

Autism Screening and Early Intervention:
A Discussion Paper

Indiana Association for Infant & Toddler Mental Health
Mental Health Task Force

July 25, 2008

Autism Screening and Early Intervention: A Discussion Paper

Abstract

Recent research is beginning to improve our ability to identify and begin to provide intervention for very young children with social emotional and social communication delays, including those associated with autism spectrum disorders. As a result, early intervention providers have increasing opportunities to partner with parents and other providers to support children who have these characteristics. To be most effective in this important work, early intervention providers should be aware of current intervention and diagnostic practices in order to partner most effectively with families and other team members.

Background:

Interest and awareness of autism spectrum disorders (ASD) has been increasing over the last decade. A variety of factors may contribute to this upsurge in attention. First, many more children are identified with an autism spectrum disorder now than previously. One reason for this increase is changes in awareness and understanding of autism as a disorder. Once thought to be rare, autism is now thought to occur in 1 in 150 persons (Johnson & Myers, 2007). This figure represents a 10 fold increase in 50 years, leading to concerns about an autism “epidemic”. However, it is important to understand that direct comparisons between earlier incidence rates and current ones cannot be made for several reasons. Today’s figures include not only those with autism, but also those with Asperger’s Syndrome and Pervasive Developmental Disorder, Not Otherwise Specified, diagnostic entities that were not defined categories in the United States prior to the 1980s. In addition, repeated modifications to the criteria for autism and related disorders resulted in changes to those who could be eligible for a diagnosis. Since 1980, when autism first was included in the DSM system (APA, 1980), criteria for autism or its related disorders have been changed three times (i.e., DSM-III-R, DSM IV, and DSM IV-TR). With DSM V looming on the horizon, more changes may be coming (For details, see dsm5.org). Depending on which set of criteria is used, greater or fewer numbers of people may be eligible for an autism spectrum disorder diagnosis. Finally, autism was added as an eligibility area for special education under the Individuals with Disabilities Education Act (IDEA) in 1990, resulting in many children being or becoming eligible for services in special education programs in local schools, but perhaps not meeting the full criteria for a diagnosis of autism in a clinical sense.

As is often the case in disability areas, persistent concerns of parents and other family members may bring an area to the attention of professionals. In the case of ASD, parents have multiple sources of information available to them both electronically and through face to face support groups. Parents who are also

celebrities may bring pronounced attention to a disability area, and autism is included in this phenomenon. Awareness walks and other events have been sponsored by parent groups, universities, and associations. All of these contribute to an increased awareness of autism by the public at large.

Early Identification and Early Intervention:

Increasing interest in any developmental difference or disorder also leads to expansion of efforts to intervene. Both evidenced-based approaches and alternative methods can be bolstered by an increasing pool of potential participants. Intervention and identification efforts may affect each other in a circular manner. Conditions with large numbers are often more likely to generate legislative and other support to promote treatment development and efficacy studies. Similarly, research that documents the benefits of early intervention can encourage earlier identification in order to improve outcomes from the start.

A large body of research demonstrates significant progress in response to specific interventions for young children with ASD characteristics or diagnoses. Several approaches that have shown positive outcomes share key features that promote child development, especially social communication. These interventions range from traditional behavioral to more contemporary naturalistic interventions to developmental approaches to treatment. However, few well-controlled studies with random assignment to treatment method (random clinical trials) have been performed. In addition it is critical to recognize that the majority of these studies were with children older than age 3 years, although some work with toddlers has been done and more is underway (see Koegel, Koegel, Fredeen, & Gengoux, 2008, for a good review. Overall, more research is urgently required to determine whether some specific intervention approaches are more effective than others. A full review of all available approaches is beyond the scope of this paper; instead, a few representative samples will be discussed.

Although more research is needed, we do have some information about what constitutes effective intervention for autism. In 2001, after a systematic review of the research literature, the National Research Council (NRC) generated recommendations for components of effective intervention for supporting children with ASD from birth to 8 years. The NRC recommended that interventions start as soon as an ASD is suspected. Interventions should consist of intensive instruction (minimum of 5 hours per day for 5 days per week). Although there is research support for this level of intervention, it has been controversial for economic and practical reasons, and has also been called into question as potentially developmentally inappropriate for infants and toddlers. Nevertheless, most researchers agree that intensive intervention has been shown to be effective (Koegel, Koegel, Fredeen, & Gengoux, 2008). Additional characteristics of effective methods included repeated, planned teaching opportunities structured over brief periods of time. Priority for instruction should be given to functional, spontaneous communication, social instruction across settings, play

skills with a focus on peer interaction, new skill maintenance and generalization in natural contexts, and, as appropriate, functional academic skills. Problem behavior should be addressed through functional assessment and positive behavior supports. Any intervention should include mechanisms for ongoing assessment with corresponding adjustment in programming.

