



Autism Spectrum Disorders

Service Delivery Guidelines

Intervention guidance for service providers and families of young children with characteristics of Autism Spectrum Disorders



ALASKA EARLY INTERVENTION / INFANT LEARNING PROGRAM

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AUTISM SPECTRUM DISORDERS

EARLY INTERVENTION GUIDANCE FOR SERVICE PROVIDERS AND
FAMILIES OF YOUNG CHILDREN WITH CHARACTERISTICS OF
AUTISM SPECTRUM DISORDERS

JUNE 2011



MISSION

To promote positive development and improved outcomes for Alaska's families by creating a culturally responsive, comprehensive and accessible service delivery system that links service providers, empowers families and engages communities

–Alaska Early Intervention/ Infant Learning Program

AUTISM SPECTRUM DISORDERS

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PREFACE

It is rewarding when parents and caregivers tap into previously unknown strengths and learn new methods to help the child or children in their lives learn new life skills. Raising and working with children identified with autism spectrum disorders can be challenging at times. In its 2006 *Autism in Alaska* report, the Governor's Council on Disabilities and Special Education recognizes that children and adults on the autism spectrum:

- Have great promise, gifts and potential
- Deserve the opportunity to engage actively in the community, with friends and family and in work and volunteer positions
- Contribute to their families, communities, and Alaska
- Represent ethnic, socioeconomic, racial, and religious groups, speak many languages and live in urban, rural and remote areas of the state
- Are people first—Autism Spectrum Disorder (ASD) is only a part of who they are

INTRODUCTION

The awareness of autism and autism spectrum disorders (ASD) has increased significantly across the nation over the past decade.¹ Once considered rare, ASD is now the fastest growing developmental disorder. The Centers for Disease Control (CDC) places the national autism rate at one in 110 live births, and one in 70 for boys.

Early intervention has been proven to increase a child's response to treatment and to improve a child's overall lifetime skills. The more life skills children can develop when young, the more fully they will be able to participate in their families and communities as they move from childhood to adulthood. The increasing awareness of ASD means families and children have more community resources they can access than ever before.

Following national trends, ASD awareness and diagnosis have increased in Alaska as well, further demonstrating the need for ASD research and the importance of early screening. The more we can learn about early characteristics related to ASD, the better prepared parents and early intervention providers will be in working toward better long-term outcomes.

Alaskans face increased challenges accessing appropriate intervention due to the state's size, distance to services, and the remoteness of many communities. Add to that Alaska's rich mix of cultures and languages, and early intervention providers must be creative, resourceful and tenacious in order to help Alaska's children with ASD to access the best evidenced-based treatments to help them to lead full and happy lives.

PURPOSE OF THESE GUIDELINES

The purpose of these guidelines is to provide parents and service providers with an overview of the best practices for early identification and intervention for young children with characteristics of ASD in Alaska. These include those approaches shown to result in the best outcomes for children from birth to three.

While most of the recommended practices in the guidelines do not carry the force of regulation, they are intended to guide parents and early intervention providers in making informed decisions about the most appropriate assessment procedures and intervention practices.

¹ ASD is used to refer to autism and autism spectrum disorders throughout this document.

Not all practices will be appropriate in all cases. The guidelines are intended to be flexible, not prescriptive or limiting, and to set the tone for the family to be an instrumental part of early intervention. An Individualized Family Service Plan (IFSP) should be developed for each child based on his or her particular needs, the resources available, and input from the family and the early intervention provider or team.

The guidelines provide information on the characteristics common to ASD, the process of screening and assessment, eligibility for early intervention services in Alaska, and transitioning to services designed for older children. They also aim to increase understanding of the needs of families with young children in Alaska with characteristics of ASK and the many resources available to them

EARLY INTERVENTION SERVICES IN ALASKA

Early intervention services are federally mandated under Part C of the Individuals with Disabilities Education Act (IDEA), a federal law passed in 1986. IDEA requires states to ensure that young children who may have disabilities or developmental delays receive an evaluation to identify the potential need for early intervention.

Alaska's early intervention services are administered by the Department of Health and Social Services, Office of Children's Services, Early Intervention/Infant Learning Program (EI/ILP). They include a flexible array of services for children birth to three years of age who experience disabilities or developmental delays, or who are at risk for developmental delays.

EI/ILP partners with grantees to provide services directly to families at a local and regional level. In 2010, services were provided to children throughout the state by approximately 115 highly qualified staff employed within 17 regional grantee agencies. Programs vary widely by staff and region size. Service may include:

- Developmental screening and evaluation
- Individualized Family Service Plans to outline goals for the family and the child
- Child development information
- Home visits
- Infant mental health services
- Physical, occupational or speech therapy
- Specialized equipment
- Referrals to other needed services

EI/ILP APPROACH TO SERVICE DELIVERY

Because no single professional can meet all the needs of a child with developmental delays, EI/ILP encourages the use of a *transdisciplinary* approach, with a primary

service provider assigned to each child and a team of professionals from different disciplines who share their expertise with the parents and other team members as needed to support the child's progress and participation in daily activities in the family's home and community.

In addition to taking a team approach to service delivery, the core values of EI/ILP support services that are *evidence-based* and *family-centered*. By listening to the family throughout the process, intervention techniques can be modified on a continual basis to match the child's and family's unique needs and strengths.

MORE INFORMATION

More information and resources for early intervention services in Alaska are available at the EI/ILP website. The site includes a statewide directory of EI/ILP programs that cover all regions of Alaska.

 www.hss.state.ak.us/ocs/InfantLearning

UNDERSTANDING AUTISM SPECTRUM DISORDERS

WHAT IS AUTISM SPECTRUM DISORDER (ASD)?

According to the American Academy of Pediatrics, ASDs are a group of related brain disorders that affect a child's behavior, social, and communication skills. Children with ASD will master the early motor skills (sitting, crawling, and walking) on time, and as a result, delays in social and communication skills may not be as obvious.

The definition of autism has broadened so that autism is now seen as a spectrum of disorders, which also includes Asperger syndrome and Pervasive Developmental Disorder Not Otherwise Specified (PPD- NOS). Each case of autism can be placed along a continuum ranging from milder to more severe based on the level of an individual's skills in the main areas of behavioral development.

WHAT ARE THE CHARACTERISTICS?

According to the American Academy of Pediatrics, each child with ASD will have unique sets of symptoms or characteristics and each of these may range in severity. However, symptoms or characteristics tend to center around behavioral development:

Social differences:

- Doesn't snuggle when picked up, but arches back instead
- Doesn't keep eye contact or makes very little eye contact
- Doesn't respond to parent's smile or other facial expressions
- Doesn't look at objects or events parents are looking at or pointing to
- Doesn't point to objects to get parents to look at them.
- Doesn't bring objects to show parents just to share his interest
- Doesn't often have appropriate facial expressions
- Unable to perceive what others might be thinking or feeling by looking at their facial expressions
- Doesn't show concern or empathy for others
- Unable to make friends

Communication differences:

- Doesn't say single words by 15 months or two-word phrases by 24 months
- Repeats exactly what others say without understanding its meaning (parroting or echolalia)
- Doesn't respond to name being called, but does respond to other sounds (like a car horn or a cat's meow)
- Refers to self as "you" and others as "I" (pronominal reversal)
- Often doesn't seem to want to communicate
- Doesn't start or can continue a conversation
- Doesn't use toys or other objects to represent people or real life in pretend play
- May have a good rote memory, especially for numbers, songs, TV jingles, or a specific topic
- Loses language milestones, usually between 15 to 24 months in a few children (regression)

Behavior differences:

- Rocks, spins sways, twirls fingers, or flaps hands (stereotypical behavior)
- Likes routines, order and rituals
- Obsessed with a few activities, doing them repeatedly during the day
- Plays with parts of toys instead of the whole toy (for example, spinning the wheels of a toy truck)
- May have splinter skills, such as the ability to read at an early age, but often without understanding what it means
- Doesn't cry if in pain or seem to have any fear
- May be very sensitive or not sensitive at all to smells, sounds, lights, textures, and touch
- Unusual use of vision or gaze—look at objects from unusual angles
- May have unusual or intense but narrow interests

HOW COMMON IS AUTISM?

Autism spectrum disorders are not rare. According to the Kennedy Krieger Institute, ASD affects more children than diabetes, AIDS, and cancer combined. Boys are four times more likely to develop autism than girls.

Autism has been increasing in Alaska as it has nationwide. According to statistics from the U.S. Department of Education the diagnosis rate is 10 to 17 percent per year.

IS THERE A CURE?

ASDs are lifelong conditions with no known cure. However, children with ASD can progress developmentally and learn new skills. Some children may improve so much that they no longer meet the criteria for ASD, although milder symptoms may often persist.

What is known is that the earlier children receive intervention, the more positive the outlook for their future. Although characteristics of ASD may be lifelong, having ASD is no longer considered the same barrier to a normal life it was just a few short years ago. People with ASD can and do live independently, attend school, work, and lead full and happy lives.

Misconceptions about ASD

The field of autism research has exploded over recent years. Now more than any other time, we have a clearer understanding of this complex development disorder. However, there are still some misconceptions that families might encounter. Those misconceptions may include the following:

Myth: Autism is a mental illness.

Reality: Autism is a neurologic development based disorder.

Myth: Children with autism are mentally retarded.

Reality: Not all children with autism are delayed. Children with autism have a cognitive impairment but may have average or above-average intelligence. The appearance of cognitive impairment may be a result of communication delays.

Myth: Children with autism are unruly kids who choose not to behave.

