrum disorder (ASD) addressing the following domains: qualitative impairment in social interaction; qualitative impairment in communication; and repetitive behavior, interest and activities.

ASD diagnostic evaluations should be conducted by a specialist (eg, child neurologist, developmental pediatrician, psychiatrist, psychologist, pediatrician) with experience in making an ASD diagnosis. Other professionals, such as speech language therapists, pediatric occupational therapists, and social workers with expertise in ASDs, can be helpful by performing independent evaluations that can assist in the diagnostic process.

In order to assess impairment, the evaluation must include feedback from the parent, child and other caregiver / teacher.

MAIN COMPONENTS	
Parent Component , including	<ul style="list-style-type: none"> ▪ Questionnaires as appropriate, including atypical behaviors, symptoms, adaptive function ▪ Parent interview including family history, child developmental history and generational medical / psychiatric history ▪ Observation of parent / child interaction
Child Component , including	<ul style="list-style-type: none"> ▪ Questionnaires as appropriate, including atypical behaviors, symptoms, adaptive function ▪ Interview or general interaction depending on cognitive level ▪ Observation (combination of natural and clinical environment observation is ideal, however not essential for diagnosis) ▪ Cognitive and language assessment (can be substituted with documented academic achievement if available) ▪ Hearing Testing ▪ Assess for presence of anxiety, trauma, language, attachment, obsessive-compulsive disorders
Other Caregiver / Teacher Component , including	<ul style="list-style-type: none"> ▪ Questionnaires as appropriate, including atypical behaviors, symptoms, adaptive function ▪ Observation (combination of natural and clinical environment observation is ideal, however not essential for diagnosis)

The following pages contain a list of tools / measures to assist in the recognition of children at risk and subsequent diagnostic determination. It is recommended that a combination of these tools be used for an ASD diagnosis. None of the following tools should be done in isolation to make a diagnosis. Tools are listed by category in no particular order from generalized to ASD specific.

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Tool	Ages	Format (Number of Items)	Time to Complete (min)	Reported Sensitivity	Reported Specificity	References / Authors	Availability
ASD Specific Screening Tools (typically used in primary care; should not be used in isolation to make a diagnosis)							
Checklist for Autism in Toddlers (CHAT)	18-24+ mo	Parent interview or questionnaire and interactive (parent 9; clinician 5)	5	0.18-0.38; 0.65	0.98-1.0; 1.0	Baron-Cohen, Scambler	Download: www.autismresearchcentre.com
Checklist for Autism in Toddlers (CHAT), Denver Modifications	18-24+ mo	Parent interview or questionnaire and interactive (parent 9; clinician 5)	5	0.85	1.0	Scambler	CHAT scoring modifications; available in Scrambler at al
Checklist for Autism in Toddlers-23 (CHA-23)	16-86 mo but all had mental ages of 18-24 mo	Parent interview or questionnaire and interactive (parent 23; clinician 5)	10	Part A: 0.84-0.93 Part B: 0.74	Part A: 0.77-0.85 Part B: 0.91	Wong	Combination of M-CHAT and CHAT items; protocol available in Wong et al
Childhood Asperger Syndrome Test (CAST)	4-11 y	Questionnaire complete by parent (37)	10	0.88-1.0	0.97-0.98	Scott , Williams	Download: www.autismresearchcentre.com
Modified Checklist for Autism in Toddlers (M-Chat)	16-48 mo	Questionnaire completed by parent (23)	5-10	0.85	0.93	Dumont-Matthieu and Fein, Robins	Download: www.dbpeds.org/media/mchat.pdf
Pervasive Developmental Disorder Screening Test-II, Primary Care Screener (PDDST-II PCS)	18-48 mo	Questionnaire completed by parent (22)	10-15	0.92	0.91	Siegel	Purchase: www.harcourtassessment.com
Generalized Developmental Tools (may be used as part of a diagnostic evaluation, but should not be used in isolation to make a diagnosis) * Sensitivity & specificity not applicable as these are not ASD specific tools.							
Child Behavior Checklist (CBCL)	4-18 y	Questionnaire completed by parent, teacher, or student (118)	Varies	*	*	Achenbach	Purchase: www.aseba.org
Behavior Assessment System for Children 2 nd Edition (BASC-2)	2-22 y	Questionnaire, observation, interactive	10-30 m	*	*	Reynolds, Kamphaus	Purchase: www.pearsonassessments.com
Vineland Adaptive Behavior Scales (VABS) 2 nd Edition	0-18 y	Interview	20-90 m	*	*	Sparrow, Bella, Cicchetti	Purchase: www.pearsonassessments.com
Social Skills Rating System (SSRS)	3-18 y	Questionnaire completed by parent, teacher, student	10-25 m	*	*	Gresham, Elliott	Purchase: www.pearsonassessments.com