A wide variety of approaches may meet some or all of the criteria proposed by the NRC. Approaches evolving from the areas of Applied Behavior Analysis (ABA) are best studied though still lack the scientific rigor and study to establish an evidence base or the conclusion that they are indisputably more effective than other techniques. This means that their effectiveness can be clearly and convincingly demonstrated through scientific methods. The first and perhaps best research approach derived from ABA is discrete trial training (DTT). DTT, while effective, requires specialized training to implement, rigorous record keeping, and many hours of intervention, making it difficult for some families to implement. It has also been criticized for limitations such as poor generalization and lack of spontaneous behaviors.

More recently, several groups have developed approaches based on behavioral methods, but designed for use in natural environments. Naturalistic techniques may be more appropriate for toddlers and a better fit for early intervention practice, given their emphasis on embedding teaching into daily routines (Koegel, Koegel, Fredeen, & Gengoux, 2008). One example of this type of approach is pivotal response training (PRT) (Koegel & Koegel, 2006). Pivotal response training shows promise in combining some of the successful aspects of DTT while eliminating many of the problems stated above. An additional advantage is that the affect between parent or professional and child using the PRT approach has been judged to be more positive than when a DTT approach is utilized (Schreibman, 2008). Another approach with emerging research support is the Developmental, Individual-Difference, Relationship-Based (DIR) model proposed by Greenspan & Weider (1998). The DIR approach uses some naturalistic behavioral methods, and has been considered a promising practice. Some common factors in successful naturalistic methods include: providing instruction as part of ongoing, daily routines, arranging the environment to support teaching and communication, following the child's lead, and using choices, child interests, and natural reinforcers to increase motivation (Koegel, Koegel, Fredeen, & Gengoux, 2008).

Despite volumes of evidence and the NRC recommendations, families remain faced with the often challenging task of selecting a treatment method and provider. It has been suggested that as many as one-third of newly diagnosed children with ASD participate in controversial or unproven treatments (Levy, Mandell, Merhar, Ittenbach, & Pinto-Martin, 2003), including sensory-motor therapies, bonding therapies, and multiple forms of complementary and alternative medicine. Families may choose these methods over empirically or research-based methods for many reasons, including availability and ease of

implementation. Further, controversial methods are likely to promise a “cure” whereas research-based methods may offer a more modest outcome, such as functional improvement (Smith & Wick, 2008). No one intervention is considered effective or appropriate for all children. Frequently a combination or blending of various methods with components chosen to address individual needs or challenges is considered best practice.

Early intervention professionals can help families identify effective and appropriate treatments that are aligned with family preferences and are a good fit with the family’s schedule and preferences. Providers should try to strike a balance between encouraging parents to choose methods that have an evidence base and supporting parents who wish to try a method that has limited research support or one that is still under investigation, keeping in mind that the final decision will be made by the family. Providers can also encourage parents to recognize that something that seems “too good to be true” may not result in a long-term benefit for their child. Nevertheless, high quality early intervention emphasizes an individualized approach to intervention activities, and this model is also a good fit when considering how to best work with the children with delays in social and social communication areas as well (Schreiber, 2008). Therefore, it may be that a non-traditional approach is effective for some children and families.

Families and Access to Services, Funding, and Support:

Having a child is an exciting but stressful time for any parent and when concerns about the child’s development arise there is a sense of loss and uncertainty. Families are often the first to suspect something “is different” about their child. With regard to a possible ASD diagnosis, 30-50% of parents reported a concern in the first year of life and 80-90% had concerns by the child’s second birthday (Volkmar, Chawarska, & Klin, 2008). As discussed, it is hoped that early identification will lead to early engagement in services. In addition, the sooner families are able to identify concerns the sooner they can be introduced to appropriate community supports and services as well as make the adjustments necessary to address their child’s and family’s specific needs.