Reality: Certain aggressive behaviors may be characteristics associated with autism spectrum disorders. There may be many reasons why some children with ASD sometimes demonstrate disruptive or aggressive behaviors. The behaviors are generally not “chosen” by the child.

Myth: Bad parenting causes autism.

Reality: Parents are not responsible for causing their child’s autism.

ASSESSING AUTISM SPECTRUM DISORDERS

There is no single test for autism or ASD, however, a diagnosis is based on a variety of observed behavior, educational and psychological testing. Improved diagnostic screening methods can now identify risk for ASD in children who are as young as 16 months old.

When an EI/ILP provider receives a referral, an evaluation of the child is conducted, assessing the child's and family's strengths, characteristics, and needs. In Alaska Part C, eligibility can be established when a child is 50 percent delayed in any area of development. However, an Early Interventionist may also use clinical opinion to qualify a child for Part C Services. It is important to note that this evaluation and eligibility determination is independent of a medical diagnosis of autism, and is based on the child's development.

Once eligible, a multidisciplinary team, with the family's input creates an IFSP. This includes a plan of care that identifies the family's goals. Working with the primary service provider, the family identifies the frequency, duration, and when and how the service is delivered. When the child reaches 24 months, the IFSP is required to start considering transition services with the family including their priorities and concerns. This consideration may include a medical diagnosis of ASD as this determination may be necessary for services after age three.

MEDICAL DIAGNOSIS VS. EDUCATIONAL IDENTIFICATION

The priority of the EI/ILP provider is to make sure that a child who is delayed or at risk of being delayed receives intervention as early as possible. Waiting for a child to receive a medical diagnosis of ASD before receiving early educational and developmental interventions is not ideal. Using medical diagnosis as the primary basis for determining eligibility for EI/ILP services also has the potential for creating a logjam of families waiting for diagnoses before IFSPs or Individualized Education Plans (IEPs) can be developed for their children. By using an educational definition of ASD to determine eligibility based on the identification of characteristics consistent with ASD, EI/ILP can start working with the family on a

child's individualized service plan independent of where the child is in the process of receiving a medical diagnosis.

MEDICAL EVALUATIONS FOR CHILDREN WITH POSSIBLE AUTISM

The distinction between educational identification and medical diagnosis is not in any way intended to discourage parents from seeking a medical evaluation and diagnosis for their child. In fact, EI/ILP encourages parents to get a medical evaluation for a child who may have an autism spectrum disorder. There are three primary reasons why this is important:

- To provide a general assessment of the child's health status (as is recommended for all children with possible developmental delays or disorders)
- To identify other conditions (such as hearing loss) sometimes confused with autism in a child who does not have autism
- To identify and assess medical conditions or genetic syndromes that are sometimes associated with autism

In addition, a medical evaluation and diagnosis of ASD is an opportunity to establish a diagnosis for the child for other programs, to assess the child's overall function in all developmental domains, to assess the child's family and environment, and to get appropriate medical follow-up care.

PURSUING A MEDICAL DIAGNOSIS

When a child is identified as meeting the educational classification of autism, EI/ILP will seek parent permission to share this information with the child's health care provider, because medical follow up is very important for children with autism. EI/ILP encourages families to work with their provider to obtain medical diagnostic services (see Appendix 5).

A medical diagnosis generally occurs in consultation with the child's pediatrician or primary care physician. The American Academy of Pediatrics has provided pediatricians extensive and specific guidance on autism screening and diagnosis.

It will be common for there to be interplay between the potential identification of a child meeting the educational classification of autism under IDEA and the medical diagnosis of autism. Pediatric practices may have resources to carry out further screening and comprehensive evaluation, and may wish to refer the child to appropriate specialists. The choice of a practitioner, along with the payment source, should be reflected on the IFSP in the "Other Child Related Services" section.

EI/ILP recommends that a developmental pediatrician, neurologist, child psychiatrist, or a licensed clinical psychologist complete the diagnostic evaluation. The policy of ASHA, the American Speech-Language-Hearing Association, is that a speech language pathologist with expertise in ASD may perform autism diagnostic evaluations. Regardless of the area of specialty, an accurate diagnosis requires that

the clinician who performs the assessment has training and experience in the area of ASD.

COMPONENTS OF A MEDICAL DIAGNOSTIC ASSESSMENT

A medical diagnostic assessment for ASD should confirm the diagnosis as well as provide information about the strengths and learning challenges of the child. The assessment can be very helpful in planning for intervention services.

A specific autism assessment tool is highly recommended but not required to make the diagnosis. Examples of some assessment tools are included in Appendix 4. The components of an evaluation for ASD should include:

- Developmental, medical, and three-generation family history (see Appendix 5)
- Careful physical and neurological examination
- Developmental evaluation
- Assessment of social interaction, verbal and nonverbal communication, and repertoire of activities and interests and play behavior against the DSM IV TR criteria for autism
- Audiological evaluation
- Assessment of family functioning including strengths, resources, stressors and support needs, both emotional and financial
- Chromosome analysis and DNA testing for Fragile X in children who show global developmental delay
- Additional targeted medical assessment based on clinical presentation, including additional laboratory studies (EEG, MRI, etc.)

FOLLOW-UP TO A MEDICAL DIAGNOSIS

For young children identified with ASD, timelines for a re-evaluation should be determined. A child who is assessed at 16 to 24 months should be reassessed in one year. Decisions about additional medical evaluations or referrals for medical follow-up must originate from the child's primary health care provider. Medical follow-up is not a service covered by EI/ILP.

PRINCIPLES OF INTERVENTION

SERVICES SHOULD BE INDIVIDUALIZED

Individualization means that each child and family's services are based on a child's unique needs, strengths and interests, and the family's concerns, priorities and resources. This is important because each child and family is different. The development of the IFSP and ongoing changes in the plan will be done with the family. Families have a decision-making role as members of the intervention team. The team will determine who will be involved in the program, when services will take place, and what will be the focus of the services.

This guideline introduces families to the framework for intervention to guide them in this discussion. Families will determine how they will be involved in implementing their child's IFSP. Even though the intervention may have a specific curriculum, the daily activities and routines are individualized step by step and customized for each family. It is not possible for families to assign the process of "treating" ASD to the infant learning specialists. Research on child development has shown that toddlers do almost all of their learning in the time between early intervention visits as they interact with their family in a variety of social and physical environments.

The range of intensity of services is up to the family and can vary from one to 40 hours a week. Additional information on some evidenced-based practices (such as DIR/floortime and SCERTS, and Teach) can be found starting on page 25 of these guidelines or see the National Autism Center National Standards Report at:

 www.nationalautismcenter.org

IMPORTANCE OF FAMILY INVOLVEMENT AND PARTICIPATION

Families are the first and most important teachers for their child. They are the constant in a child's life. Infants and toddlers learn as they experience life with their families. Early intervention and infant learning professionals can help ensure this learning is designed to meet the child's developmental needs. Service systems and personnel will change over time, but families maintain the continuity from day to day and year to year. Families become lifelong advocates for their child.

The partnership between EI/ILP and the family begins when the family contacts the program because of concerns about their child. Throughout the eligibility determination process and developing the IFSP, the family identifies how their child functions in the daily routines of family life and what areas are most important to

work on. The IFSP describes the roles of service providers, family members, and others in achieving the family-identified outcomes. EI/ILP staff will provide families with education, support, and guidance to help them develop the skills necessary to help their child with ASD reach his or her potential.

The provision of early intervention services is only a small part of the process of helping a child with ASD to develop. Family members and early interventionists work together constantly to connect what the child is doing in family life to the content of the intervention visits. Active dialogue between interventionists and parents, modeling and practicing during visits, tailoring carry-over strategies to changes in the family and child's life, designing and carrying out manageable record keeping systems, all are part of the early intervention experience.

Families should be actively involved in their child's program in the following ways:

- Planning and deciding what services their child will receive
- Evaluating the child's progress
- Training and assisting with activities of daily living and developing strategies for addressing the IFSP during daily routines

Family members and team members should jointly determine when it is time to consider revising the IFSP, what to work on next, and how to change activities or strategies that have not been as successful as hoped. Visits need to be scheduled at times and in ways that family members can fully participate. The content of all visits must be directed to ensuring that family members and other caregivers acquire the skills and resources to help the child. It is almost certain that progress toward outcomes will be slower if families are not active in every part of the early intervention process including home visits.

INTERVENTION SHOULD BE BASED ON CURRICULUM SPECIFICALLY DESIGNED TO ADDRESS THE NEEDS OF A CHILD WITH ASD

Curriculum for children with ASD is based on widely accepted principles of child development. The instructional program builds on these principles and the child's individual strengths while also addressing his or her weaknesses. The curriculum for a child with ASD requires concentrated or specialized instruction to address the areas of language, social interaction, play skills and interests. The essential areas for a specialized ASD curriculum include:

- Attending to and staying engaged in the environment, especially to other people and learning opportunities
- Imitating others, including both verbal and motor imitation. Imitation is seen as a fundamental tool for learning
- Using verbal and non-verbal communication such as gestures, vocalizations and words
- Understanding and using language to communicate

- Playing appropriately with toys
- Playful interaction with others
- Reciprocal interactions
- Spontaneous interactions
- Making choices
- Following daily routines and variations in routines

INTERVENTION IS PLANNED AND SYSTEMATIC

Systematic intervention or instruction is carefully planned and consistent. It involves assessing, planning, teaching and measuring progress with each intervention step. Each step is coordinated toward a meaningful set of outcomes or goals. The only reliable way to determine if teaching is effective is to be systematic and to measure progress on a regular basis. It is important to note that many of the indicators that are easiest to measure, such as vocabulary, intelligibility of words, or duration of eye contact, may not be as important to the family as its general sense of whether the overall quality of life has improved for the child and the family. Reduced frequency of tantrums, ease of transition between home and other settings, or the ability of family members to spend quality time together may be some of the most meaningful but hardest to measure changes.

