Jurisdictional Scan: ***Alleged Maltreatment by a Minor***

This jurisdictional scan was prepared by the Knowledge Management (KM) Team for a Casey Family Programs Strategic Consultant, in response to an inquiry about jurisdictional responses to alleged maltreatment by a minor. The information provided was gathered through an email query of child protection agency partners; the question posed was, "**What is the response from your jurisdiction's child protection agency when a minor is identified as the perpetrator of child abuse?"** Responses were received from: Alameda County, California; Sacramento County, California; Connecticut; Illinois; Missouri; Nebraska; New Jersey; Rhode Island; Tennessee; Texas; and Vermont. Responses have been lightly edited for grammar and flow.

Several of the responses below involved information regarding child on child sexual abuse, which is a complex issue, one that requires careful assessment to determine the alleged perpetrator's motivation, trauma history, and need for services. Also important to consider is the alleged perpetrator's age and development; attached as an appendix to this jurisdictional scan is a document about states' approaches to the age of majority and what is known from brain science about brain development.

This information is provided for informational purposes only and does not necessarily reflect the views of Casey Family Programs.

Jurisdictional responses

Alameda County, California

An assessment is conducted to determine whether the minor was a victim of abuse himself/herself. Determining whether the response is categorized as "immediate" or "10-day" is based on Structured Decision Making (SDM).

Sacramento County, California

When a minor is identified as the perpetrator, the agency assesses the parent's/guardian's protective capacity and only opens a referral for investigation if it meets criteria, i.e., General Neglect by the parent/guardian. Minors may be listed as the perpetrator of sexual abuse if there is a significant age difference between the victim child and perpetrator child.

Connecticut

The approach depends on the age of the child. If it is "kid on kid" abuse then the allegation will usually be for the parent (i.e., for neglect). If the youth is of baby-sitting age (i.e., 13 and up), then the youth might be designated as an alleged perpetrator, but only after a careful assessment of the situation to determine if that is truly warranted. Understanding the youth's history is also an important component to determine what might have led to the current

situation. A caregiver is someone who is entrusted to care for somebody. A younger child is not considered a caregiver, so the parent or caregiver present at the time of the alleged abuse will also be assessed.

Illinois

Reports that meet the criteria to define a child as an alleged perpetrator are complex. Investigators embrace that those who meet the criteria as eligible perpetrators as minors are in fact children. Investigators assess their safety and well-being, and assign allegations to investigate maltreatment by those in a caregiving role at the time they allegedly perpetrated.

When screening/assessing calls to the hotline, only one allegation that has an age limit for the perpetrator in the state of Illinois: abuse allegation #10 (substantial risk of physical injury) where the alleged perpetrator must be at least 16 years of age for this allegation to be applied. All other allegations may be placed on an alleged perpetrator regardless of their age.

The assessment of allegations to a minor perpetrator includes consideration of age, special needs or disabilities, etc., but in every other aspect the assessment is the same.

Other allegations have no age limit. For example, a sexual abuse allegation can be applied to minors who have perpetrated. The retention of the allegation, if indicated, is changed if the perpetrator is a minor and would fall off based on the retention schedule or before the minor's 23rd birthday instead of holding a retention of 50 years for an adult perpetrator of sexual abuse. From a field perspective, notifications and findings of child abuse and/or neglect are made to the minor's guardian, and services may be provided to the minor as both a possible victim and a perpetrator, as often children who perpetrate sexually on other children or siblings, or who are aggressive, are victims as well.

Missouri

For juvenile alleged perpetrators, Missouri has policies surrounding sexual abuse involving children under the age of 14 as initiators:

5.5.1 Definition of Juvenile with Problem Sexual Behavior
Section 210.148, RSMo. defines a juvenile with problem sexual behavior as 'any person, under fourteen years of age, who has allegedly committed sexual abuse against another child'.

For the purpose of Juvenile Assessments sexual abuse by children under fourteen (14) years of age is defined as any sexual or sexualized interaction with a child including, but not limited to, acts that are age or developmentally inappropriate and:
1.Involve force or threats of the use of force; 2.Are intrusive; 3.Are unwelcome; 4.Result in physical injury or cause emotional trauma to the victim child; or 5.Are coercive or manipulative.

Juvenile Assessments will be screened in by the Child Abuse and Neglect Hotline Unit when any child under the age of fourteen (14) is alleged to have committed an act of sexual abuse against any person under the age of eighteen (18).

5.5.1.1 Sexual Behavior

It is common for children to engage in some form of sexual behavior. Some of these behaviors can usually be considered normal. However, children can exhibit a variety of problem sexual behaviors that can be addressed with appropriate intervention. The key for assessing whether Children's Division intervention is appropriate is whether the sexual behavior becomes abusive. A family assessment and services approach is utilized to identify the child and family's treatment needs and to assure the safety of victim children impacted by the child's sexual behavior. Child sexual behaviors can be a difficult topic of conversation for many families. Families may be naturally defensive and protective of children who have exhibited problem sexual behavior. It is important staff be sensitive to terminology when engaging and working with families in which a child has been identified as having committed an act of sexual abuse against another child. Staff should refrain from using language such as perpetrator and sexual offender, especially when working with the family.

Normal versus Problem Sexual Behavior

In order to identify the appropriate level of intervention, it is important to be able to differentiate between normal or typical sexual exploration and development versus problem sexual behavior. It is common for young children to exhibit curiosity about their own and others' bodies.

Normal sexual exploration will generally include some or all of the following characteristics:

- Occurs between playmates;
- Occurs between children of the same general age, physical size, social and emotional development;
- Is age and/or developmentally appropriate for the children involved; ◦Is unplanned, not forced, and does not occur with frequency;
- No physical or emotional trauma are suffered;
- Is redirected with adult intervention.

Problem sexual behaviors may include some or all of the following characteristics:

- Repeated behaviors;
- Extreme or inappropriate masturbation;
- Use of aggression, force, weapons, threats, or coercion;
- Use of alcohol or drugs to induce cooperation or incapacitate the child; ◦Exposing the victim child to pornography;
- Taking photos or video recordings of sexual conduct;
- Distribution of photos or recordings of sexual conduct to others, especially without the knowledge or consent of the participants;
- Causes physical and/or emotional harm;
- Incidents involving children of different age or developmental levels;
- Does not stop after adult intervention; and/or
- Accompanied with strong, upset feelings such as anger or anxiety.