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ASD Specific Tools (may be used as part of a diagnostic evaluation, but should not be used in isolation to make a diagnosis)							
Asperger Syndrome Diagnostic Scale (ASDS)	5-18 y	Questionnaire completed by parent, teacher, or clinician (50)	10-15	0.85		Myles, Campbell	Purchase: www.proedinc.com
Autism Behavior Checklist (ABC)	18 mo and older	Behavior checklist completed by interviewer (57)	10-20	0.38-0.58	0.76-0.97	Krug	Purchase: www.proedinc.com
Autism Spectrum Quotient (AQ) – Adolescent Version	11-16 y	Questionnaire completed by parent (50)	15	0.89	1.0	Baron-Cohen	Download: www.autismresearchcentre.com
Autism Spectrum Screening Questionnaire (ASSQ)	6-17 y	Questionnaire completed by parent (27)	10	0.62-0.82		Ehlers	Questions are included as an appendix in Ehlers at al
Childhood Autism Rating Scale (CARS)	Older than 2 y	Behavioral checklist completed by trained interview/observer	Variable	0.92-0.98; 0.94	0.85	Eaves and Milner, Perry, Schopler, Sevin	Purchase: www.wpspublish.com
Gilliam Asperger's Disorder Scale (GADS)	3-22 y	Questionnaire completed by parent, teacher, or clinician (32)	10			Gilliam, Capbell	Purchase: www.proedinc.com
Gilliam Autism Rating Scale-2 nd Edition (GARS-2)	3-22 y	Questionnaire completed by parent or teacher (42)	5-10			Gilliam	Purchase: www.proedinc.com
Krug Asperger's Disorder Index (KADI)	6-21 y	Questionnaire completed by parent or clinician (32)	15-20	0.78	0.94	Krug and Arick, Campbell	Purchase: www.proedinc.com
Pervasive Developmental Disorder Screening Test – II, Developmental Clinic Screener (PDDST-II, DCS)	18-48 mo	Questionnaire completed by parent (14)	10-15	0.73	0.49	Siegel	Purchase: www.harcourtassessment.com
Pervasive Developmental Disorder Screening Test – II, Autism Clinic Severity Screener (PDDST-II, ACSC)	18-48 mo	Questionnaire completed by parent (12)	10-15	0.58	0.60	Siegel	Purchase: www.harcourtassessment.com

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ASD Specific Tools (may be used as part of a diagnostic evaluation, but should not be used in isolation to make a diagnosis)							
Screening Test for Autism in Toddlers (STAT)	24-36 mo	Interactive, requires specific training (12)	20	0.92	0.85	Stone, Stone	Author: Wendy Stone, PhD (triad@vanderbilt.edu)
Social Communication Questionnaire (SCQ)	4 y and older	Questionnaire completed by parent (40)	5-10	0.85-0.96	0.67-0.80	Berumentl, Rutter	Purchase: www.wpspublish.com
PDD Behavior Inventory (PDD BI)	1.5-12.5 y	Questionnaire completed by parent, teacher, individual (188)	30-45	0.65-0.99	0.96	Cohen, Sudhalter	Purchase: www.parinc.com
Social Responsiveness Scale (SRS)	4-18 y	Questionnaire completed by parent or teacher (65)	15-20 m			Constantino	Purchase: www.wpspublish.com
ASD Diagnostic Tools (may be used as part of a diagnostic evaluation, but should not be used in isolation to make a diagnosis)							
Autism Diagnostic Interview Revised (ADI-R)	Older than 2 y	Standardized interview, requires training (93)	1.5-2.5 h	0.98-1.00	0.83-0.90	Rutter, LeCouteur, Lord	Purchase: www.wpspublish.com
Autism Diagnostic Observation Schedule (ADOS)	Older than 2 y	Standardized behavioral observation, requires training	30-45 m	Autistic Disorder: 0.91 - 0.98 Aspergers, PDD-NOS: 0.72 -0.84	Autistic Disorder: 0.84 - 0.94 Aspergers, PDD-NOS: 0.76 - 0.84	Lord, Rutter, DiLavore, Risi	Purchase: www.wpspublish.com

RI Department of Health would like to thank the following contributors for their expertise and contributions: Marcie Atkins, PhD; Rowland Barrett, PhD; Karen Cammuso, PhD; Andrea Chait, PhD; Susan Constable; Susan Culbert, PhD; Kristin David, PhD; Brenda DuHamel; Mark Dumas, PhD; Sarah Fine, PhD; John Gaitanis, MD; Amy Grattan; Joseph Hallett, MD; Terry Harrison-Goldman, PhD; Razi Hasan, MD; Pamela High, MD; Laurence Hirshberg, PhD; Jessica Hopkins, PhD; Laura Jones; Jon Kimpton, PhD; Elizabeth Kulcsar, PhD; Randy Kulman, PhD; Cynthia Loncar, PhD; David Mandelbaum, MD; Kelly Pistacchio, PhD; Barry Prizant, PhD; Joanne Quinn; Kathleen Schlenz, OT; Stephen Sheinkopf, PhD; Pamela Shuman, MD; Maureen Whelan and Yvette Yatchmink, MD.

For Additional Resources Contact: Office of Special Healthcare Needs
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