Systematic instruction relies on intervention decisions that are driven by data. Data is used to measure the change in a behavior over time. It may include the *frequency* (how often a behavior does or does not occur), *duration* (how long a behavior lasts when it occurs), and *range* of a behavior (how much support or prompting a child needs). In order to use data to monitor the effectiveness of intervention, assessment, planning and intervention must follow a series of systematic steps:

1. An assessment is completed prior to intervention
2. Outcomes and objectives are written in measurable terms. There must be a specific description of the desired behavior
3. Data on outcomes and objectives are taken prior to intervention and used as a baseline for intervention
4. Steps or tasks towards outcomes are analyzed and defined
5. Instructional strategies and supports are identified (e.g. where, when, with whom, level of support)
6. Methods for motivating or reinforcing the desired behaviors are identified
7. Methods and timelines for measuring progress are determined
8. Data is taken and analyzed on a routine basis
9. Adjustments in intervention plans are made based on analyzing progress on the IFSP

Sometimes when teams are eager to ensure that a child is receiving intensive services, they may develop service plans with many hours of service without following the process outlined above. An IFSP that is developed after a child has met the IDEA classification of autism may be a very short-term plan that focuses on finishing any assessments, developing outcomes and objectives, gathering preliminary data, and identifying steps and tasks that will be carried out to meet the outcomes.

At this point (step 5 above) the team would meet again to identify what the intensive intervention would look like. IDEA requires that IFSPs be reviewed at least every 6 months, but in most cases it is expected that these more complex plans will be revisited more frequently as part of the team meeting process.

Ongoing collaboration between the family and service providers in analyzing data and in adjusting strategies is key to successful teaching and learning. Continuation of ineffective strategies or relying on techniques merely because they have been shown to be effective with other children may be harmful. Many intervention teams find that a regularly scheduled meeting of all team members (including the family) is important to review data, maintain consistency in intervention, and make timely changes in the plan.

The team may need to strike a balance between meeting time and time working directly with the child, based on the realities of the family's schedule, the child's readiness and willingness to receive intervention. Family members need to talk to their service coordinator if they feel there is too much time spent at meetings and not enough spent working directly with the child.

POSITIVE BEHAVIORAL SUPPORT FOR CHALLENGING BEHAVIORS

Positive behavioral support is the term used for a set of principles that frame the way we think about and respond to children and their behavior. The principles are grounded in the appreciation of each child's strengths and challenges. To practice positive behavioral support means getting to know the whole child and assuming his or her behavior has meaning, and that the behavior is a form of communication. Positive behavioral support requires recognizing that children develop and respond best when they are respected and supported to enjoy relationships and make choices.

Challenging behaviors displayed by children with ASD are complex and may create frustration and confusion for those who interact with the child. Behavior may range from aggression, tantrums, or self-injury, to withdrawal or repetitive stereotypical actions. Some of these behaviors also occur in children who are developing normally. For children with ASD, however, extreme behaviors occur more frequently or are more disruptive to development. Although some behaviors occur for medical or other reasons, the majority of challenging behaviors occur because of:

- Social misunderstanding

- Communication frustration
- Discomfort with the physical environment
- Anxiety
- Intense preoccupations or interests

Before developing a plan to address problem behavior, a thorough assessment of the behavior must take place. This assessment, which may be referred to as a *functional behavioral analysis*, is completed by the intervention team and helps them to understand what happens before the behavior occurs. The assessment is designed to answer questions such as “Why is the behavior happening?”, “When does the behavior occur?”, “What function does the behavior serve?”, and “Is the behavior preceded by any biological, environmental, sensory, and/or emotional conditions?”

The assessment will also look at what happens after the behavior occurs: “How do people respond to the behavior?” The assessment helps the family understand how their response to the child’s behavior may increase or decrease the challenging behavior.

Once the assessment is completed, a positive behavioral support plan is developed. The plan includes designing strategies to keep the behavior from occurring, providing the child with new skills to replace the undesirable behavior, and assisting caretakers to respond to the behavior in new ways. The ultimate goal of the plan is to help the child and family gain access to new environments, have positive social interactions, develop friendships, and learn new communication skills. The result of the support should be that the child has fewer problem behaviors and more ways of interacting with others (1).

The plan will often include strategies to address communication. A child whose communication skills are limited will be frustrated due to the inability to convey needs and wants. This frustration can be a cause for socially unacceptable or challenging behaviors. Therefore, the intervention plan will include development of an effective communication system for the child.

The plan may also include strategies to address sensory problems that may co-occur with autism. Many individuals with ASD display different or atypical reactions to common sensory experiences. There may be an over-reaction or under-reaction to sights, sounds, touch, movement, body position/awareness and the pull of gravity. This can result in problem behavior. The individual may become over-aroused, display discomfort, complain, withdraw or engage in some sensory-related behavior.

Intervention to address sensory-related behaviors is called *Sensory Integration (SI)* therapy. Individuals who have difficulty processing and regulating sensory information are challenged by difficulties with attention, learning, and social interaction. There is no research that indicates that sensory integration therapy has

any direct impact on ASD. However, sensory issues may be particularly overwhelming to children with ASD, so treatment that addresses them may prove to be helpful. Sensory Integration therapy strives to reduce the child's preoccupation with his or her sensory needs by satisfying the sensory craving, reducing the stimuli in the environment, and increasing the tolerance for sensory stimulation. Once able to regulate the sensory input, the child is more available for engagement and learning opportunities (2).

FOCUS ON COMMUNICATION SKILLS

The importance of having an effective communication system cannot be underestimated. A first step in addressing communication issues with children who are suspected of having ASD is to ensure that their hearing has been reliably tested. Hearing or an alternative to hearing is a critical component of communication. An observer may not know if a hearing loss is causing autistic behavior, autism makes it seem as if a child has hearing loss, or if a child has both ASD and communications issues. Obtaining an accurate hearing assessment of a child with ASD can be challenging.

Communication is much broader than simply talking to one another. A good communicator uses verbal as well as non-verbal behavior to engage a listener. Children communicate to let their needs known long before they can talk. As children develop, their non-verbal communication (e.g. pointing to a desired object, lifting one's arms to be picked up) becomes natural and is understood by others.

Children with ASD, whether verbal or non-verbal, must develop some type of communication system in order to succeed socially. They must be able to communicate in a manner that others will understand. Toddlers with ASD may often have large vocabularies or imitate spoken language well, but lack joint attention skills or the ability to use language functionally to communicate.

Alternative or augmentative communication systems are one way to assist children with limited verbal language. The type of communication system used will vary depending on the child and the activities and environments in which he or she spends time. The system may include simple gestures, sign language, objects, pictures, or an electronic communication device.

The use of an alternative system does not mean that the child cannot or will not develop verbal language skills or speech. The communication system is used as an aid to improve communication and speech, increase social interactions, and provide structure to daily activities or routines. Children with ASD are often successful with picture communication systems because they tend to have strong visual skills. If a child has difficulty understanding spoken communication, pictures are often used to give more information. For example, a child may be offered a choice of what he wants to play with by showing him two pictures. The child will choose the preferred toy by pointing to the picture or handing it to the adult. The purpose of an

alternative system is to expand the ways in which the child can interact with and be understood by a variety of people.

One of the more common alternative communication systems used with children with ASD is the *Picture Exchange Communication System (PECS)*. PECS was developed to allow children and adults with ASD and other communication deficits to initiate communication. PECS begins by teaching a child to exchange a picture of a desired item with an adult to request something. The system goes on to teach discrimination of symbols and then puts them all together in simple “sentences.”

Many young children using PECS also begin to develop speech. The same is true for children who learn sign language. There are some who conclude that signs are even more likely to promote speech, since each word has its own motor movement, whereas the motor movement with every picture is the same (3).

Whether a child is using an alternative communication system or not, the following skills should be included in a communication curriculum for children with ASD:

- Look at person when name is called
- Look at objects when they are labeled
- Attend to a speaker
- Use eye contact to maintain interaction
- Imitate simple actions, sounds words, songs or finger plays
- Gain someone’s attention
- Manipulate a person or object to ask for something
- Point
- Combine pointing with looking at a person to ask for something
- Request “more”
- Tell someone you are “all done”
- Say “no” or refuse
- Greet others
- Say “yes” or agree
- Name things
- Name people
- Describe what others are doing

SOCIAL RELATIONSHIPS ARE THE BASIS FOR A CHILD’S ABILITY TO PLAY AND INTERACT

In addition to difficulties with communication, young children with ASD typically lack appropriate interaction and play skills. Intervention for a child with ASD needs to specifically address these skills. Before focusing on social interaction in play, the

child needs to have some skills for using toys in a playful way. Usually children begin interacting with toys when playing by themselves.

To increase a child's success while playing, the environment needs to be organized. The physical space should be defined in a way that is clear for the child, for example, sitting at a table or on a rug. The choices of toys and activities need to be planned. The length of the play period and how to end the play session should also be determined.

Initial sessions for learning how to use toys may include simple actions on toys such as dumping, pulling, and building. Once the child becomes more sophisticated in his or her use of toys, the child will move on to symbolic use of toys. This will include simple imitation such as giving a baby doll a drink or talking on a play telephone.

Social play begins when a child plays with a parent or alongside another child or sibling using the same materials. This is referred to as parallel play. As the children interact with materials, they learn to share materials and themes in a play routine. Moving into play that is more cooperative or social requires skills such as turn-taking and sharing. For children with ASD, these skills may have to be taught.