5.5.2 Juvenile Office Referrals

Reports in which the child has committed an act of sexual abuse and caused serious physical injury and/or used a weapon must be referred to the Juvenile Office prior to initiating the Juvenile Assessment. These are reports in which there is a greater likelihood of juvenile court intervention due to the nature of the delinquent act. Therefore, it is imperative that staff coordinate with the juvenile office and law enforcement prior to conducting any interviews.

Serious physical injury is defined as: physical injury that creates a substantial risk of death or that causes serious disfigurement or protracted loss or impairment of the function of any part of the body.

Juvenile Assessments should be referred to the juvenile office under the following circumstances:

- When the parent/caregiver of the alleged child initiator does not engage in the assessment process;
- When there is no evidence that the parent/caregiver is taking steps to prevent future problem sexual behavior;
- When there is a repeated incident of problem sexual behavior by the child; or
- The assessment reveals that the child's behaviors are of such severity that the child cannot be safely maintained in the home and/or community.

5.5.3 Family Assessment and Services Approach

Juvenile Assessments will involve a wide array of behaviors, locations, and family compositions. Thus, it will be important for staff to carefully consider each report on a case-by-case basis and be mindful of the following:

- Establishing rapport with the family. Rapport begins with honesty of staff and respect for the family. Staff should fully and openly explain the purpose of the Division's contact with the family.
- The Juvenile Assessment process should be fully explained. Staff should clarify their role as well as the expectations that exist for the family. Emphasis should be placed on the Division's desire to help the family, as opposed to finding fault.
- Recognition should be given to the fact that families are more likely to change when they are invested in a plan for change, rather than being asked to comply with the mandates of others.
- This process must focus on the family as a system, rather than on any individual within the family. Therefore, parents and children will be given the opportunity for full inclusion in all phases of the family assessment process.
- Full inclusion includes giving parents and children equal and active voices in identifying the issues, safety planning, and further treatment needs.

5.5.3.1 Conducting the Assessment

For all Juvenile Assessments, staff may utilize the Children with Problem Sexual Behaviors Assessment Tool (CD-214) and the Children with Problem Sexual Behaviors Safety Plan(s) (CD-215) as guides with the family of the alleged child initiator.

Safety of all the child(ren) in the home shall be an ongoing priority during the assessment process. Staff shall also assess whether the alleged child initiator will have access to any other children outside of the home.

5.5.3.1.1 Reviewing Prior History

Staff should pay particular attention to the history of the alleged child initiator. Risk factors for problem sexual behavior include exposure to violence, experiencing trauma, witnessing sexual acts, and inadequate supervision due to parental mental health, substance use disorder, and domestic violence concerns.

5.5.3.1.2 Reporter Contact
Reporters will often call the hotline in response to disclosure of sexual abuse by the victim child. The reporter may have limited information regarding the alleged child initiator and his/her household composition. Contact with the reporter is essential to help determine what initial steps to take in order to assure safety of all children in the report.

5.5.3.1.3 Parental Notification
Pursuant to Section 210.145, RSMo., a parent must be notified prior to interviewing any child involved in a Juvenile Assessment. This includes the child victim(s), the alleged child initiator, and any non-victim children. Consent should be obtained from a parent prior to interviewing the alleged child initiator. If consent cannot be obtained, a referral to the juvenile office may be necessary in order to assure safety of all children involved and to ensure the problem sexual behavior is addressed.

5.5.3.1.4 Face to Face Safety Assurance
Every child identified as an alleged victim on the CA/N-1 must be seen face to face within the following Response Priority Level timeframes:

- Priority Level 1 = three (3) hours
- Priority Level 2 = twenty-four (24) hours
- Priority Level 3 = seventy-two (72) hours

When the alleged child initiator does not reside in the same household as the victim child(ren), staff should utilize all resources available to assess the living arrangements of the alleged child initiator. If the alleged child initiator resides with other children, every effort should be made to see the children living in the same home as the alleged child initiator in the timeframes outlined above. Assuring the safety of all children is essential to prevent further victimization by the alleged child initiator.

The Chief Investigator, or their designee, will be responsible for verifying the safety of all children involved is assured within the above response timeframes. All efforts should be made to see the alleged child initiator within 24 hours. If the victim child(ren) does not reside in the same home as the alleged child initiator and there is no indication that the victim(s) is in danger of serious physical harm or threat to life, the Chief Investigator, or designee, may determine that the victim child(ren) be seen within 72 hours. At times, this may require the utilization of staff other than the assigned staff depending on the complexities of the report.

5.5.3.1.5 Child Interviews

<u>Victim Children</u>
When possible, staff should begin by interviewing the victim child(ren). Staff will need to assess whether an in-depth interview is appropriate at the point of initial contact with an alleged victim child, or if it would be more appropriate to make arrangements for a forensic interview through a Child Advocacy Center (CAC). The needs of the child victim(s) should not be overlooked. However, this may require a delicate balance with the needs of the alleged child initiator. Staff should utilize supervisor consultation to determine the appropriateness of a CAC referral.

Each county office is strongly encouraged to work with their local CAC to develop protocols to assist with the completion of Juvenile Assessments.

Staff should assist the victim's family in obtaining any necessary medical examinations for the victim child, which may include a Sexual Assault Forensic Examination (SAFE).

Things to Consider Prior to Making a CAC Referral:

- The intent of a Juvenile Assessment is to focus on assessment and treatment of the alleged child initiator as opposed to making a determination of whether sexual abuse occurred.
- Whether law enforcement or the juvenile office is already involved.
- The severity of the sexual abuse act and potential for the need of juvenile court intervention.
- Is a CAC needed to help develop the safety plan?
- Is a referral necessary to obtain a SAFE exam or other CAC services?
- What impact, either positively or negatively, would a forensic interview have on engaging the family of the alleged child initiator in the treatment process?

Alleged Child Initiator

In addition to interviewing the alleged child initiator about the allegations in the Juvenile Assessment, staff should also assess for potential abuse and neglect of that child. If the child discloses that they have been a victim of abuse or neglect, staff must report this to the Child Abuse and Neglect Hotline Unit (CANHU) to set up a separate Child Abuse/Neglect Report. It may be appropriate to refer the alleged child initiator for a forensic interview if they disclose they are victims of abuse or neglect.

