

EI/ECSE Standard 1
Component 1.3
Overview & Speaker Notes

Intended Audience:

Overview for Facilitators:

ECPC has developed an anchor presentation for each of the Initial Practice-Based Professional Preparation Standards for Early Interventionists/Early Childhood Special Educators (EI/ECSE). The components under each standard are presented separately. The materials are designed for an in-service professional development (PD) program but can be used in a pre-service teacher preparation course. This resource will increase professionals' ability to address each of the EI/ECSE standard and components. Additional materials for each standard can be found on the ECPC Website: [Curriculum Module | The Early Childhood Personnel Center \(ecpcta.org\)](https://www.ecpcta.org/curriculum-module)

Speaker Notes

The speaker notes provide a narrative and activities for each slide. You will see speaker notes for most of the slides within the slide deck. The notes provide additional details about the information on a particular slide, including the context for the information and key points. The notes are a guide, and speakers should feel free to modify these as needed. Please note the following:

- The narrative is a sample script for the presenter. Although you may read it verbatim, speaker notes are intended as a guide for the presenter, and you may modify them as needed.

Materials Required for face to face

1. Share the outline with timelines for the training (build in breaks)
2. Conduct an opening activity (introductions/ice breaker)
3. Computers or tablets with internet access for participants (if possible)
4. Handouts
5. Projector with audio capable for playing video with speakers
6. Presentation slides with speaker notes
7. Develop an evaluation tool for all attendees (e.g., continuous improvement activity)

Materials Required for virtual

1. Distribute the link to the online platform in advance
2. Share the outline with timelines for the training (build in breaks)
3. Conduct an opening activity (introductions/ice breaker)
4. Determine how participants will receive handouts and materials, on the cloud, using a storage platform (e.g., dropbox, google, etc.)
5. Platform to share presentation (e.g., zoom, teams, etc.) with polling questions prepared in advance and breakout room capability
6. Upload or send handouts in advance or through platform (insert through chat)
7. Download videos ahead of time to prepare for low bandwidth from slide deck
8. Share screen capability (be sure to enable sound for videos)
9. Develop an evaluation tool for all attendees (e.g., continuous improvement activity)

Objectives for Standard 1, Component 1.3:





After participating in this professional learning opportunity, participants will be able to:





- Describe the influence of biological factors on a child's development and learning
- Describe the influence of environmental factors on a child's development and learning
- Describe how biological and environmental factors influence the planning and delivery of early intervention and instruction for a child


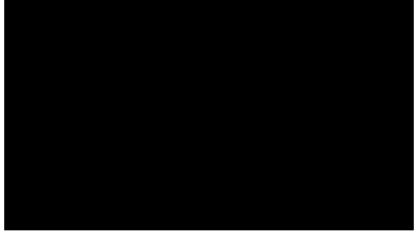

Outline of Session Activities



Topic	Slides	Activity
Introduction/Objectives	1-4	
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Protective Factors: Resilience	10	Video
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Speaker Notes with Slides





Slide 1	<p style="text-align: center;">Child Development and Early Learning: Early Learning & Development Theory & Philosophy</p> <p style="text-align: center;">Initial Practice Based Professional Standards for Early Interventionists/Early Childhood Special Educators (EI/ECSE) 1.3</p> <hr/> <p style="text-align: center;"> Early Childhood Professional Center www.ecpc.org</p>	
Slide 2	<p style="text-align: center;">Standard 1</p> <p>Candidates understand the impact of different theories and philosophies of early learning and development on assessment, curriculum, instruction, and intervention decisions. Candidates apply knowledge of normative developmental sequences and variations, individual differences within and across the range of abilities, including developmental delays and disabilities, and other direct and indirect contextual features that support or constrain children's development and learning. These contextual factors as well as social, cultural, and linguistic diversity are considered when facilitating meaningful learning experiences and individualizing intervention and instruction across contexts.</p> <hr/> <p style="text-align: center;"> Early Childhood Professional Center www.ecpc.org</p>	
Slide 3	<p style="text-align: center;">Component: 1.3</p> <ul style="list-style-type: none">• Candidates demonstrate an understanding of characteristics, etiologies, and individual differences within and across the range of abilities, including developmental delays and disabilities, their potential impact on children's early development and learning, and implications for assessment, curriculum, instruction, and intervention. <hr/> <p style="text-align: center;"> Early Childhood Professional Center www.ecpc.org</p>	Read the text aloud to the group
Slide 4	<p style="text-align: center;">Objectives</p> <ul style="list-style-type: none">• Describe the influence of biological factors on a child's development and learning• Describe the influence of environmental factors on a child's development and learning• Describe how biological and environmental factors influence the planning and delivery of early intervention and instruction for a child <hr/> <p style="text-align: center;"> Early Childhood Professional Center www.ecpc.org</p>	