In Indiana there are some specific supplemental programs that offer financial assistance in the form of supplemental insurance and services designed to assist families. A medical diagnosis is often needed in order for a child to qualify for Medicaid waiver programs such as those for individuals with developmental disabilities and autism. Many insurance companies now are required to cover services related to autism and developmental delays once a diagnosis has been determined. Specifically, Indiana Code 27-8-14.2 as part of the House Enrollment Act 1122 went into effect in July 2001, mandating insurance coverage for health insurance policies issued on a group basis for individuals with ASD (www.IN.gov/legislative). An exception to the state mandate for coverage includes self-insured companies, or employers that offer health benefits to employees without contracting with an insurance company. If covered by such a

plan, there is no obligation to provide coverage for services related to ASD. Additionally, if an insurance provider is an out of state entity, they are not required to comply with the Indiana State mandate for ASD coverage. (For additional information regarding a particular insurance plan and mandate coverage, contact your Human Resource Department.)

IDEA (IDEIA, 2004) is the federal law that provides for education and intervention services for people with disabilities from birth to age 22 years. IDEA specifies autism may be an eligibility area for students under Part B, beginning at age 3 years. Within Part C, which covers services for infants and toddlers, autism is not specifically mentioned. This is likely due to the fact that Part C describes eligible infants and toddlers only as having delays in development, and that it does not require a specific diagnosis in order to access services. Under IDEA, an infant and toddler may be eligible for early intervention services when delays are present in areas of development commonly affected by autism, including communication and social behaviors.

In a recent survey of state Part C program policies related to ASD, it was found that in virtually all states (98%) a diagnosis of autism would result in Part C eligibility (Stahmer & Mandell, 2007). Although infants and toddlers with autism are typically eligible for Part C services, most states (65%) reported that the services available are not autism specific. Although not required for participation in Part C services, a diagnosis of autism may be helpful for very young children and their families in several ways, including: designing an intervention plan; assisting parents to access other services and supports; and in transition to school age services beginning at age three years.

Examples of states with specific policies and practices related to autism diagnosis and treatment within Part C are relatively rare (Muller, 2006). As of 2006, only Connecticut, New York, and North Dakota had published clinical practice guidelines for helping providers working with very young children with possible autism. In other states, the Part C lead agencies work collaboratively with autism projects (e.g., Tennessee, Minnesota, and Delaware).

In Indiana, autism is not specifically addressed in the Part C guidelines for eligibility. Similarly, Indiana does not provide any rules or guidelines for diagnosis or treatment of ASD within its early intervention law. Nationally, about half of all states either had guidelines for diagnostic assessment of ASD (20%) or were in the process of preparing such guidelines (27%). With regard to treatment for ASD, 26% of states reported they had guidelines and an additional 30% were developing treatment guidelines (Stahmer & Mandell, 2007).

In Indiana, a family may access a diagnostic evaluation either through a psychologist or physician as a component of the services provided to them through the Part C early intervention system. Psychologists who provide Part C services in Indiana report that a significant component of their referrals through

Indiana's First Steps early intervention system, are requests for evaluation and diagnosis of autism spectrum disorders.

Families of children who are participating in early intervention services through First Steps may participate in a transition process from Part C to Part B services. The service coordinator is responsible for referring the child and family to the local school system at 30 months of age. School systems are then able to create an individual education program and start services beginning on a child's third birthday for eligible children. Without early intervention, diagnosis and screening a child may not receive services through the school system until the child enters kindergarten, or even later, as children are not required to be registered in school in Indiana until age 7.

Current Primary Care Practices in Surveillance, Screening and Identification:

Current diagnostic criteria for ASD are focused on behaviors that are present in children age 3 and older. Due to the mandate for earlier identification, clinicians and researchers have been working to identify behaviors and behavioral deficits that may signal the presence of an ASD in children as early as the first year of life. Parents may report that their baby is "too good" or "easy" early on followed by a change at 12 months to being extremely irritable or joyless. Other early signs include low response to common social interactions, such as responding to their name, making eye contact, and "showing" behaviors, often referred to as shared or joint attention skills. These and other studies have led researchers to posit that deficits in social and social communication skills have the most promise for identifying autism at earlier ages (See Table 1). Furthermore, any report of regression or loss of language and or social skills should be taken seriously. About 25-30% of children diagnosed with ASD appeared typically developing as babies and then regressed sometime between 12 and 24 months of age. A child who was using a few words such as "mommy" or "up" may lose those words entirely and develop no more speech, or a child may stop playing social games like peek-a-boo, patty-cake or stop waving "bye-bye."