If staff determines the alleged child initiator had care, custody, and control of the victim child, the response track should be changed to an Investigation. In the event the track is changed to an Investigation, staff shall notify the alleged child initiator's parents of this decision. Staff shall also provide the alleged child initiator and his/her parents the Description of the Investigation Process (CS-24) within twenty-four (24) hours.

Non-Victim Children

Non-victim children should be interviewed regarding their knowledge of the allegations in the report. Staff should assess whether these children are also victims of abuse, especially in cases alleging sibling sexual abuse.

Interviewing Children Alone

Children should be interviewed alone whenever possible. It is important to remember that Juvenile Assessments do not involve allegations of parental abuse or neglect, but do involve allegations of possible juvenile delinquency. Therefore, staff should grant a parent's request to be present during interviews of their children.

5.5.3.1.6 Home Visit

Staff shall complete a minimum of one visit to the home of the alleged child initiator. If the child resides in more than one household, it may be necessary to visit each home to assess environmental factors that may affect child safety.

When the victim child and the alleged child initiator do not reside in the same household, it may be necessary for staff to complete a home visit with the victim child and his/her family, depending on their individual needs.

Staff should offer Family Centered Services as appropriate to the victim's family, along with any referrals to community services, such as counseling. Sensitivity should be given to the victim's family during the assessment process and open communication is strongly encouraged.

5.5.3.1.7 Parent/Caregiver Interviews
All parents and/or caregivers of the alleged child initiator should be interviewed and included in the assessment process when possible. Each parent/caregiver may have unique insight into the causes for their child's behavior. Assessing each parent/caregiver's protective capacities will also help guide intervention decisions. It may be necessary to include each parent/caregiver in the safety plan for their child.

Parents/caregivers also play a vital role in their child's treatment. Staff should be prepared for a wide range of parental reactions to their child being named in a Juvenile Assessment. It is imperative to family engagement that the child's parents be assured that the Children's Division is responding with the goal of providing services, not to be punitive. Staff should acknowledge that this is a difficult topic for any parent to discuss and education should be provided to the child's parent/caregiver(s) regarding child sexual behaviors. The child's parent/caregiver(s) should also be reassured that treatment services are often successful in preventing future incidents.

When the victim and the alleged child initiator are not siblings, staff should interview at least one of the victim child's parents/caregivers. This will assist in providing information regarding the incident(s) as well as information regarding the victim child's well-being. The victim's parent/caregiver(s) may also be helpful in providing information regarding compliance with safety plan(s). At times, it may be necessary to include the victim's parent/caregiver(s) in the development of a safety plan for the victim, depending on the family's individual circumstances. Staff should be prepared for the victim's parent/caregiver(s) to have a wide range of emotions in reaction to their child being a victim of sexual abuse. Nothing in Section 210.148, RSMo. precludes the victim's parent/caregiver from contacting law enforcement or the juvenile office to report the abuse.

5.5.3.1.8 Safety Planning
A safety plan should be completed for every child who has been found to have a problem sexual behavior. The Children with Problem Sexual Behaviors Safety Plan(s) (CD-215) may be utilized. A safety plan should be completed when the following has occurred:

- An act of sexual abuse has been witnessed by an adult;
- There has been a disclosure from the child victim;
- When the child has admitted to problem sexual behavior; or
- When a parent/caregiver is concerned that their child is exhibiting problem sexual behavior.

Factors that may contribute to increased risk for future incidents of problem sexual behavior include:

- Younger children reside in the same home;

- The child resides with children and/or adults who are vulnerable due to limited physical, developmental, and/or intellectual capacity, with other children known to be sexual abuse victims or with other children known to have sexual behavior problems; or,
- The parent/caregiver is unable or unwilling to provide adequate supervision.

The safety plan should be behaviorally specific and should take the following into account:

- Each living arrangement of the child; and
- All situations in which the child may have access to other children.

The safety plan should be mutually agreed upon between staff and the family. All individuals involved in implementing the safety plan must be contacted by staff to ensure they are in agreement to the plan.

The Children with Problem Sexual Behaviors Safety Plan(s) (CD-215) is composed of the following sections:

- Individuals involved. Who are the core adults and children involved in the assessment?
    - What is needed to keep all the children in the home safe?
    - Close supervision?
    - Re-arrangement of bedrooms?
    - Separation of children?
    - Or some other tangible intervention?
- Who will be responsible for supervising the children? List all individuals who will help supervise the children and their relationship to the alleged child initiator. It is best to avoid utilizing other children or siblings in the supervision plan.
- Describe the specific steps that will be taken to supervise the children. Staff should be cognizant that constant supervision of a child is a very difficult task to achieve. There are many things that can interfere with an adult's ability to keep children in line of sight at all times. Staff should consider the following:
    - How will the children be supervised at night?
    - How will the children be supervised when the caregiver has to use the bathroom or take a shower
    - How will the children be supervised when the caregiver has to prepare meals?
    - How will the children be supervised when they play outside?
    - How will the children be supervised at the bus stop?
    - How will the children be supervised when the caregiver needs to leave the home?
    - How will the parent/caregiver get a break from the stress of providing a high level of supervision?
    - How will the child be supervised at school and/or daycare?
    - Does the school and/or daycare need to be notified of the concerns?

If bedrooms need to be re-arranged, describe the specific steps that need to be taken. Staff should be aware of the current sleeping arrangements of all family members and consider the following:

- Does anyone need their own room?
- Who should not share a room?
- Do the adults need to move to help with supervision needs?

If the children need to be separated, describe the specific steps that need to be taken. When the alleged child initiator and the child victim(s) reside in the same household, it may be appropriate for the children to be separated into different households, especially if the victim child(ren) are expressing fear or exhibiting signs of trauma. Consideration should be given to the least restrictive plan possible while balancing the needs of all children involved. Other factors that may make separation an appropriate plan include:

- Other safety interventions have been attempted and have not been successfully in curtailing the behavior.
- The parent(s)/caregiver(s) are unable or unwilling to provide the necessary level of supervision required to safely maintain all of the children in the home.
- The child's behavior poses a serious risk to others and the child cannot be safely maintained until further assessment and intervention planning is complete.

If separation must occur, it is preferable for the alleged initiator child to leave the home. If the children are going to be separated, staff must assess whether the alleged child initiator will have access to other children as a result of the new living arrangement. When at all possible, reunification of the children should not occur until recommended by the treatment provider of the child victim(s) and the alleged child initiator.

