# Autism Spectrum Disorders: Screening and Referral

# Developed by the
# Central Missouri Rapid Response Initiative

Rapid Response is a cooperative effort among state and local agencies with a goal of screening children for Autism Spectrum Disorders and providing early interventions.

Information adapted from the Missouri Autism Guidelines Initiative on Best Practice Guidelines for Screening, Diagnosis and Assessment (www.autismguidelines.dmh.missouri.gov)

# Autism Spectrum Disorders (ASD) Screening & Referral

- ASD Overview

- Screening Overview

- General Development & Domain-Specific Screening Tools

- ASD-Specific Screening Tools

- Referral Resources

# What is ASD?

- A neurobiological disorder that affects development.
  - Communication
  - Social relationships
  - Ability to respond appropriately to the environment
- Associated medical and behavioral problems
  - Seizure disorders, sleep difficulties, weight, GI, sensory & motor processing
  - Cognitive impairment, learning difficulties, hyperactivity, anxiety

# What is ASD?

- Characteristics differ from person to person.

- A diagnosis of autism is made through behavioral observation--no medical tests are available.

- Generally a life-long condition.

# Core Features of ASD Identified in the DSM-IV

- Difficulty forming social relationships
- Difficulty in the development of communication
- Restricted, repetitive patterns of behavior, interests or activities
- Onset of characteristics seen by 36 months

# Primary Diagnostic Categories

Pervasive Developmental Disorders
a.k.a. Autism Spectrum Disorders (ASDs)

1. Autistic Disorder
2. Pervasive Developmental Disorder
   Not Otherwise Specified (PDD NOS)
3. Asperger's Disorder

(DSM IV-TR)

# Latest Prevalence Estimates for ASD

- Approximately1 in 110 children with ASD, or 1% of US children (CDC, 2009)

- 57% increase on average between 2002 and 2006

Early identification and intervention is crucial to support children and their families.

# Community Collaboration: A Key to Early Identification

Monitoring or tracking of child development should be done by all those caring for children

- Parents
- Primary care providers
- All other health, educational, and human services professionals working with children

# Monitoring Early Social Development

- Awareness of healthy social development is essential
- Resources
  - CDC *Learn the Signs, Act Early* materials
  - ASD Red Flags

# ASD Red Flags

**Impairment in Social Interaction**

- Lack of appropriate eye gaze
- Lack of warm, joyful expressions
- Lack of sharing interest or enjoyment
- Lack of response to name