Children develop from simple cooperative play to participation in small group activities. Again, for a child with ASD this often requires planning and support to be successful. Just placing a child with ASD in a group setting with children is not sufficient. Often it is helpful to begin with a short, planned "play date." The number of children should be limited to one or two familiar children and the environment should also be familiar. The toys that will be most motivating for the child with ASD should be identified and there should be sufficient number of toys for both children to have their own set.

A child's social behavior with adults and peers needs to be a focus of intervention. This focus usually begins with child-adult interactions and moves on over time to child-child interactions.

The basic structure for planning for social interactions should include the following:

- Define the space
- Organize the choices, toys or materials
- Organize which materials are to be shared
- Organize the expectations of the activity
- Define the social expectations for the children
- Determine how long the activity will continue
- Determine how the activity will end

These same guidelines can be used when introducing a child with ASD to a larger group setting such as a play group or nursery school class.

It may also be helpful to use the same structure in planning community experiences for a young child with ASD. Community settings may be difficult for autistic children because they are unpredictable. Although all aspects of a community outing cannot be organized, establishing some of the above parameters will help the child stay calm and focused throughout the experience. Community outings should begin in the presence of a trusted adult. The goal is for the child to become familiar enough with peers to be comfortable with less adult support in the community or group setting over time.

PROVIDING FAMILY SUPPORT

Children with ASD present unique challenges to their families. No two families of children with ASD will require the same support, and often the need for support changes over time. Family support goals on the IFSP are often as important as child developmental goals. Similarly, these goals should be evaluated from time to time and changed to reflect the changing needs of the child and family. Parents have shared that their need for support is quite significant during the time period their child was first identified with an ASD.

The IFSP should reflect a wide range of family support outcomes. These might include:

- The need for information on ASD and intervention philosophies
- Opportunities to speak with other parents of children with ASD
- Support groups for parents of children with ASD
- Training on how to teach the child new skills or strategies to integrate the child's intervention into daily routines
- Identifying appropriate childcare or respite support options
- Professional counseling support
- Support and information for siblings of children with ASD
- Support and information for extended family members
- Support for families to develop advocacy skills for their child with ASD
- Support at the time of transition out of EI/ILP or other transitions the family may experience

Appendix 8 contains a list of resource organizations for families.

APPROACHES TO INTERVENTION

There has been a great deal of publicity and controversy about what is the best way to address the needs of children with ASD. Several approaches have been widely publicized. When parents learn their child may have ASD, they may be led to believe that a certain brand name program will resolve all the issues associated with the condition. Extensive research has been conducted about many approaches, and although there is evidence that interventions lead to improvements, there does not appear to be a clear, direct relationship between any particular intervention and children’s progress.

With any approach, children’s outcomes are variable, with some children making substantial progress and others showing very slow gains. While substantial evidence exists that interventions can reach short-term goals in many areas, there is still much we have to learn about the relationships between particular techniques and specific changes or outcomes (3).

And while research has shown that early treatment is very beneficial, “early” is usually defined as 3 years of age or older. We don’t yet know whether very young children—those 2 years old or even younger—will tolerate or benefit from the lengthy and structured teaching sessions commonly used with older children (4).

Children with ASD learn in complex ways. Their learning needs, like their autism, transform as they grow and develop. In many cases, focusing exclusively on one approach or method of instruction, which may temporarily produce a desired result, could ultimately restrict a child’s growth. However, there may times when a good rationale exists for putting a significant short-term effort into the development of a specific skill.

Ultimately, the best way to approach ASD is to find the intervention strategies that best fit a given child’s and family’s needs. A good plan will consider the developmental strengths, needs and unique learning style of each child. One child may require a high level of direct instruction, while another may be over-stimulated by it. This chapter includes an overview of many of the treatment approaches developed to help young children with ASD.

EVALUATING TREATMENTS

The following principles for evaluating ASD treatment options come from Dr. B.J. Freeman in *Diagnosis of the Syndrome of Autism: Questions Parents Ask*. They include

some important caveats for families and providers to keep in mind when considering a treatment program or technique:

- Approach any new treatment with hopeful skepticism. Remember that the goal of any treatment should be to help the person become a fully functioning member of society
- Be aware that any treatment represents one of several options for a person with autism
- Be aware that treatment should always depend on individual assessment information that indicates it is an appropriate choice for a particular child.
- Be aware that no new treatment should be implemented until its proponents can specify assessment procedures necessary to determine whether it will be appropriate for an individual with autism
- Be aware that debate over use of various techniques are often reduced to superficial arguments over who is right, moral and ethical and who is a true advocate for the child. This can lead to results that are directly opposite to those intended
- Be aware that new treatments have often not been validated scientifically
- Beware of any program or technique that is touted as effective or desirable for every person with autism
- Beware of any program that thwarts individualization and potentially results in harmful program decisions

QUESTIONS TO ASK REGARDING SPECIFIC TREATMENTS

When selecting a specific treatment, parents and providers should ask the following:

- Will the treatment result in harm to the child?
- How will failure of the treatment affect the child and family?
- Has the treatment been validated scientifically?
- Have the assessment procedures been specified?
- How will we know the treatment is working?
- How will the treatment be integrated into the child's current program? Do not become so infatuated with a given treatment that functional curriculum, play and social skills are ignored. (5)

TYPES OF TREATMENT

It is useful to characterize the active ingredients of treatment approaches along a continuum from traditional behavioral approaches, such as discrete trial, to more contemporary behavioral approaches using naturalistic language teaching techniques, to developmentally oriented approaches.

BEHAVIORAL APPROACHES

Applied Behavioral Analysis (ABA) is the science of applying what is learned from the analysis of behavior to understand the relationship between behavior and conditions. The behavior analyst reviews data to develop theories as to why a particular behavior occurs in a particular context. The information obtained from the analysis is used to purposefully and systematically modify behavior. This happens when the behavior analyst uses the data to design interventions to alter the behavior being targeted (4).

Applied Behavioral Analysis generally emphasizes four elements:

- Antecedents (what comes before the targeted behavior such as instructions, demands, or corrections)
- Behavior (which is observable and measurable)
- Consequences (such as reinforcement)
- Context (the setting conditions such as people, places, materials, activities, or time of day)

Since the 1970s, the science of ABA has been used to create programs for individuals with autism that teach specific skills in a specialized sequence with the goal of increasing or improving socialization, communication, and general adaptive functioning. Such treatment, applied intensively in the toddler and preschool years, has been referred to as **Early Intensive Behavioral Intervention (EIBI)**. Although they are not synonymous, ABA is often used interchangeably with EIBI, particularly in the popular press. ABA is also erroneously perceived as a specific intervention technique rather than as an overall science and service delivery mechanism used to establish, guide, and evaluate ongoing intervention.

Among the ABA-based approaches for young children with autism, most are based on the research of Dr. Ivar Lovaas and others at the University of California, Los Angeles. This has led many to use the term “Lovaas therapy” interchangeably with ABA or other intensive behavioral treatments for ASD.

Within both broadly defined ABA-based interventions and the more specific EIBI programs, a number of techniques are used to accomplish treatment goals. These often include traditional behavioral techniques such as functional assessment, prompting, shaping, and reinforcement, as well as techniques specifically designed for autism treatment, such as Discrete Trial Instruction.

Discrete Trial Instruction (DTI) is a method of teaching children that was first adapted for children with ASD by Dr. Lovaas and his colleagues at UCLA. This method of instruction includes multiple opportunities of intensive practice or *trials* where the child is taught to respond to a command or *stimulus*. Each practice session includes a series of short, concise instructional prompts. The model emphasizes precision and organization during instruction. This includes adult control over the learning environment, the use of prompting and shaping

techniques, and reinforcement when the child produces the correct response. The rationale for using DTI is the belief that children with ASD are unable to learn in natural contexts due to their specific learning and behavioral characteristics (6).

There are variations in how DTI is used. The more recent work of Vincent Carbone and his colleagues advocates the use of discrete trials in which the content of the curriculum is specific to functional verbal behavior. **Verbal behavior intervention** is focused on language as a skill that can be analyzed and targeted according to behavioral principles. That is, language is a behavior and can, therefore, be influenced by reinforcement and maintained through motivation. The use of language is directly related to the value of the reinforcement that follows the child's communication attempt. Carbone, Sundberg, and Partington have used these teaching procedures to achieve spontaneous language in children with ASD (7).

Another behavioral approach is **Pivotal Response Training (PRT)**, which targets behaviors that will have widespread effects on development (8). PRT is used to teach language, decrease disruptive/self-stimulatory behaviors, and increase social, communication, and academic skills by focusing on critical, or "pivotal" behaviors that affect a wide range of behaviors. The primary pivotal behaviors are motivation and child's initiations of communications with others. The goal of PRT is to produce positive changes in the pivotal behaviors, leading to improvement in communication skills, play skills, social behaviors and the child's ability to monitor his own behavior (9).

The difficulties cited with using a traditional behavioral model to enhance social and communication skills include the artificial nature of the instructional setting and the lack of a clear link between instruction and the social use of a skill (10). There is now a large body of empirical support for behavioral approaches using naturalistic teaching methods. These behavioral programs are often carried out in community and home settings and are structured to take advantage of natural learning opportunities. Incidental teaching such as the Little Walden Program at Emory University, which often takes place in a preschool classroom setting, is an example of a behavioral model of this type (11).

DEVELOPMENTAL APPROACHES

There are numerous intervention approaches based on a developmental framework. Although the evidence-based support for developmental approaches is more limited than for behavioral approaches, there are several studies that provide empirical support for language outcomes using specific strategies built on a developmental approach (12) (13) (14) (15). Case studies also provide information about this approach, with Greenspan and Wieder (16) providing the largest case review.