Staff should consider the following:

- Which child(ren) will go stay somewhere else?
- Where will they stay?
- Are there children in the other home?
- What will visits look like?
- What needs to occur before the child(ren) can return home?

If children are going to be separated as a result of the safety plan, staff must complete a walk-through and background checks for the alternate living arrangement. Describe the specific steps that will be taken to monitor access to media. Access to media that is violent or sexual in nature should be closely monitored anytime there is a concern for sexual boundaries or sexual harming behavior.

Staff should consider the following:

- What devices in the home have internet access?
- Who is allowed on each device?
- Where can devices be used?
- Do the devices have parental control settings?
- How will exposure to adult content on television, movies, or music be handled?

Describe the household rules. Household rules should be created, or modified, anytime there is a concern for sexual boundaries or sexual harming behavior. Clear and consistent rules regarding privacy and personal boundaries will help decrease the potential for future incidents and will help adults model appropriate behavior.

Examples of household rules include:

- Older children will not be responsible for baby-sitting or supervising younger children;
- Alarms will be installed on bedroom doors;
- Children will not share beds;

- Rules regarding who may be allowed in whose bedroom and under what circumstances;
- Only one person will be allowed in the bathroom at a time;
- All household members will close the door when using the bathroom;
- Children will knock before opening a closed door;
- Children will have no access to adult sexual materials;
- All household members will respect each other's boundaries, including touch, physical affection, personal space, etc.
- Clothing must be worn in all common areas of the home;
- Clothing must be worn at bedtime;
- No tickling or wrestling;
- No computers, phones, tablets, gaming, or other devices with internet access will be allowed in bedrooms;
- Parents/caregivers will model open communication among family members. No secrets will be allowed.

What additional steps are necessary to ensure the safety of everyone in the home? It is important to remember each Juvenile Assessment will involve unique circumstances. There may be additional steps the family feels would be helpful in assuring the safety of all the children.

Who should notify staff in the event the safety plan fails and another sexual abuse act occurs?

There may be times when it is not appropriate for the alleged initiator child to remain in the community. In these situations, staff should outline the steps needed to seek the appropriate placement for the child.

What additional services or supports does the family need? Staff should consider:

- What services were identified through the assessment process?
- Has the family identified any natural supports that can be developed?
- Utilization of the genogram or eco-map may be useful in identifying resources for the family
- Who will be helping to implement the safety plan? Outside of the individuals involved in the assessment, who else was identified as a helper in the safety plan? Have they been contacted and agree to helping the family keep the children safe?
- How will the parents/caregivers communicate the safety plan to the children? All the children in the home need to know the safety plan. This will provide an opportunity for the parents/caregivers to demonstrate open communication as well as boundary expectations. Staff should assist the parent/caregiver in talking to the children if necessary.

At a minimum, the safety plan should be re-evaluated at each home visit. If the child is involved in any treatment, the safety plan should be shared with the service provider. Staff should update the safety plan as needed. Multiple safety plans may be necessary if there are multiple living arrangements involved. When the child victim(s) do not reside in the same household as the alleged initiator child, staff should consider if a safety plan specific to the victim(s) is necessary to help protect them from future harm.

5.5.3.1.9 Safety Network Contacts

Due to the sensitive nature of Juvenile Assessments, staff should exercise discretion in the information provided to safety network contacts regarding the involvement of the Children's Division. It is best practice to notify the parents of the alleged initiator child regarding what collateral contacts will be made and to be transparent about the reason(s) for contacting specific collaterals. Staff are strongly encouraged to contact school or daycare personnel that have day-to-day interaction to obtain information about the child's functioning and/or behavior. There may be times when staff will need to assist the child's parent/caregiver(s) in working with the school or daycare to address any safety or supervision concerns that result from the child's problem sexual behavior.

5.5.3.1.10 Chief Investigator 72 Hour Review/Supervisory Consultation
The Chief Investigator is responsible for assuring that all children involved in the Juvenile Assessment have been seen and that safety has been assured within 72 hours of the report. The Chief Investigator should review the safety plan within the first 72 hours.

Due to the complexities of Juvenile Assessments, the Children's Service Supervisor plays a vital role. The Children's Service Supervisor should regularly consult with staff to assist in determining the level of contact and ensuring the safety plan is being appropriately monitored.

5.5.4 Children in Out-of-Home Care
There may be times when a Juvenile Assessment is received on a child who is in the custody of the Children's Division. Staff assigned the Juvenile Assessment should work closely with the child's case manager and the Family Support Team in completing the assessment. The Guardian ad Litem (GAL) should be notified prior to interviewing the alleged child initiator.

5.5.5 Out of Home Investigations (OHI)
There may be times when a Juvenile Assessment is received on a child who is the victim on an open OHI report. It will be the responsibility of staff assigned the Juvenile Assessment to complete assessment and safety planning process. However, both staff members shall work together to coordinate the best approach to assuring child safety and completing the investigative process of the OHI report.

5.5.6 Non-Caretaker Referrals
For referrals that do not meet the criteria for a Juvenile Assessment, staff should follow policy and procedure for non-caretaker referrals. If during the course of the assessment, staff determines the child does not meet the criteria for a Juvenile Assessment due to age, staff should cease the assessment process and follow policy and procedure for a non-caretaker referral.

5.5.7 Juvenile Assessment Conclusion Summary Template
The following conclusion summary template shall be used on all Juvenile Assessments. The template shall be used in the Conclusion Summary section of the FACES Conclusion Screen:

The ( ) County Children's Division received a Juvenile Assessment report on (Date), incident date (Date).

Summary of Alleged Concerns:

Safety was assured of victim child(ren) on (Date and time each victim child was verified as safe)

Was an Immediate Safety Intervention Plan needed? If so, please explain how the safety threat(s) were resolved:

Actions taken for Victim Child(ren):

Contact with the Alleged Child Initiator (ACI) was made on (Date) at (Time).

Actions take for ACI:

A Juvenile Assessment was conducted and it was determined that the report would be concluded as (Assessment Conclusion) based on the following:

ACI Vulnerabilities:

ACI Parental Protective Capacities:

Strengths of the Family and Safety Network:

Past or Current Substance Abuse:

Mental Health Needs:

Culture:

Domestic Violence:

Prior history was reviewed and concerns were expressed in the past that included: (Note any significant history as it pertains to this report).