Table 1: Early Social and Social Communication Behaviors

- 3 months: becomes calm, self regulated, and focus on sight and sounds including people
- 4 months: initiates and sustains warm, joyful interactions with caregivers
- 6 months: Appearance of "big smiles" or other warm joyful expressions.
- 8-9 months: uses intentional gestures, eye gaze, and vocalizations to indicate wants needs and the desire for social interaction including back-and-forth smiling, shows assertive curiosity, protest, and fear

- 12-16 months: engages in shared social problem-solving, including taking a caregiver’s hand to find a favorite object, interactive play with lots of back-and-forth exchanges accompanied by sounds (babbling, “baby talk”), social gestures such as smiles, looks and pointing
- 24 months: meaningful 2-word phrases beyond imitating or repeating
(Source: First Signs, Inc.-firstsigns.org)

In addition to behavioral characteristics, several biological risk factors increase the chances of autism spectrum disorders. These include advanced parental age, family history of other individuals with ASD, and some specific genetic and medical conditions, such as Fragile X, tuberous sclerosis, neurofibromatosis, mitochondrial disorder, and prenatal exposure to alcohol (Johnson & Myers, 2007). When working with children from families that have these histories, providers are encouraged to be more aggressive with referrals for further evaluation.

It is important for all children to be screened for any delays or differences in development—not only for possible autism. Although we now believe that autism is much more prevalent than once thought, other types of delays are just as likely or even more likely to be present alone or in conjunction with autistic behaviors. These include hearing loss, communication delay, or global developmental delays. In fact, in July 2006, the American Academy of Pediatrics issued developmental surveillance and screening practice guidelines to improve early identification of children with developmental challenges (AAP, 2006). This policy statement describes developmental surveillance as the health care provider’s ongoing monitoring of child development across the early childhood period, and called for administering a standardized developmental screening measure to all children at targeted pediatric well child care visits of 9, 18, and 24 or 30 months.

The AAP also recommends screening for autism spectrum disorders by means of a disorder-specific screening tool to take place at all 18 and 24 month visits. In October 2007, the AAP published guidelines for identification, evaluation, and management of autism spectrum disorders (Johnson & Myers, 2007) which included a detailed decision-making algorithm for surveillance and screening of ASD across the early childhood period. In addition to this population-based screening of all children at certain ages, whether they exhibit behavioral “red flags” of ASD or not, completion of a standardized screening tool was also recommended whenever concerns about potential ASD are raised by a parent or by the pediatric health care provider. Specific “red flags” intended to trigger further evaluation by a pediatrician included: no babbling, pointing or other gestures by 12 months, no single words by 16 months, no 2-word spontaneous (non-echoed) phrases by 24 months, and loss of language or social skills at any age.

Well standardized screening tools for pediatric care providers are not yet available for children younger than 18 months. Some health care providers may choose to use Wetherby and Prizant's *Communication and Symbolic Behavior Scales: Developmental Profile (CSBS-DP)*, a parent questionnaire which identifies children at risk for a communication delay between the ages of 6 and 25 months and which includes social communicative behaviors. ASD-specific screening tools currently available to physicians include the *Modified Checklist for Autism in Toddlers (MCHAT)*. A 23 item parent-completed questionnaire, the MCHAT is appropriate for use with parents of children between 18 and 48 months of age. Another tool developed for primary care is the *Pervasive Developmental Disorders Screening Test-II, Primary Care Screener*, a 22-item parent completed questionnaire which can be used with parents of children ages 18-72 months.

Despite these new tools and research, providers who are asked to make a determination of possible autism in children under three face a difficult task. It is important that professionals who make ASD diagnoses in young children have a good understanding of typical developmental trajectories and that they fully appreciate the range of behaviors that typically developing children may present. In addition, it is necessary for practitioners to be familiar with other disorders and developmental delays common in early childhood in order to make a differential diagnosis. For intervention and planning reasons, making a distinction between an autism spectrum diagnosis and a non-autism spectrum diagnosis is most important (Bishop, Luyster, Richler, & Lord, 2008).

An additional concern for Indiana is the fact that the state was fifth in the nation in rates of autism identified in public schools in the 2006-2007 school year, with 1 in 116 eligible for ASD services (<http://www.fightingautism.org/idea/autism-state-rankings.php>). This rate is higher than overall national rates: Discussion of eligibility determination practices in public schools as well of medical diagnoses in clinical practice may be indicated, given this discrepancy.