Developmental approaches share many common active ingredients with contemporary naturalistic behavioral approaches and are often compatible with them. A common feature of developmental approaches is that they are child-directed. Intervention emphasizes the development of skills through active

exploration and positive social interactions, based on the belief that children acquire skills through social interactions. These approaches emphasize naturally occurring situations as the context for instruction. Intentionality and meaning are assigned to all of the child's behaviors.

The rationale for using a developmental approach to enhance development in children with ASD is based on the belief that the fundamental process of learning is the same for all children, so children with autism are able to learn in natural contexts (17). Examples of developmental approaches are the relationship-based model called "**Floor Time**" or **DIR** developed by Dr. Stanley Greenspan, and **Structured Teaching (e.g. TEACCH)**, a cognitively-based approach to teaching self-care skills and managing disruptive behavior (18).

SCERTS™ (Social Communication, Emotional Regulation, Transactional Support) is a developmental model developed by Prizant, Wetherby, Rubin, and Laurent, intended to provide a flexible, yet comprehensive multidisciplinary plan for children with ASD. Goals, specific objectives, progress ratings and evaluation procedures are recommended with an emphasis on developing goals that address the core deficit areas of children with ASD. The model addresses Social Communication goals and Emotional Regulation. Transactional Supports needed include the visual and organizational supports children with ASD commonly need, support for families and staff, and the supports necessary to facilitate social interactions with partners (19).

Limitations to the socio-communicative approach include inconsistency in the number of learning opportunities that occur depending on the skills of the interventionist and the difficulty some children have in a learning environment with many distractions. Documentation of progress may also be less specific than in a behavioral approach.

Developmental researchers have criticized behavioral approaches for their failure to target the specific deficits associated with ASD. They argue that this failure to select target skills within a meaningful developmental framework results in isolated skills that are difficult to transfer to other settings (20). Behaviorists counter that the irregularity of skill development in children with ASD makes a careful adherence to normal developmental stages less relevant (21).

While the conceptual differences between developmental and behavioral approaches to intervention remain real, the gaps in practice appear to be narrowing (22). Developmental models have incorporated methods that recognize the needs of children with ASD for high levels of structure, adult attention and consistency, while behavioral interventions are also being used to address complex social and communication goals in normal environmental settings (23).

RELATIONSHIP-BASED APPROACHES

In recent years, experts have seen promising results in using relationship-based approaches for young children with ASD. One relationship-based approach is Responsive Teaching.

Responsive Teaching is a parent-mediated intervention model developed by Dr. Gerald Mahoney that is especially well suited to EI/ILP service delivery principals which emphasizes a strong partnership between families and service providers (24).

There has also been a great deal of interest in **Relationship Development Intervention** developed by Dr. Steven Gutstein. This approach focuses on teaching people with ASD how to develop strong emotional relationships with others (25). However, research validating this approach is still incomplete.

One of the drawbacks of the relationship-based approach for children with autism is the open-ended quality of the instructional environment. Children who lack core skills such as joint attention and imitation or who have severe challenging behaviors may be harder to engage in this model.

EXPERIMENTAL, ALTERNATIVE OR COMPLIMENTARY APPROACHES

There is a great deal of information available today on treatment options for young children with ASD. In addition to the standard forms of treatment discussed above, there are others that fall into a category of physiological and/or physical interventions. These are often referred to as alternative treatments or complementary treatments.

These interventions are viewed as an addition to the existing services provided by EI/ILP providers. Although EI/ILP neither provides these services nor covers their cost, an early intervention service coordinator can assist the family in gathering necessary information on these alternative and complimentary treatment options. See Appendix 7 for an overview of some alternative or complimentary approaches.

Service providers and families have expressed some concerns regarding alternative treatment options:

- There is a lack of scientific research and documentation on the effectiveness or potential side effects (physical or emotional) that may result from the treatment.
- There are tendencies for some interventions to be either too narrow in focus or to claim that the intervention will affect all areas of development.
- The financial impact on families who pursue some treatments is significant. Most treatments are not reimbursable by health insurance or, if they are, coverage is limited.
- There is a difficulty in finding qualified specialists to help implement and oversee treatment.

- The family may have unrealistic and false expectations about the outcome of the intervention.

Families need to acquire as much information as possible before deciding to pursue alternative treatment options. It is essential that these treatments be done under the guidance of qualified medical specialists or therapists with experience in ASD. These specialists may also be helpful in providing information on the effectiveness of the treatment based on other children whom they treat.

With any new treatment or intervention, a family should set specific goals and objectives and should agree with the practitioner on clear criteria and timelines for measuring success. If a treatment is not working it should be modified or discontinued.

Families need to keep in mind that participating in alternative treatments is very challenging. There are no “quick fixes” and therefore treatments require ongoing supervision and adjustments as well as family commitment. They often require ongoing support to implement the treatment as well as collect data to measure effectiveness. In many cases, alternative treatments involve a change in a family’s lifestyle. Most important, in order to determine if a treatment is effective, it is essential to participate in one program at a time. Intervention with multiple treatments will not allow assessment of which treatment was actually successful.

CHOOSING AN APPROACH

All these approaches, in conjunction with the principles of intervention, should be considered by the early intervention team, including the family, when developing an IFSP for a child with ASD in Alaska. One or more of the above approaches may be included in the child’s IFSP if it is found to be consistent with the individual needs of the child and family.

All intervention techniques used in EI/ILP programs should be carried out by licensed and certified staff assisted by early intervention associates who meet the requirements of Alaska’s professional standards.

At least one staff person with expertise in the implementation of an approach should be a member of the intervention team. These individuals may come from a variety of professional backgrounds, such as speech pathology, occupational therapy, early childhood education, special education or psychology. These professionals have the responsibility of working with the team in the design, training, and implementation of the treatment program.

PLANNING FOR TRANSITION

Part C services end when a child turns 36 months of age. At 24 months, planning begins with the family for the next transition. At 24 to 30 months, at minimum, the team should be assessing and building support network to bring in community resources, respite, medical equipment, mini grants, and medical diagnosis. IFSPs that address Social, Communication and Behavioral aspects will generally assist with identifying services in Preschool programs.

Children with ASD often have difficulty with change, including the changes experienced when transitioning to new settings, teachers, caregivers and peers. During the transition to a school-based program, there will be many changes in people, settings, and routines. A child with ASD may be so sensitive to change as to notice other more subtle differences not obvious to most of us.

There are significant differences between the service delivery model used in EI/ILP and an educationally based program developed by a local school district. Planning and flexibility on the part of early intervention service providers and preschool programs are necessary to assist families and children in adjusting to this change.

When planning the transition from an early intervention program to a school program, it is important that the local school district is notified as early as possible that the child is receiving EI/ILP services. This should occur even before discussions regarding transition take place. Early notification allows the school district to plan for the child with ASD. This may include identification of the appropriate staff and resources needed, as well as completion of any training the school's staff may need.

Cooperation between an EI/ILP program and the school district is essential for effective transitions. A transition meeting should be held between nine months and at least 90 days before the child's third birthday. Prior to this meeting, it may be helpful to identify skills that can be introduced at home but that will be helpful for the child to have in a school-based program. In addition, community resources for necessary family supports should be identified that may not be available from the school.

Information that will be helpful for the school district to have:

- Details of EI/ILP services that are in place and strategies that have been successful
- Information on the child and family's strengths (There should be a focus on the family as well as on the child throughout the transition process.)

Flexibility and creativity on the part of the school district and the early intervention program is needed for transitions to meet the child's and families' needs. For example, for children who turn three in the late spring or summer, the school may want to investigate whether it is possible to have the services in the IFSP continue until September using the school as a payment source. If the child is turning three early in the school year, it may make sense for the school district to consider asking EI/ILP to deliver services in the school setting.

Unfortunately, many children with ASD do not present their complex needs until very shortly before their third birthday. In this case, early intervention providers

Transition Planning Tools

EI/ILP Transition Planning Handbook

A detailed, step-by-step guide for parents going through the transition process with a timeline of steps as a child gets older and an overview of the process to create an Individual Education Plan (IEP). Available at:

www.hss.state.ak.us/ocs/InfantLearning/afterage3/ilp_StepAhead.pdf

Alaska Transition Training Initiative

A consortium of early childhood programs and providers in Alaska, ATTI helps address transition issues for special needs children moving from Part C to Part B at age three. Learn more at:

www.alaskaearlytransitions.org/trainers.html

Stone Soup Group: Transitions

Information and resources for parents and caregivers transitioning someone with special needs from one phase of care to the next, including medical and legal issues, guardianship, Medicaid, and transitions into postsecondary programs. Links to parent groups, behavioral supports and assistance programs specifically for kids transitioning from an early intervention to early education can be found at:

www.stonesoupgroup.org/transitions.html

The Paper Trail Notebook

An organizational tool available from the Stone Soup Group, the Paper Trail Notebook can assist the family in identifying and organizing information that will be needed for transition, including records of medical history, appointments and providers. Available at no charge to families of children with special health care needs through EI/ILP providers or directly from the Stone Soup Group at (907) 561-3701 or by visiting:

www.stonesoupgroup.org/papertrail.html

may need to help parents understand the need to share information with the school district as soon as possible. Of course, it is important for EI/ILP staff to participate in early information sharing with school districts for all children with complex or challenging behaviors whether or not they have an ASD diagnosis.

Transition planning should be a major focus of the IFSP for all children with ASD, but especially for those nearing the age of three. School districts may wish to participate in joint evaluations or observations of the child. Parents and EI-ILP providers should be aware that the determination of eligibility for special education services under the classification of autism for children over the age of three is made by the school district.