Trends noted when reviewing prior history included:

The Risk Assessment level scored (#) due to

A Family Centered Service Case will/will not be opened for this report.

Why/Why not?

5.5.8 Timeframes for Completion
Juvenile Assessments should be completed within forty-five (45) days. However, staff, in conjunction with supervisory consultation, may determine that the family would benefit from services and further monitoring of the safety plan beyond the forty-five (45) day timeframe. In those situations, staff may continue to work with the family through the Juvenile Assessment. Through supervisory consultation, the Children's Service Supervisor shall determine the frequency of home visits and contact based on the family's needs. If it appears that the family will require services from the Children's Division beyond ninety (90) days, staff should refer the family to Family-Centered Services.

<u>Outside of that, we use Non-Caretaker Referrals:</u>

Non-Caretaker "N" Referrals

Local offices should develop protocols within their multidisciplinary teams for the dissemination of N-Referrals to the appropriate agencies. In general, if the identified alleged perpetrator is a child or adolescent youth, the county office should refer the matter to the local juvenile office. If the alleged perpetrator is an adult, the county office should refer the information to local law enforcement. This may vary, depending on each local jurisdiction.

The following is a list of steps that local office staff should consider taking in order to address the reported concern and to connect families with appropriate community resources. Regardless of the nature and extent of the reported concern, staff must contact the reporter within forty-eight (48) hours, unless information indicates an emergency situation, in which case the reporter should be contacted as soon as possible. Staff should discuss the situation with the reporter and seek supervisory consultation as needed to determine the most appropriate response, which may include any or all of the following list of possible actions taken.

Possible N-Referral "actions taken" are as follows:

1. Contact the reporter to obtain any additional information, or to ensure that complete and accurate information is available to forward on to law enforcement and/or the juvenile office.
2. Follow locally established protocols for disseminating the referral to the appropriate law enforcement agency and/or juvenile office.
3. Emergency N-Referrals should be referred to the appropriate law enforcement agency and/or juvenile office within the Level 1 Response timeframes (three hours).
4. The reporter may also be made aware that the referral will be disseminated to the appropriate law enforcement agency and/or juvenile office, who in turn, may contact them directly.
5. Collateral contacts may be necessary to address the concerns.
6. The reporter, staff, or appropriate law enforcement agency and/or juvenile office personnel may contact the family by telephone to assist the family in making appropriate referrals.
7. Staff may contact the family to obtain additional information and assess the needs of the family. If interviews of the children are necessary they should be conducted with the permission of the parent/guardian.
8. A home visit may be necessary to address the concerns.
9. Staff may determine that, based upon additional information, a CA/N report is necessary. If so, staff should cause a "Field Report" to be made to CANHU, and document in the N-Referral summary that a "Field Report" was made.
10. Referrals to community agencies or the provision of Family-Centered Services (FCS) may be offered.
11. Referrals received on families with an open FCS or AC case should be given to the case manager whenever possible. If the referral is assigned to the county in which the child is residing for the next 24 hours, the case manager should be informed and, if necessary, involved in the completion of the referral process. However, in this situation, it would be the responsibility of the county which received the referral assignment to complete the referral process (including documentation in FACES) or arrange for it to be transferred to the case manager county at the discretion and agreement of each county.

Nebraska

The Child Abuse and Neglect Hotline would assess the reported information to determine if the report should be accepted. Hotline staff utilize the SDM® Intake Tool. There may also be concerns of abuse or neglect by the caregiver(s) of the alleged minor perpetrator.

Reports that are accepted for assessment are assigned to a CFS Specialist. The CFS Specialist will:

- Utilize the SDM® Safety Assessment to determine if there is an active safety threat and if so, implement a safety plan to keep the child(ren) in the home. If the child(ren) cannot be maintained in the home, a request to law enforcement or the county attorney will be made for out-of-home care. In Nebraska, CFS does not have the legal authority to remove children from their homes.
- Utilize the SDM® Risk Assessment to determine if the risk level would recommend ongoing case management and intervention.
- Refer the family to community-based or formal services based on the results of the SDM® Safety and Risk Assessments.
- Refer to Nebraska State statute 28-710 to determine if the alleged abuse or neglect by the alleged minor perpetrator meets the criteria to be placed on the Child Abuse and Neglect (CAN) Central Registry (CR). No minor under the age of 12 can be placed on the CAN CR.
    - Minors placed on the CAN CR are guaranteed a review of the evidence to determine if the recommendation to be on the Registry is correct.
    - Minors placed on the CAN CR receive a subsequent mandatory review of their case within 60 days of their 19th birthday. A determination could be made if the minor youth has obtained services that have remediated the issues and the youth should be removed from the CAN Central Registry based on good cause.
- Information will be shared with Law Enforcement and the County Attorney. The minor youth may be placed on Probation or charged with other crimes.

New Jersey

In New Jersey, minors can be alleged perpetrators of child abuse/neglect and the child protection investigator makes a determination, after collecting all the facts, as to whether the minor was considered a "caregiver" under the law. There is no age threshold in New Jersey when determining whether a minor could be considered a "caregiver." Policy states that "Minors shall be considered caregivers to their own children, and may be considered caregivers to other children if caring for that child at the time of an alleged act of abuse or neglect and of sufficient age and maturity to reasonably be expected to provide such care. A child of insufficient age or maturity to reasonably care for him or herself shall not be considered a caregiver to any child not his or her own." The type of arrangement, timeframe, routine nature of the caregiving, and age/maturity of the child are all factors that staff are required to consider.

Rhode Island

Responses to allegations of abuse of a child by another child is limited to sexual abuse, which is defined in both policy and statute as sexual contact involving individuals under the age of eighteen, which mimics adult sexual behavior.

- Such behavior includes, but is not limited to:
    1) oral, anal and /or vaginal penetration;

2) fondling or touching;
3) exposure to pornographic materials.

- Such behavior is not developmentally appropriate nor curiosity based and involves one of the following elements:
  1) age, size, emotional and/or cognitive disparity;
  2) force, threats, coercion or shame.

Young children would not be perpetrators of sexual abuse. Parents would not be perpetrators of neglect, unless they were aware that a child is abuse reactive and failed to provide adequate supervision resulting in that child acting out toward another child. Older youth may be perpetrators of sexual abuse if the behavior towards the other child contains the elements of disparity in age, size, cognition, force, etc. These circumstances are also referred to law enforcement.