**Impairment in Communication**

- Lack of showing gestures
- Lack of coordination of nonverbal communication
- Unusual prosody (little variation in pitch, odd tone, irregular rhythm, unusual voice quality)
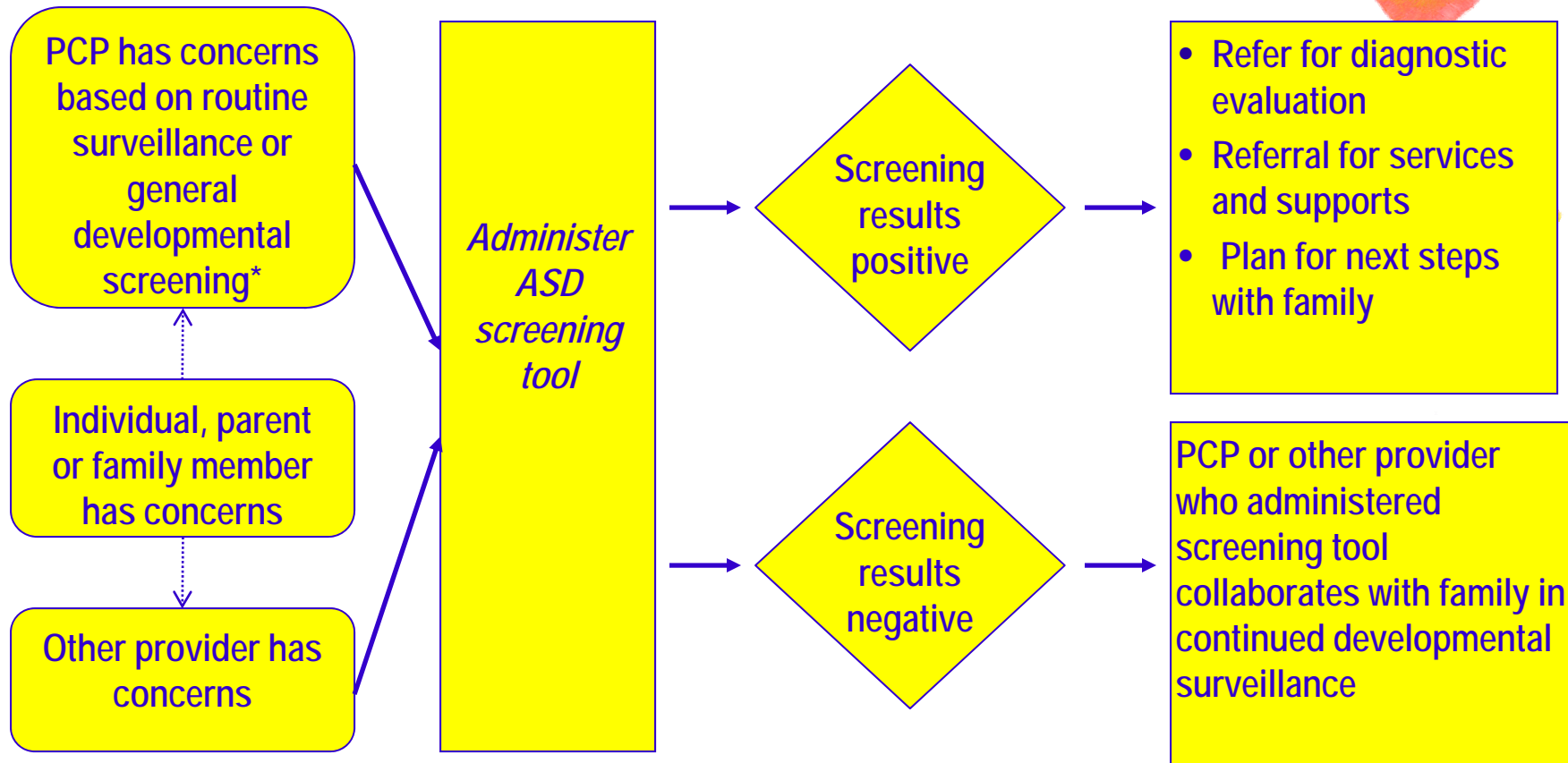
**Repetitive Behaviors & Restricted Interests**

- Repetitive movements with objects
- Repetitive movements or posturing of body, arms, hands, or fingers

*Red Flags are reprinted from First Signs, Inc.  For more information, please go to www.firstsigns.org.*

# Screening for ASD

**PCP has concerns based on routine surveillance or general developmental screening***

**Individual, parent or family member has concerns**

**Other provider has concerns**

**Administer ASD screening tool**

**Screening results positive**

**Screening results negative**

- **Refer for diagnostic evaluation**
- **Referral for services and supports**
- **Plan for next steps with family**

**PCP or other provider who administered screening tool collaborates with family in continued developmental surveillance**

\* Routine screening by PCP is recommended at 18 and 24 months

# What is Screening?

- Brief systematic process to identify children who may have developmental concerns

  – Uses an objective, reliable and valid instrument

  – Results are always interpreted in context

  – Screening determines who needs further evaluation.

# Why Screen?

- Many problems are not obvious to teachers/parents/health professionals.

- Clinical judgment detects fewer than 30% of children who have developmental disabilities.

- Early screening may result in earlier intervention and reduce cost of care over time.

- Help parents understand child's developmental concerns.

# Screening Guidelines

American Academy of Pediatrics recommendations for physicians:

- General developmental screening at ages 9, 18, and 30 months

- Autism specific screening at ages 18 and 24 months

# Types of Screening Tools

Caregiver interview/report or directly administered

- General – looks at all developmental domains

- ASD Screening

  – Domain-specific for young children

  – Disability-specific

# Examples of General Developmental Screening Tools

- Ages and Stages Questionnaire (ASQ-3)
- Battelle Developmental Inventory (BDI) Screening Test
- Brigance Screens-II
- Denver-II Developmental Screening Test
- Developmental Indicators for the Assessment of Learning- 3$^{rd}$ Edition (DIAL-III)

# Examples of Domain-Specific Screening Tools

- Communication
  - Communication and Symbolic Behavior Scales- Developmental Profile (CSBS-DP): Infant Toddler Checklist

- Social-Emotional
  - Ages & Stages Questionnaire – Social Emotional (ASQ-3:SE)

# ASD-Specific Screening Tools

Examples:

- Modified Checklist for Autism in Toddlers (M-CHAT)

- Pervasive Developmental Disorders Screening Test-II (PDDST-II)

- Screening Tool for Autism in Two-Year-Olds (STAT)

- Social Communication Questionnaire (SCQ)

- Social Responsiveness Scale (SRS)

- Detection of Autism by Infant Sociability Interview (DAISI)

# Modified Checklist for Autism in Toddlers (M-CHAT)

- Screener for toddlers (16 to 30 months)

- 23 items

- Reliable and valid, supported by research

- Doesn't allow a clinician to make a diagnosis but is a useful clinical tool that has excellent sensitivity and specificity.