Role of Early intervention and Education Providers in Autism Screening:

Parents, early care and education providers, and early intervention specialists can all play important roles in early identification efforts. Knowledge of typical developmental milestones, particularly those related to social and social communication skills, paired with awareness of risk factors and behavioral “red flags” will allow parents, caregivers, and early intervention specialists to help infants and young children overcome challenges and acquire the foundational building blocks for healthy emotional, social and intellectual development.

Early intervention specialists can play a special role in early identification of ASD by listening to parent's concerns and showing openness to discussion about atypical development. If a parent seems worried, it is acceptable to elicit their concerns with sympathetic and careful questioning. At times, a provider who has

heard a parent mention several “red flag behaviors”, might say, “I wonder if you are concerned about possible autism?”

Once concerns about social and social communication behaviors have been shared, it is important to follow up with parents to determine if these concerns have been discussed with the child’s physician and if any screening has been completed. If no screening has been done, the early intervention provider may wish to complete a screening measure with the family if this is within the provider’s scope of practice and experience. Most screening tools are designed to be administered, scored, and interpreted by many different kinds of providers; specific details about approved users are typically available in the instrument’s manual. In these and many other ways providers encourage early identification and share the potential for restarting positive developmental patterns through appropriate treatment. As a valued and trusted member of the child’s early intervention team, early intervention and education providers can help families with referrals to medical or mental health specialists who can provide parents and other members of the early intervention team with information, training, and support, as well as diagnoses when appropriate.

Summary:

Research and public awareness of social and social-communication delays, including ASD, have increased the likelihood that early intervention professionals will serve young children with delays in these areas during their careers. EI providers must have appropriate training in order to serve these children with empirically-based or research supported methods. In addition, they must be aware of current practices in diagnosis and assessment utilized by community partners, and they must be aware of referral sources for families.

Recommendations:

- With parent permission, universal screening of young children for all developmental concerns, including autism spectrum disorders, should be conducted in their medical homes and child care environments.
- Training in research supported intervention methods for parents and professionals should be an emphasis in Indiana's First Steps (Part C) early intervention system and included in Indiana's Comprehensive State Plan to Guide Services for Individual with Autism Spectrum Disorders.
- Professionals whose licensure allows the ability to make diagnoses (health service providers in psychology and physicians) should regularly receive consistent and current training in characteristics of autism and autism spectrum disorders for children under age three years to ensure uniformity of diagnostic practices.
- Public funding should be directed to identification, screening, diagnostic and intervention methods that are research-supported.
- Parents and intervention providers should have access to a range of research supported intervention methods through First Steps (Part C) and other community resources.
- Mental health consultation for children with ASD who have challenging behaviors should be available for child care providers and preschool programs.
- Diagnoses made by qualified personnel, health services providers in psychology, should have equivalent weight to those made by physicians, in resulting in a child's eligibility for services such as Children's Special Health Care Services and Medicaid waivers.

References:

- American Academy of Pediatrics. (2006). Identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and screening. *Pediatrics*, 118, 405-420.
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders*, 3rd Ed., Washington, DC: APA.
- Bishop, S., Luyster, R., Richler, J. & Lord, C. (2008). Diagnostic assessment. In K. Chawarska, A. Klin, & F. Volkmar (Eds.) *Autism spectrum disorders in infants and toddlers* (pp. 23-49). New York: Guilford.
- Greenspan, S., & Weider, S. (1998). *The child with special needs*. Reading, MA: Perseus Books.
- Koegel, R. L. & Koegel, L.K. (2006). *Pivotal response treatments for autism*. Baltimore: Brookes.
- Koegel, L. Koegel, R., Fredeen, R., & Gengoux, G. (2008). Naturalistic behavioral approaches to treatment. In K. Chawarska, A. Klin, & F. Volkmar (Eds.) *Autism spectrum disorders in infants and toddlers* (pp. 207-242). New York: Guilford.
- Levy, S. E., Mandell, D. S., Merhar, S., Ittenbach, R. F., & Pinto-Martin, J. A., (2003). Use of complementary and alternative medicine among children recently diagnosed with autism spectrum disorder. *Journal of Developmental and Behavioral Pediatrics*, 24, 418-23.
- Muller, E. (2006). State approaches to serving students with autism spectrum disorders. *inForum*. (retrieved May 1, 2008 from <http://www.projectforum.org>).
- National Research Council. (2001). *Educating children with autism. Committee on Educational Interventions for Children with Autism*. C. Lord & J. P. McGee (Eds.), Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- Johnson, C., & Myers, S. M. (2007). Identification and evaluation of children with autism spectrum disorders. *Pediatrics*, 120, 1183-1214.
- Schreibman, L. (2008). Treatment controversies in autism. *Zero to Three*, 28(4), 38-44.