In reviewing Rhode Island's practices and policies, one of the objectives is to consider diverting cases involving younger children from the investigative route to the unit which supports assessment and referrals for Prevention. The report would result in the Family Functioning Assessment, which is used in CPS Investigations as well as other divisions of DCYF, to focus more on the assessment without the need to conduct an investigation unless, as part of the assessment, it is determined that the child has been victimized. The way these investigations have been managed does not fit because there may be no perpetrator. A young child would not be listed as a perpetrator in the central registry and when there is no role as a perpetrator for the parent or other adult, it presents a challenge.

Tennessee

The response is the same as if the perpetrator was an adult, to ensure the victim is safe and protected. The classification or substantiation may differ, as well as some of the action steps, but the overall response is the same. When the perpetrator is a minor, assessing safety is part of the investigation, as are developing action steps to ensure access to necessary resources and services. Also, the minor perpetrator may come into custody, depending on the circumstances.

Texas

The policies around minors as alleged perpetrators vary by program. Relevant policies from the handbook are included below.

When appropriate, children aged 10 and up may be considered alleged perpetrators. For licensed settings, minors in care are not considered alleged perpetrators, but in some circumstances a licensed caregiver's biological child may be an alleged perpetrator.

4122.2 Child as an Alleged Perpetrator

SWI Policy and Procedures December 2020

A child ages 10-17 may be designated an alleged perpetrator in a CPI intake if they meet the criteria listed for adult perpetrators above.

See 4123 Victim Perpetrator (VP).

5230 Children as Perpetrators in an APS Intake

SWI Policy and Procedures January 2021

Occasionally, a child is alleged to be a perpetrator of abuse, neglect, or financial exploitation against an adult age 65 or older or an emancipated minor or adult with disabilities. A child is determined to be a perpetrator based on the child's age and the allegation.

A child younger than 10 years of age is never considered a perpetrator. Any child age 10 or older, including those in DFPS conservatorship or those who reside in or attend a CCR-licensed facility, may be designated as an alleged perpetrator in an APS intake. In order to be an alleged perpetrator of neglect, a child 10 or older must be in the role of a caretaker for the alleged victim.

8250 Child-on-Child Abuse or Neglect in a CCR Operation

SWI Policy and Procedures January 2021

A child in care is *never* assigned the role of alleged perpetrator in a CCI intake.

A child in care may be assigned the role of alleged perpetrator in intakes for programs other than DCI or RCCI.

When a report is made that a child in care in a CCR operation is allegedly abusing or neglecting another child in care, the intake specialist:

- Assesses an intake, which contains an allegation of neglectful supervision.
- Lists the caregiver as the alleged perpetrator.
- Lists both the perpetrating child and the victim of the perpetrating child as victims of neglectful supervision.

If the identity of the caregiver is unknown or unclear at intake, the AP is left blank.

Exceptions

Biological Child of the Caregiver

A caregiver's biological child who abuses a child in care may be considered an alleged perpetrator in either of the following situations:

- In an RCCI intake if the caregiver's biological child is 10 years old or older.
- In a DCI intake if the caregiver's biological child is 14 years old or older.

An allegation of neglectful supervision with the caregiver as the alleged perpetrator (AP) is also assessed for the child in care because the caregiver was responsible for the child who was abused or neglected. If the identity of the caregiver is unknown or unclear at intake, the AP is left blank.

Vermont

When a child under the age of six years old is identified as an actor of sexually harmful behaviors beyond developmental norms, the child actor is documented as the victim on the report. The report is screened for a CHINS B Assessment based on the supervision and treatment needs of the child.

When a minor is age six to thirteen, the minor is documented as the perpetrator. The intake is screened for a Sexual Abuse Assessment based on whether there was a significant age difference between the perpetrator and victim; or the use of force, threat, coercion; and whether the act would be considered developmentally normal during childhood or adolescence. Assessments focus on services for the family and do not result in a finding of abuse or placement on the Child Protection Registry.

When a minor is age fourteen or older, the minor is documented as the perpetrator. The intake is screened for a Sexual Abuse Investigation based on whether there is significant age difference between the perpetrator and the victim; or the use of force, threat, coercion; and whether the act would be considered developmentally normal during childhood or adolescence.

An investigation results in a determination of a substantiation of abuse or an un-substantiation. Substantiated perpetrators are placed on the Child Protection Registry.

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September 2018

INFORMATION PACKET: *What are some considerations when determining the age of majority?*

This Information Packet was prepared by the Knowledge Management (KM) team for a Casey Family Programs Strategic Consultant in response to an inquiry regarding states' approaches to the age of majority and the implications of brain science on those approaches. The information provided is not exhaustive and is for informational purposes only. It does not necessarily reflect the views of Casey Family Programs.

Background

The age of majority (AOM) determines when a young person is considered an adult according to the law and, in many countries, this is set at 18 years.[1] In the United States, the AOM is 18 years in all states except for Alabama (19), Nebraska (19), and Mississippi (21).[2] AOM is the age at which one becomes a legal adult and gains full legal rights. It is also the age at which a person is liable for his or her own actions, such as contractual obligations or liability for negligence.[3] Under the 26th Amendment, however, the right to vote is 18 nationwide, regardless of state laws.

The AOM should not be confused with either the age of consent (AOC) or the minimal age of criminal responsibility (MACR). For the AOC, the adolescent may not have reached the AOM, but he or she is no longer required to obtain parental consent to get married or to voluntarily agree to sexual intercourse. For the MACR, even if the child or adolescent has not achieved the AOM, he or she can be held criminally responsible (at as young as 7 years of age in some states) and, in some cases, tried as an adult.[4] Additionally, the process referred to as the "emancipation of a minor" (or, in Mississippi, as the "Removal of Disability of Minority"[5]) can allow a minor to become responsible for his or her own decisions regarding education, health care, residence, and other matters.[6]

Variation in the Meaning of the Age of Majority

Although most states have designated 18 years old as the AOM, it merely represents a "default" rule, i.e., an individual is classified as an adult unless the legislatures or courts have prescribed a higher or lower age in particular contexts.[7] For instance, the "operative" age of adulthood is functionally lower than 18, because every state permits at least some adolescents to be tried and punished as adults well before age 18. Meanwhile, many states extend parental support obligations beyond age 18.[8]