There may be instances where a child has participated in an autism-specific early intervention program but is not considered to have autism by a school district. In cases such it is especially important for the EI/ILP provider to work with the school district and the family to assure a smooth transition.

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APPENDICES

1. M-CHAT Checklist
2. Brief Infant-Toddler Social & Emotional Assessment (BITSEA)
3. CSBS DP Infant-Toddler Checklist
4. ASD Assessment & Screening Tools
5. Medical Follow-up for Children Identified with ASD
6. How Parents can Get the Most Out of the Early Intervention Visit
7. Alternative or Complementary Treatments for ASD
8. Resources

M-CHAT CHECKLIST

Please fill out the following about how your child usually is. Please try to answer every question. If the behavior is rare (e.g., you've seen it once or twice), please answer as if the child does not do it.

1. Does your child enjoy being swung, bounced on your knee, etc.?	Yes	No
2. Does your child take an interest in other children?	Yes	No
3. Does your child like climbing on things, such as upstairs?	Yes	No
4. Does your child enjoy playing peek-a-boo/hide-and-seek?	Yes	No
5. Does your child ever pretend, for example to talk on the phone or take care of dolls, or pretend other things?	Yes	No
6. Does your child ever use his/her index finger to point, to ask for something?	Yes	No
7. Does your child ever use his/her index finger to point, to indicate interest in something?	Yes	No
8. Can your child play properly with small toys (e.g., cars or bricks) without just mouthing, fiddling, or dropping them?	Yes	No
9. Does your child ever bring objects over to you (parent) to show you something?	Yes	No
10. Does your child look you in the eye for more than a second or two?	Yes	No
11. Does your child ever seem oversensitive to noise? (e.g., plugging ears)	Yes	No
12. Does your child smile in response to your face or your smile?	Yes	No
13. Does your child imitate you? (e.g., you make a face-will your child imitate it?)	Yes	No
14. Does your child respond to his/her name when you call?	Yes	No
15. If you point at a toy across the room, does your child look at it?	Yes	No
16. Does your child walk?	Yes	No
17. Does your child look at things you are looking at?	Yes	No
18. Does your child make unusual finger movements near his/her face?	Yes	No
19. Does your child try to attract your attention to his/her own activity?	Yes	No
20. Have you ever wondered if your child is deaf?	Yes	No
21. Does your child understand what people say?	Yes	No
22. Does your child sometimes stare at nothing or wander with no purpose?	Yes	No
23. Does your child look at your face to check your reaction when faced with something unfamiliar?	Yes	No

The authors of the M-CHAT recommend conservative scoring in order to miss as few children on the autism spectrum as possible. Any child who fails three or more items on the entire M-CHAT, or two or more of the critical items should receive a comprehensive evaluation. The critical items are 2, 7, 9, 13, 14, and 15. Source: 1999 Diane Robbins, Deborah Fein, & Marianne Barton

BRIEF INFANT-TODDLER SOCIAL & EMOTIONAL ASSESSMENT (BITSEA)

Scoring Instructions:

- 1) Convert all “N” (no opportunity) responses to 0
 N responses are possible for the following two items:
 “Plays well with other children”
 “Hits, shoves, kicks or bites other children.”
- 2) Problem domain:
 Sum the responses to the following questions: 2, 3, 4, 6, 7, 8, 9, 11, 12, 14, 16, 17, 18, 21, 23, 24, 26, 27, 28, 30, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42
 If 6 or more problem questions are unanswered, we recommend that you do not use the problem sum.
- 3) Competence domain:
 Sum the responses to the following questions: 1, 5, 10, 13, 15, 19, 20, 22, 25, 29, 31
 If 2 or more competence questions are unanswered, we recommend that you do not use the competence sum.

Cutpoints:

Problem scores that fall at or above the values listed below are considered high problems.
 Competence scores that fall at or below the values listed below are considered to indicate low competence.

BITSEA Scale:	Girls Cutpoint	Boys Cutpoint
Problems		
12-17 months	13	15
18-23 months	15	15
24-29 months	13	14
30-35 months	14	14
Competence		
12-17 months	11	11
18-23 months	15	13
24-29 months	15	14
30-35 months	15	14

Combining a child’s status on the Problem and Competence cutpoints provides most sensitive detection of problems and delays in competence. By combining cutpoints we mean that if a child has a high problem score and/or a low competence score s/he would be considered to screen positive on the BITSEA.

Source: Briggs-Gowan & Carter, 2002. Protected under Copyright law. Used here with the permission of the authors.

Child's birth date: _____ / _____ / _____
 month day year

Today's date: _____ / _____ / _____
 month day year

Sex of child: 1: Boy 2: Girl

Your relationship to child: 1: Mother 2: Father 3: Other

Child's ethnicity: 1: White/Caucasian
 2: Black/African American

3: Hispanic/Latino 5: Native American/Eskimo
 4: Asian/Pacific Islander 6: Other: _____

Instructions: This questionnaire contains statements about 1- to 3-year-old children. Many statements describe normal feelings and behaviors, but some describe things that can be problems. **Some may seem too young or too old for your child. Please do your best to answer every question.**

For each statement, please circle the answer that best describes your child in the LAST MONTH. Circle 0 to indicate "Not True or Rarely." Circle 1 to indicate "Somewhat True or Sometimes." Circle 2 to indicate "Very True or Often."

Please choose the answer that best describes your child in the LAST MONTH:

0 = not true/rarely 1 = somewhat true/sometimes 2 = very true/often

- | | | | |
|---|---------|---|---------|
| 1. Shows pleasure when s/he succeeds (For example, claps for self). | 0 1 2 | 25. Imitates playful sounds when you ask him/her to. | 0 1 2 |
| 2. Gets hurt so often that you can't take your eyes off him/her. | 0 1 2 | 26. Refuses to eat. | 0 1 2 |
| 3. Seems nervous, tense or fearful. | 0 1 2 | 27. Hits, shoves, kicks, or bites children (not including brother/sister). (N = No contact with other children) | 0 1 2 N |
| 4. Is restless and can't sit still. | 0 1 2 | 28. Is destructive. Breaks or ruins things on purpose. | 0 1 2 |
| 5. Follows rules. | 0 1 2 | 29. Points to show you something far away. | 0 1 2 |
| 6. Wakes up at night and needs help to fall asleep again. | 0 1 2 | 30. Hits, bites or kicks you (or other parent). | 0 1 2 |
| 7. Cries or tantrums until s/he is exhausted. | 0 1 2 | 31. Hugs or feeds dolls or stuffed animals. | 0 1 2 |
| 8. Is afraid of certain places, animals or things. What is s/he afraid of? _____ | 0 1 2 | 32. Seems very unhappy, sad, depressed or withdrawn. | 0 1 2 |
| 9. Has less fun than other children. | 0 1 2 | 33. Purposely tries to hurt you (or other parent). | 0 1 2 |
| 10. Looks for you (or other parent) when upset. | 0 1 2 | 34. When upset, gets very still, freezes or doesn't move. | 0 1 2 |
| 11. Cries or hangs onto you when you try to leave. | 0 1 2 | The following questions are about feelings and behaviors that can be problems for young children. Some of the questions may be a bit hard to understand, especially if you have not seen them in a child. Please do your best to answer them anyway. | |
| 12. Worries a lot or is very serious. | 0 1 2 | 35. Puts things in a special order, over and over. | 0 1 2 |
| 13. Looks right at you when you say his/her name. | 0 1 2 | 36. Repeats the same action or phrase, over and over. Describe: _____ | 0 1 2 |
| 14. Does not react when hurt. | 0 1 2 | 37. Repeats a particular movement, over and over (like rocking, spinning, etc.). Describe: _____ | 0 1 2 |
| 15. Is affectionate with loved ones. | 0 1 2 | 38. "Spaces out." Is totally unaware of what's happening around him/her. | 0 1 2 |
| 16. Won't touch some objects because of how they feel. | 0 1 2 | 39. Does not make eye contact. | 0 1 2 |
| 17. Has trouble falling asleep or staying asleep. | 0 1 2 | 40. Avoids physical contact. | 0 1 2 |
| 18. Runs away in public places. | 0 1 2 | 41. Eats or drinks things that are not edible, like paper or paint. Describe: _____ | 0 1 2 |
| 19. Plays well with other children (not including brother/sister). (N = No contact with other children) | 0 1 2 N | 42. Hurts him/herself on purpose. For example, bangs his or her head. Describe: _____ | 0 1 2 |
| 20. Can pay attention for a long time. (Not including TV) | 0 1 2 | | |
| 21. Has trouble adjusting to changes. | 0 1 2 | | |
| 22. Tries to help when someone is hurt. For example, gives a toy. | 0 1 2 | | |
| 23. Often gets very upset. | 0 1 2 | | |
| 24. Gags or chokes on food. | 0 1 2 | | |

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CSBS DP INFANT-TODDLER CHECKLIST



CSBS DP Infant-Toddler Checklist

Child's name: _____ Date of birth: _____ Date filled out: _____

Was birth premature? _____ If yes, how many weeks premature? _____

Filled out by: _____ Relationship to child: _____

Instructions for caregivers: This Checklist is designed to identify different aspects of development in infants and toddlers. Many behaviors that develop before children talk may indicate whether or not a child will have difficulty learning to talk. This Checklist should be completed by a caregiver when the child is between **6 and 24 months of age** to determine whether a referral for an evaluation is needed. The caregiver may be either a parent or another person who nurtures the child daily. Please check all the choices that best describe your child's behavior. If you are not sure, please choose the closest response based on your experience. **Children at your child's age are not necessarily expected to use all the behaviors listed.**