- Positive results may necessitate referral for evaluation.

# M-CHAT

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 up stairs?                                       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,            Yes    No

    or pretend other things?

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                  Yes    No

    mouthing, fiddling, or dropping them?

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     Yes   No

something unfamiliar?

Please refer to: Robins, D., Fein, D., Barton, M., & Green, J. (2001). The Modified Checklist for Autism in Toddlers: An init study investigating the early detection of autism and pervasive developmental disorders. Journal of Autism and Developmental Disorders, 31 (2), 131-144.

# Six Critical M-CHAT Items

Item 2.   Taking interest in other children

Item 7.   Use of index finger to point/indicate interest

Item 9.   Bringing objects to show the parent

Item 13.  Imitating

Item 14.  Response to name

Item 15.  Follows point across the room

# Referral Criteria

Refer children if there is:

- A "no" response to 2 or more of the 6 critical items

OR

- A failed response to 3 or more of the 23 total M-CHAT items

Referral does not mean that the child has autism.

# M-CHAT Interview

- Follow-up to clarify responses on M-CHAT

- M-CHAT and follow-up interview are available at www.firstsigns.org

- Interview portion is optional, but is strongly recommended

**13. You reported that _____ does not usually imitate you. (Critical)**

Is this still true?

No → Then your child does imitate you?

Yes → PASS

No →

Yes →

Does your child copy you if you:......

| | | |
|---|---|---|
| Stick out your tongue? | Yes ☐ | No ☐ |
| Make a funny sound? | Yes ☐ | No ☐ |
| Wave good bye? | Yes ☐ | No ☐ |
| Clap your hands? | Yes ☐ | No ☐ |
| Put your fingers to your lips to signal "Shhh"? | Yes ☐ | No ☐ |
| Blow a kiss? | Yes ☐ | No ☐ |

*If yes to two or more* → PASS

If yes to one or none → FAIL

# Communicating Results

- Early screening and diagnosis of children with ASD is very important

- It is also an extremely sensitive issue for many parents

- Care must be taken when discussing possible delays with parents

# Communicating Results

- Use family-friendly language

- Listen and answer questions

- Provide information and/or referrals for diagnosis, interventions and community services

- Plan for next steps

*Talking to Parents about Autism-*

-Video Developed by Autism Speaks, the Centers for Disease Control, and the Ad Council.

http://www.youtube.com/watch?v=xaWUsXk4nD8

# Referral

Once a screening is conducted and a delay is suspected, children can be referred to several sources for an evaluation for diagnosis or for services

# Who Provides a Medical Diagnosis?

- A licensed health or mental health professional with training and experience in ASD diagnosis and treatment, as well as knowledge of child development

- Professionals frequently consulted
  - Developmental pediatrician or child neurologist
  - Child clinical psychologist

# Who Provides Early Intervention Services?

- First Steps (ages 0-2)

- Early Childhood Special Education programs (ages 3-5) through local school districts