Furthermore, what the AOM entails not only varies from state to state but also within the state, depending on the activity.[9] For example, all 18-year-olds can enlist in the military, sit on a jury, and vote, but they cannot drink alcohol and may not be able to buy cigarettes (depending on the state); they can buy AR-15s and rifles, but not handguns. Eighteen-year-olds may reach the age of majority and be able to sign contracts, but they may not be able to rent cars until the age of

25.[10] In Mississippi, while the AOM is 21, an 18-year-old can sign contracts for personal property or settle personal injury claims, or, if married, file in marital matters.[11] In Louisiana, where the AOM is 18, 14-year-olds may sue another party in court or consent to their own medical treatment without informing their parents, but any contract they sign is voidable, and they cannot vote or buy alcohol.[12]

Unintended Consequences

The complexities of AOMs are not limited to inter- and intra-state variances. Lowering the AOM can cause unintended consequences. The lack of agreement on the age at which individuals should be considered adults affects both associated rights and protections, as well as legal responsibilities and culpabilities. For instance, paying child support may no longer be mandated for parents beyond the lowered AOM, though this varies by state,[13] and may particularly have an effect on children with disabilities, who may need child support for longer periods. Similarly, youth leaving foster care may not have access to services that they had prior to the lowering of the AOM.

One study[14] of vulnerable populations surveyed the challenges faced by youth in the mental health, foster care, and juvenile and criminal justice systems; youth with physical disabilities and chronic illness; and runaway and homeless youth. The services these vulnerable populations receive from these systems often end abruptly as they transition to adulthood (at the AOM), even though the need for the services continues. Youth must leave systems tailored for clients their age and, if they are eligible for further services at all, enter adult systems that are not equipped to address their needs.

The AOM does not take into account the differing ways and timeframes in which young people mature and develop.[15] In justice systems in which individuals can be awarded leniency due to mental impairment, some studies[16] suggest that a similar justification can be made for issues surrounding maturity. These studies consider it particularly important because of a growing trend for young people to be tried as adults based on their crime rather than their individual culpability. The next section examines the brain science that underlies the argument for leniency based on maturity and has implications for the AOM and for the MACR.

Brain Science

The Supreme Court has increasingly called upon new findings in neuroscience and psychology in a series of rulings over the past decade (*Roper v. Simmons*, *Graham v. Florida*, *Miller v. Alabama,* and *Montgomery v. Louisiana*) that prohibited harsh punishments for offenders under 18.[17] Because their wrongdoing is often the product of immaturity, younger criminals may have a greater potential for reform. Now many are questioning whether the age of 18 has scientific meaning.[18]

Emerging Adulthood

While the AOM recognizes most 18-year-olds as adults, the emerging science about brain development suggests that most people do not reach full maturity until age 25.[19] Over the past decade, developmental psychologists and neuroscientists have found that biological and psychological development continues into the early twenties, well beyond the AOM.[20] Recently, researchers have found that 18–21-year-old adults are more like younger adolescents than older adults in their impulsivity under conditions of emotional arousal.[21] The theory of “emerging adulthood” has developed, which describes an extended, distinct period of development

between adolescence and young adulthood, typically lasting from ages 18–25, and views the stage of adolescence that precedes it and the young adult period that follows as very different.[22] The developmental, scientific research suggesting that young adults are not fully mature is reinforced by demographic data indicating that the social transition to independent adulthood extends well beyond the AOM.[23]

Brain-imaging studies and postmortem examinations have shown that the brain areas involved in reasoning and self-control, such as the prefrontal cortex, are not fully developed until the mid-twenties—a far later age than previously thought (although the areas involved in emotions, such as desire and fear, seem to be fully developed by 17).[24] This pattern of brain development shows that around the ages of 18–21, people have the capacity to feel adult emotions but a teenager's ability to control them.[25] However, the complex nature of neurodevelopment poses challenges to establishing when a brain is mature, and there is disagreement on what properties of a brain should be evaluated when judging a brain's maturity.[26]

Child Maltreatment

Brain science goes one step further, recognizing that child maltreatment and trauma also have significant effects on brain development. Brain imaging studies of children with documented cases of maltreatment reveal distinct changes in both the brain's structure and functioning.[27] Trauma-induced changes to the brain can result in varying degrees of cognitive impairment and emotional dysregulation,[28] which can lead to substance use and aggression problems.[29] This has particular implications regarding the AOM and its effect on the MACR, because studies have found that over 50 percent of incarcerated males had experienced childhood trauma.[30]

Summary and Resources

Brain science reveals that the brains of adolescents and young adults are still developing and that "there is little empirical evidence to support age 18, the current legal age of majority, as an accurate marker of adult capacities."[31] What that means for policymaking, including legislating the AOM, continued to be open to interpretation.[32]

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[1] Bryan-Hancock, C., & Casey, S. (2011). Young people and the justice system: Consideration of maturity in criminal responsibility. *Psychiatry, Psychology and Law*, *18*(1), 69–78. https://doi.org/10.1080/13218711003739086

[2] FindLaw. (2018a). *Automatic emancipation of minors*. Retrieved from https://family.findlaw.com/emancipation-of-minors/automatic-emancipation-of-minors.html

[3] U.S. Legal, Inc. (2016). *Age of majority law and legal definition.* Retrieved from https://definitions.uslegal.com/a/age-of-majority/

[4] Child Rights International Network. (2018). *Minimum ages of criminal responsibility in the Americas*. Retrieved from https://www.crin.org/en/home/ages/Americas

Williams, R. (2015). Raising the age of juvenile court jurisdiction. *National Conference of State Legislatures Legis Brief, 23*(39). Retrieved from http://www.ncsl.org/research/civil-and-criminal-justice/raising-the-age-of-juvenile-court-jurisdiction.aspx

[5] FindLaw. (2018c). *Mississippi legal age laws*. Retrieved from https://statelaws.findlaw.com/mississippi-law/mississippi-legal-ages-laws.html

[6] FindLaw. (2018a).

[7] Cohen, A. O., Bonnie, R. J., Taylor-Thompson, K., & Casey, B. J. (2015). When does a juvenile become an adult: Implications for law and policy. *Temple Law Review*, *88*, 769–788. Retrieved from https://www.templelawreview.org/lawreview/assets/uploads/2016/08/Cohen-et-al-88-Temp.-L.-Rev.-769.pdf p. 770.

[8] Cohen et al. (2015).