Emotion and Eye Gaze

1. Do you know when your child is happy and when your child is upset? Not Yet Sometimes Often
2. When your child plays with toys, does he/she look at you to see if you are watching? Not Yet Sometimes Often
3. Does your child smile or laugh while looking at you? Not Yet Sometimes Often
4. When you look at and point to a toy across the room, does your child look at it? Not Yet Sometimes Often

Communication

5. Does your child let you know that he/she needs help or wants an object out of reach? Not Yet Sometimes Often
6. When you are not paying attention to your child, does he/she try to get your attention? Not Yet Sometimes Often
7. Does your child do things just to get you to laugh? Not Yet Sometimes Often
8. Does your child try to get you to notice interesting objects—just to get you to look at the objects, not to get you to do anything with them? Not Yet Sometimes Often

Gestures

9. Does your child pick up objects and give them to you? Not Yet Sometimes Often
10. Does your child show objects to you without giving you the object? Not Yet Sometimes Often
11. Does your child wave to greet people? Not Yet Sometimes Often
12. Does your child point to objects? Not Yet Sometimes Often
13. Does your child nod his/her head to indicate yes? Not Yet Sometimes Often

Sounds

14. Does your child use sounds or words to get attention or help? Not Yet Sometimes Often
15. Does your child string sounds together, such as *uh oh, mama, gaga, bye bye, bada*? Not Yet Sometimes Often
16. About how many of the following consonant sounds does your child use:
ma, na, ba, da, ga, wa, la, ya, sa, sha? None 1-2 3-4 5-8 over 8

Words

17. About how many different words does your child use meaningfully that you recognize (such as *baba* for bottle; *gaggle* for doggie)? None 1-3 4-10 11-30 over 30
18. Does your child put two words together (for example, *more cookie, bye bye Daddy*)? Not Yet Sometimes Often

Understanding

19. When you call your child's name, does he/she respond by looking or turning toward you? Not Yet Sometimes Often
20. About how many different words or phrases does your child understand without gestures? For example, if you say "where's your tummy," "where's Daddy," "give me the ball," or "come here," without showing or pointing, your child will respond appropriately. None 1-3 4-10 11-30 over 30

Object Use

21. Does your child show interest in playing with a variety of objects? Not Yet Sometimes Often
22. About how many of the following objects does your child use appropriately:
cup, bottle, bowl, spoon, comb or brush, toothbrush, washcloth, ball, toy vehicle, toy telephone? None 1-2 3-4 5-8 over 8
23. About how many blocks (or rings) does your child stack? **Stacks** None 2 blocks 3-4 blocks 5 or more
24. Does your child pretend to play with toys (for example, feed a stuffed animal, put a doll to sleep, put an animal figure in a vehicle)? Not Yet Sometimes Often

Do you have any concerns about your child's development? yes no If yes, please describe on back.

Communication and Symbolic Behavior Scales Developmental Profile by Amy M. Wetherby & Barry M. Prizant
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Information on scoring this instrument may be found at www.firstwords.fsu.edu.

ASD ASSESSMENT & SCREENING TOOLS

SCREENING TOOLS FOR AUTISTIC SPECTRUM DISORDERS

The Brief Infant-Toddler Social & Emotional Assessment (BITSEA)

©Birggs-Gowan, M. & Carter, A., 2002.

Communication and Symbolic Behavior Scales DP (CSBS). Wetherby, A.M., &

Prizant, B. Paul H. Brookes Publishing, CO, 2002.

First Signs. Public Awareness program for early identification for children with ASD
Toll-free (800) 80-SIGNS.

Psycho-educational Profile – Revised (PEP-R). Schopler, E., Reichler, R., Bashford, A., Lansing, M. & Marcus, L., 1990. Austin, TX: Pro-Ed.

The Checklist for Autism in Toddlers (CHAT). Baron-Cohen, S., Allen, J., & Gillberg, C. Can autism be detected at 18 months? The needle, the haystack and the CHAT. *British Journal of Psychology*.1992, 161, pp. 839-842.

The Modified Checklist for Autism in Toddlers (M-CHAT). Robins, D., Fein, D., & Barton, M. University of Connecticut, Psychology Department, 1999.

Phone (860) 486-3515

Vineland Adaptive Behavior Scales

Sparrow, S., Balla, D., & Cicchetti, D. Circle Pines, MN: American Guidance Service, 1984.

ASSESSMENT INSTRUMENTS FOR AUTISM SPECTRUM DISORDERS

Autism Diagnostic Interview – Revised ADI-R. Lord, C., Ritter, M., & LeCouteur, A. *Journal of Autism and Developmental Disorders*, 1994, 24, pp. 659-685.

Autism Diagnostic Observation Schedule (ADOS). Lord, C., Ritter, M., Di Lavourre, P., & Risi, S., 1999. Los Angeles, CA: Western Psychological Services.

Childhood Autism Rating Scale (CARS). Schopler, E., Reichler, R., & Renner, B. Los Angeles, CA: Western Psychological Services, 1988.

MEDICAL FOLLOW-UP FOR CHILDREN IDENTIFIED WITH ASD

This information is included to help parents and providers know what to expect in the course of a diagnostic assessment and medical follow-up for children with ASD. It may provide guidance about what kinds of questions to ask in order to understand and enhance the medical follow-up.

DEVELOPMENTAL/FAMILY HISTORY

It is important to include the following in any developmental or family history:

- The level of developmental skills obtained
- Whether there were any regressions in skill development, especially in language or social skill area
- A description of the quality of the child's relationships and play
- Unusual eating or feeding behavior
- Unusual behaviors including motor stereotypes
- Unusual sensory sensitivities or reactions
- History of medical events such as head trauma, infection, birth difficulty
- History of staring episodes or seizure disorder
- History of ear infections, gastrointestinal disturbances, or allergies
- Family history of ASD, mental retardation, attention deficit hyperactive disorder (ADHD), learning disabilities, fragile x syndrome, tuberous sclerosis, anxiety or depressive disorders or hearing impairment

REFERRALS

All referrals to medical specialists should be done through the child's primary health care provider. Medical follow-up is very specific to the unique profile and needs of the child and family.

- Audiological assessment including Brainstem Evoked Response (BSER) if child is not otherwise testable
- Complete Blood Count (CBC)
- Lead level screening
- Dermatological/Skin exam to rule out Tuberous Sclerosis
- Fragile X testing in presence of significantly delayed development and if maternal family has history of learning disabilities, mental retardation or attention disorder

- Genetic testing (chromosomal evaluation) in presence of significant delayed development, unusual facial or body features, or family history of ASD
- Referral for neurologic assessment in presence of staring, seizures, developmental regression. This should include evaluation of head circumference, muscle tone and motor asymmetries. The neurologist may order a 24 hour EEG if sleep deprived or a MRI if EEG is abnormal
- Referral to gastroenterologist in presence of history of gastrointestinal distress including chronic diarrhea, vomiting, constipation or abdominal pain
- Referral to allergist if significant history of food allergies or eczema in child or very strong history of family history of allergic disorders
- Referral to nutritionist to oversee “elimination” diet if food allergy is diagnosed

MEDICATIONS

Although no medications have been demonstrated to “treat” autism, there is evidence that for some older children and adults medications improve symptoms associated with autism including anxiety, depression, and over stimulation. The most common medications used are psychoactive medications. Psychoactive medications are those that primarily affect the person’s behavior, mood, or thought processes. Many of the psychoactive medications that have been used to treat other neurological or psychiatric conditions have also been tried for individuals with autism.

DIET

Diet therapies most commonly involve the elimination of milk or wheat products from the diet. It is suggested that some young children with autism are allergic to milk and/or wheat and that eliminating these foods from the diet can result in an improvement in manifestations of autism. Most of the literature focuses on eliminating cow’s milk or casein and/or wheat products or gluten. If food allergies are documented, the child should be treated with standard allergy testing methods, including elimination diets. Since children with ASD often only eat a very small number of foods, it is important to consult with a nutritionist before beginning any diet therapy, since one could be eliminating a child’s only source of important nutrients. A source of more information can be found in Lisa Lewis’s 1998 book: *Special Diets for Special Kids* (1998), Arlington, TX: Future Horizons. 800-489-0727.

HOW PARENTS CAN GET THE MOST OUT OF THE EARLY INTERVENTION VISIT

Parents: You know your child best. You have valuable information about your child. EI/ILP staff needs your input just as much as you need theirs. Remember, you are and will be your child's best, most important, and most constant teacher and advocate.

BEFORE YOUR VISIT

Be prepared. Make sure you schedule your visit when you can be there and not have a lot of distractions. Decide how brothers and sisters will be involved or plan an activity for them.

Plan the agenda. Let the Birth to Three staff know what you want to discuss at your visit. Remember or write down any questions that you may have since your last visit.

Be ready to share what has happened since your last visit. Think about or make a list of anything you think is important to share such as a trip to the doctor or changes in routine. Think about what suggestions have worked well and those that have not worked so well.

DURING YOUR VISIT

Ask questions. Make sure you understand what is being said. If you are not sure why something is being done, just ask. If it helps, ask for things in writing.

Ask for a demonstration. Ask to be shown anything you don't understand. Practice strategies together during the visit. Hands-on instruction is the best way to learn.

Discuss ideas for carry over between visits. Time between visits is just as important as the visit itself. Be sure to talk about ways to use the strategies and activities during everyday family activities.

AFTER YOUR VISIT

Try things out. Try out the suggested activities. What is working? What isn't?

Make a note of it. Remember to make a mental note or keep a notebook for questions that may come up between visits.