Smith, T. & Wick, J. (2008). Controversial treatments. In K. Chawarska, A. Klin, & F. Volkmar (Eds.) *Autism spectrum disorders in infants and toddlers*, (pp. 1-22). New York: Guilford.

Stahmer, A. C., & Mandell, D. S. (2007). State infant/toddler program policies for eligibility and services provision for young children with autism. *Administrative Policy, Mental Health & Mental Health Services Research, 34*, 29-37.

Volkmar, F. Chawarska, C. & Klin, A. (2008) Autism spectrum disorders in infants and toddlers: An introduction. In K. Chawarska, A. Klin, & F. Volkmar (Eds.) *Autism spectrum disorders in infants and toddlers*, New York: Guilford.

Suggested Reading:

Charman, T. (2006). *Social and communication development in autism spectrum disorders*. New York: Guilford.

Chawarska, K., Klin, A., & Volkmar, F. (2008). *Autism spectrum disorders in infants and toddlers: Diagnosis, assessment and treatment*. New York: Guilford.

Eaves, L. and H. Ho (2004). The very early identification of autism: Outcomes to age 4 ½ to 5. *Journal of Autism & Developmental Disorders, 34*(4): 367-378.

Greenspan, S. & Weider, S. (2006). *Engaging autism: Using the floortime approach to help children relate, communicate, and think*. Cambridge, MA: Da Capo Press.

Handleman, J. and Harris, S. (1994). *Preschool education programs for children with autism*. Austin: Pro-Ed Publishing.

Koegel, R. L. & Koegel, L.K. (2006). *Pivotal response treatments for autism*. Baltimore: Brookes.

Maurice, C., Green, G. & Luce, S. C. (Eds.). (1996). *Behavioral interventions for young children with autism: A manual for parents and professionals*. Austin, TX: Pro-Ed.

Seach, D. (2007). *Interactive play for children with autism*. Florence, KY: Routledge.

Thompson, T. (2007) *Making sense of autism*. Baltimore: Brooks.

Volkmer, F. (2007) *Autism and Pervasive Developmental Disorders*. Cambridge: Cambridge University Press.

Also see: *Zero to Three*, 28(4), a special issue devoted to Autism Spectrum Disorders. Web: zerotothree.org.

Online Support Resources:

Government Resources

Indiana Governor's Council for People with Disabilities
<http://www.in.gov/gpcpd/>

Children with Special Health Care Needs Program
1-800-475-1355
www.in.gov/isdh/programs/cshcs

Family and Social Services Administration
www.in.gov/fssa

Indiana Protection and Advocacy
<http://www.in.gov/ipas/index.htm>

Parent Support and Information

About Special Kids (ASK)
1-800-964-4746
www.aboutspecialkids.org

Autism Society of America
www.autism-society.org

Autism Society of Indiana
www.inautism.org

Christine Sarkine Autism Treatment Program
HANDS in Autism Program
www.handsinautism.org

Family to Family
1-800-964-4746
www.inf2f.org

Family Voices
www.familyvoices.org

Indiana LEND Program
Riley Child Development Center
(317) 274-8167
www.child-dev.com

Indiana Resource Center for Autism
<http://www.iidc.indiana.edu/irca/>

INSOURCE
www.insource.org
The Arc of Indiana
1-800-382-9100
www.arcind.org

Contributors:

Jessica A. Bissey, PsyD
Hope Gulker
James Jones, PhD
Patricia Martin-Brown, MA
Sheila Miller, LCSW
Heike Minnich, PsyD
Lynne Sturm, PhD
Angela Tomlin, PhD, Chair, IAITMH
Stephan Viehweg, LCSW

Reviewers:

Susan Pieples, President, Autism Society of Indiana
Lesa Paddack, parent
Cathy Pratt, PhD, Director, Indiana Resource Center for Autism
Naomi Swiezy, Ph.D. Clinical Director, Christian Sarkine Autism Treatment Center, Riley Hospital for Children
John D. Rau, M.D., Director, Riley Child Development Center, Indiana LEND

Suggested citation: Indiana Association for Infant & Toddler Mental Health Infant Mental Health Task Force. (2008). *Autism Screening and Early Intervention Discussion Paper*. Indianapolis, IN: Author.