[9] To see what the AOM means in each state, go to https://statelaws.findlaw.com/family-laws/legal-ages.html.
[10] VroomVroomVroom Pty, Ltd. (2018). *Teenagers and rental cars: Restrictions, regulations and policies* [Website]. Retrieved from https://www.vroomvroomvroom.com/rental-information/teenage-drivers/
[11] FindLaw. (2018c)
[12] FindLaw. (2018b). *Louisiana legal age laws.* Retrieved from https://statelaws.findlaw.com/louisiana-law/louisiana-legal-ages-laws.html
[13] National Conference of State Legislatures. (2015). *Termination of child support–Age of majority*. Retrieved from http://www.ncsl.org/research/human-services/termination-of-child-support-age-of-majority.aspx
[14] Osgood, D. W., Foster, E. M., & Courtney, M. E. (2010). Vulnerable populations and the transition to adulthood. *The Future of Children*, *20*(1), 209–229. Retrieved from http://www.centerforchildwelfare.org/kb/bppub/VulnerablePopTransition.pdf
[15] Bryan-Hancock, C., & Casey, S. (2011).
[16] Bryan-Hancock, C., & Casey, S. (2011).
[17] Scott, E. S., Bonnie, R. J., & Steinberg, L. (2016). Young adulthood as a transitional legal category: Science, social change, and justice policy. *Fordham Law Review*, *85*(2), 641–666. Retrieved from https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=5246&context=flr
Requarth, T. (2016, April 18). Neuroscience is changing the debate over what role age should play in the courts. *Newsweek*. Retrieved from https://www.newsweek.com/2016/04/29/young-brains-neuroscience-juvenile-inmates-criminal-justice-449000.html
[18] Scott et al., (2016); Requarth, T. (2016, April 18).
[19] Cox, T. (2011, October 10). Brain candy: Brain maturity extends well beyond teen years [Transcript]. *Tell Me More*. Washington, DC: National Public Radio. Retrieved from https://www.npr.org/templates/story/story.php?storyId=141164708
[20] Scott et al. (2016); Steinberg, L. (2014). *Age of opportunity: Lessons from the new science of adolescence*. Boston, MA: Houghton Mifflin Harcourt.
[21] Scott et al. (2016); Cohen, A. O., Breiner, K., Steinberg, L., Bonnie, R. J., Scott, E. S., Taylor-Thompson, K., ... & Silverman, M. R. (2016). When is an adolescent an adult? Assessing cognitive control in emotional and nonemotional contexts. *Psychological Science*, *27*(4), 549–562. Retrieved from http://fablab.yale.edu/sites/default/files/publications/Cohen,%20Breiner,%20Steinberg,%20et%20al%20(2016)%20When%20is%20an%20adolescent%20an%20adult.pdf
[22] Arnett, J. J., & Tanner, J. L. (2016). The emergence of emerging adulthood: The new life stage between adolescence and young adulthood. In *Routledge handbook of youth and young adulthood* (pp. 50–56). London, United Kingdom: Routledge. Retrieved from https://www.taylorfrancis.com/books/e/9781317619895/chapters/10.4324%2F9781315753058-13
[23] Scott et al. (2016).
[24] Giedd, J. N., Lalonde, F. M., Celano, M. J., White, S. L., Wallace, G. L., Lee, N. R., & Lenroot, R. K. (2009). Anatomical brain magnetic resonance imaging of typically developing children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, *48*(5), 465–470. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2892679/
Simpson, A. R. (2008). *Brain changes.* Retrieved from http://hrweb.mit.edu/worklife/youngadult/brain.html#text
McRae, K., Gross, J. J., Weber, J., Robertson, E. R., Sokol-Hessner, P., Ray, R. D., ... & Ochsner, K. N. (2012). The development of emotion regulation: An fMRI study of cognitive reappraisal in children, adolescents and young adults. *Social Cognitive and Affective Neuroscience*, *7*(1), 11–22. Retrieved from https://academic.oup.com/scan/article/7/1/11/1639990;
Requarth, T. (2016, April 18).
[25] Requarth, T. (2016, April 18).
[26] Somerville, L. H. (2016). Searching for signatures of brain maturity: what are we searching for? *Neuron*, *92*(6), 1164-–167. Retrieved from https://www.sciencedirect.com/science/article/pii/S0896627316308091

[27] Child Welfare Information Gateway. (2017). *Supporting brain development in traumatized children and youth*. Retrieved from https://www.childwelfare.gov/pubPDFs/braindevtrauma.pdf

Delima, J., & Vimpani, G. (2011). The neurobiological effects of childhood maltreatment. *Family Matters, 89*, 42–52. Retrieved from https://aifs.gov.au/sites/default/files/institute/pubs/fm2011/fm89/fm89.pdf#page=44

[28] Child Welfare Information Gateway. (2017); Nemeroff, C. B. (2016). Paradise lost: The neurobiological and clinical consequences of child abuse and neglect. *Neuron, 89*(5), 892–909. Retrieved from https://www.sciencedirect.com/science/article/pii/S0896627316000209 doi: 10.1016/j.neuron.2016.01.019.

[29] Wolff, N., & Shi, J. (2012). Childhood and adult trauma experiences of incarcerated persons and their relationship to adult behavioral health problems and treatment. *International Journal of Environmental Research and Public Health*, *9*(5), 1908–1926. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3386595/

[30] Wolff, N., & Shi, J. (2012), para. 2.

[31] Johnson, S. B., Blum, R. W., & Giedd, J. N. (2009). Adolescent maturity and the brain: The promise and pitfalls of neuroscience research in adolescent health Policy. *Journal of Adolescent Health*, *45*(3), 216–221. https://s3.amazonaws.com/academia.edu.documents/45561888/Adolescent_Maturity_and_the_Brain_The_Pr20160512-10789-z7gybb.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1535755435&Signature=P4ZAzR1qe33wAsWZtJnBINeIQCw%3D&response-content-disposition=inline%3B%20filename%3DAdolescent_Maturity_and_the_Brain_The_Pr.pdf, p. 2.

[32] Steinberg, L. (2012). Should the science of adolescent brain development inform public policy? *Issues in Science and Technology*, *28*(3), 67–78. Retrieved from https://pdfs.semanticscholar.org/eeb3/53f306b905e6b65dfba4fe0889992158a047.pdf; Johnson et al. (2009).