Have fun. The best teaching and learning occurs when you and your child are having fun.

Celebrate successes – even the tiny ones!!

ALTERNATIVE OR COMPLEMENTARY TREATMENTS FOR ASD

This is not an exhaustive list but it is intended to provide a brief overview of treatment options available. These are not approaches that are recommended by the EI/ILP system. Some of these treatments are controversial and may not be generally accepted by the scientific and medical community. They are provided as a resource for families who would like to acquire more information on treatment. Involvement in any of these treatments should be discussed with the family's primary health care provider.

Hormone Therapies: Several health problems in children and adults are associated with deficiencies of particular hormones. Some hormone replacement therapies have been proposed as possible treatments for autism. In particular, adrenocorticotropin hormone (ACTH) and secretin (a hormone that helps regulate digestion) have been suggested. These have not been found to be effective in scientific studies for young children and the potential side effects from treatment with secretin are unknown.

Immune Therapies: Immune therapies include treatment with intravenous immune globulin has been suggested as a possible treatment for children with autism. Proponents of these therapies suggest that a subset of children with ASD have abnormalities in their immune systems. The only treatment described in the scientific literature is intravenous immune globulin (IVIG) therapy.

Anti Yeast Therapies: Anti yeast therapies have been proposed for children with autism. These treatments involve administrations of oral anti-fungal medications or special diets that include foods purported to have anti-fungal properties (such as garlic and grapefruit seed extract). The use of anti-fungal therapies is based on the theory that for some children the symptoms of ASD are caused or aggravated by an overgrowth of yeast in the intestinal tract. This theory also suggests that yeast overgrowth occurs after children are treated with antibiotics.

Vitamin Therapies: Administration of high doses of vitamins has been suggested as a treatment for young children with autism. High doses of Vitamin B6 (pyridoxine), magnesium or trace minerals are most common. If a child has a documented vitamin or trace mineral deficiency it should be treated. However, there is insufficient evidence to recommend it as a treatment for autism. Short-term side effects are reported to be mild, but side effects are not known for young children treated with high doses or over long periods.

Auditory Integration Therapy (AIT): This technique presumes that the child has a sensory dysfunction, most likely hypersensitivity to certain sounds, making a number of common sounds painful to hear. The treatment involves a prescribed treatment program of listening to sounds and music over a period of time with certain frequencies filtered out. The intent is to reduce the sound sensitivity and thereby improve behavior, social skills and cognitive functioning.

Music Therapy: Music therapy involves using some aspect of music that may lead to improvement in social interaction and language development in young children with ASD. The procedures for music therapy are highly variable.

Craniosacral Therapy: This technique involves physical manipulation of the body to free restrictions of motion in the craniosacral system. The theory assumes that the restricted movement of cerebrospinal fluid is adversely affecting the development and function of the brain. Dr. John Upledger believes that children who have ASD show symptoms of restricted fluid movement through head banging, wrist biting, teeth grinding and hyperactivity.

Vision Therapy: This technique is based on the assumption that some of the unusual behaviors associated with ASD may be related to visual perception problems. Some of the difficulty experienced by young children with ASD include poor eye contact, difficulty attending visually, staring or hyper or hypo sensitivity to light and/or color. Treatment may include use of specialized color or prism glasses or vision exercises. It is considered an experimental method for young children with ASD.

RESOURCES

ALASKA RESOURCES

Alaska Autism Resource Center (AARC) serves the needs of individuals with autism spectrum disorders, their families, caregivers, and service providers throughout the state by providing information, referral, training, and consultation via on-site and distance delivery. It is a project of the Special Education Service Agency (SESA) in Anchorage, Alaska, and is funded by the Alaska Mental Health Lands Trust, the Alaska Department of Education and Early Development, and EI/ILP. The toll-free number provides access to trained autism specialists who are available to answer questions, provide information, and plan/schedule training and consultation.

3501 Denali Street, Suite 101, Anchorage, AK 99503 | Email aarc@sesa.org
 542 4th Avenue, Suite 207, Fairbanks, AK 99701 | Email FAI_aarc@sesa.org
 Toll-free (866) 301-7372. Anchorage (907) 334-1300
 Fairbanks (907) 456-2600. Fax (907) 456-2618
www.alaskaarc.org

Alaska Early Intervention/Infant Learning Program (EI/ILP) is a division of the Alaska Department of Health and Social Services, Office of Child Services that partners with grantees around the state to provide services directly to children with special needs and their families at a local level.

P.O. Box 240249, 323 East 4th Avenue, Anchorage, AK 99501
 Toll-free (877) HSS-FMLY (477-3659). Local (907) 269-8442.
 Fax (907) 269-3497
www.hss.state.ak.us/ocs/InfantLearning

Find a complete list of EI/ILP providers in Alaska at:

www.hss.state.ak.us/ocs/InfantLearning/program/program_dir.htm

Alaska Governor's Council on Disabilities and Special Education (GCDSE) is one of four governor-appointed advisory boards to the Alaska Mental Health Trust. The Council plans, evaluates, and promotes programs for people with disabilities in the state of Alaska.

3601 C Street, Suite 740, P.O. Box 240249, Anchorage, AK 99524-0249
 Toll-free (888) 269-8990. Local (907) 269-8990. Fax (907) 269-8995
www.hss.state.ak.us/gcdse

BOOKS & ARTICLES

Auditory Integration

Rimland, G & Edelson, S. (1994) The effects of auditory integration training in autism. *American Journal of Speech-Language Pathology*. 3, 16-24.

APPENDIX 8

Diet

Hymen, S.L., & Levy, S.E. (2000). Autistic spectrum disorders: When traditional medicine is not enough, *Contemporary Pediatrics*, 17 (10): 101-116.

Lewis, Lisa. *Special Diets for Special Kids* (1998). Arlington, TX: Future Horizons. (800) 489-0727

General

Gerlach, E. *Autism Treatment Guide*, Second Edition, (2000) Arlington, TX, Future Horizons, Inc.

Heflin, L., Juane and Simpson, R.L. “Interventions for Children and Youths with Autism: Prudent Choices in a World of Exaggerated Claims and Empty Promises.” Part I: Intervention and Treatment Option Review, *Focus on Autism and Other Developmental Disabilities*, Volume 13, Number 4, Winter, 1998, 194-211.

New York State Department of Health (1999). Clinical Practice Guideline: The Guideline Technical Report. Autism/Pervasive Developmental Disorders, Assessment and Intervention for Young Children (Age 0-3). 518 439-7286. www.healthstatenyus/nysdoh/eip

Nickel R, E. (1996). Controversial therapies for young children with developmental disabilities. *Infants and Young Children*, 8 (4): 29 – 40.

Medication

Zimmerman, A.W., Bonfardin, B., & Myers, S. (2000). Neuropharmacological therapy in autism. In P. Accardo, C. Magnusen & A. Capute (Eds.), *Autism Clinical and Research Issues*. Baltimore, MD: York Press.

TOOLS & RESOURCES

Allergies

Allergy-Induced Autism

8 Hollie Lucas Road, King’s Heath, Birmingham, B130QL United Kingdom
www.autismmedical.com

Auditory Integration

Society for Auditory Intervention Techniques (SAIT)

P.O. Box 4538, Salem, OR 97302
www.berardaitwebsite.com/sait

Cranial Sacral Intervention

The Upledger Institute

11211 Prosperity Farm Road, Suite 325, Palm Gardens, FL 33410

Toll-free (800) 233-5880

www.upledger.com

Diet

Autism Network for Dietary Intervention (ANDI)

P.O. Box 17711, Rochester, NY 14617-0711

www.autismNDI.com

General

Autism Research Institute (ARI)

4182 Adams Ave., San Diego, Ca 92116.

Toll-free (866) 366-3361 www.autism.com/ari

Autism Treatment Checklist (ATEC)

Developed by the Autism Research Institute as an on line evaluation tool to help in evaluating the different approaches to treatment.

www.healing-arts.org/children/ATEC.htm

Autism Society of America

7910 Woodmont Avenue, Suite 300, Bethesda, MD 20814

Toll-free (800) 3-Autism

www.autism-society.org

Autism Speaks

1 East 33rd Street, 4th Floor, New York, NY 10016

Phone (212) 252-8584. Fax (212) 252-8676

www.autismspeaks.org

Decision Makers Tool Kit

South Eastern Regional Education Service Center, Inc. (SERESC)

29 Commerce Drive Bedford, NH 03110

Phone (603) 206-6800

Future Horizons

721 W. Abram St. Arlington, TX 76013

1-800-489-0727

www.futurehorizons-autism.com

Online Asperger Syndrome Information and Support (OASIS) & MAAP Services for Autism and Asperger Syndrome

www.aspergersyndrome.org

APPENDIX 8

Music Therapy

American Music Therapy Association

8455 Colesville Road, Suite 1000, Silver Spring, MD 20910

Phone (301) 589-3300

www.musictherapy.org

Vision

Center for Visual Management

150 White Plains Road, Tarrytown, NY 10591

Phone (914) 631-1070

www.autisticvision.com

Alaska Infant Learning Program

This report, historical data and other publications available at www.earlyintervention.alaska.gov

Call toll free in Alaska: 1 (877) HSS-FMLY (477-3659); In Anchorage 269-8442

INFANT LEARNING PROGRAMS THROUGHOUT ALASKA



The Alaska Infant Learning Program offers developmental services to families of children birth to 3. If you have concerns about your child's development make a referral to your local Infant Learning Program. Our Mission is to promote positive development and improved outcomes for Alaska's children birth to 3 by creating a culturally responsive, comprehensive and accessible service delivery system that links service providers, empowers families and engages communities.