- Private practitioners

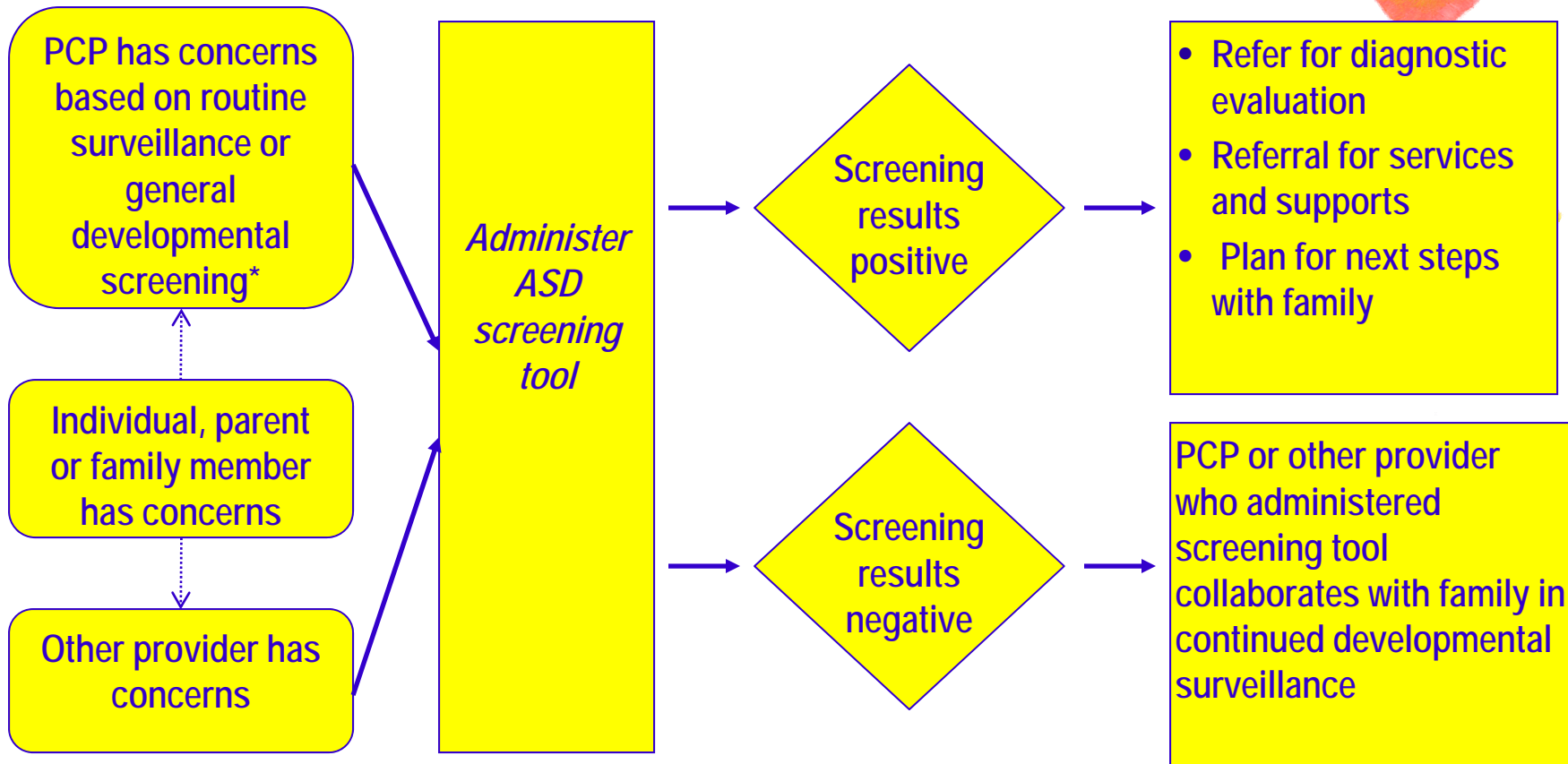# Screening & Referral Resources

- Office of Autism Services http://www.dmh.missouri.gov/mrdd/new/autism09.htm

- *Autism Spectrum Disorders: Missouri Best Practice Guidelines for Screening, Diagnosis and Assessment* http://www.autismguidelines.dmh.missouri.gov

# Best Practice Summary

```
┌──────────────────────┐
│ PCP has concerns     │
│ based on routine     │
│ surveillance or      │
│ general              │
│ developmental        │───┐
│ screening*           │   │
└──────────────────────┘   │
         ↕                  │
┌──────────────────────┐   │
│ Individual, parent   │   │
│ or family member     │   │
│ has concerns         │   │
└──────────────────────┘   │
         ↕                  │
┌──────────────────────┐   │
│ Other provider has   │───┤
│ concerns             │   │
└──────────────────────┘   │
```

**PCP has concerns based on routine surveillance or general developmental screening***

**Individual, parent or family member has concerns**

**Other provider has concerns**

*Administer ASD screening tool*

**Screening results positive**
- Refer for diagnostic evaluation
- Referral for services and supports
- Plan for next steps with family

**Screening results negative**
PCP or other provider who administered screening tool collaborates with family in continued developmental surveillance

\* Routine screening by PCP is recommended at 18 and 24 months

# Questions?

Note: The information in this presentation does not indicate an exclusive course of treatment or serve as a standard for care. Variations, taking into account individual circumstances, may be appropriate. Resources and websites in the presentation are as current as possible, but may change at any time.