<p>Slide 5</p>	<p style="text-align: center;">Development and Learning</p> <ul style="list-style-type: none"> • Biological and environmental factors synergistically influence child development <ul style="list-style-type: none"> • Genetic characteristics interact with the environment continually over time • Brain development is most active during the first three years after birth <p style="text-align: center;"> Early Childhood Personnel Center www.ecpic.org</p>	<p>Berk, L.E., (2019). Child Development, 10th Edition. Pearson.</p>
<p>Slide 6</p>	<p style="text-align: center;">Brain Development</p> <ul style="list-style-type: none"> • An ongoing interaction between: <ul style="list-style-type: none"> • Genetics • Environment • Experience <p style="text-align: center;"> Early Childhood Personnel Center www.ecpic.org</p>	
<p>Slide 7</p>	<p style="text-align: center;">Development and Learning</p> <ul style="list-style-type: none"> • Research shows environmental factors in children’s younger years play the largest role in negative outcomes (Nelson et al., 2020) • Healthy development in the early years provides the building blocks for later years <p style="text-align: center;"> Early Childhood Personnel Center www.ecpic.org</p>	
<p>Slide 8</p>	<p style="text-align: center;">Adverse Childhood Experiences (ACES)</p> <ul style="list-style-type: none"> • Experience of violence, abuse, neglect • Witnessing violence at home or in the community • Loss of primary caregiver • Caregiver lives with addiction/unaddressed mental health challenges • Instability (e.g., caregiver hospitalized, incarcerated) <p style="text-align: center;"> Early Childhood Personnel Center www.ecpic.org</p>	<p>Adverse childhood experiences, or ACEs, are described by the CDC as potentially traumatic events that occur in childhood (0-17 years). For example: (read bullets)</p> <p>See: https://www.cdc.gov/violenceprevention/aces/fastfact.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevention%2Facestud%2Ffastfact.html</p>



<p>Slide 9</p>	<p style="text-align: center;">Consequences of ACES</p> <ul style="list-style-type: none"> • Chronic health problems • Mental health problems • Negative impact on school success, job opportunities, relationships <hr style="border: 1px solid blue;"/> <div style="text-align: center;">  </div>	<p>From the CDC:</p> <p>ACES can have lasting effects on health and wellbeing.</p> <p>ACES and associated environmental conditions, such as living in under-resourced or racially segregated neighborhoods, frequently moving, and experiencing food insecurity, can cause toxic stress (extended or prolonged stress). Toxic stress from ACEs can change brain development and affect such things as attention, decision-making, learning, and response to stress.</p> <p>Children growing up with toxic stress may have difficulty forming healthy and stable relationships. They may also have unstable work histories as adults and struggle with finances, jobs, and depression throughout life. These effects can also be passed on to their own children.</p> <p>Some children may face further exposure to toxic stress from historical and ongoing traumas due to systemic racism or the impacts of poverty resulting from limited educational and economic opportunities.</p>
<p>Slide 10</p>	<p style="text-align: center;">Protective Factors: Resilience</p> <div style="text-align: center;">  </div> <hr style="border: 1px solid blue;"/> <div style="text-align: center;">  </div>	<p>https://youtu.be/HJvDrT6N-mw https://vimeo.com/245310333</p> <p>Watch this video and discuss how safe, predictable and responsive relationships protect young children – especially those with disabilities/delays – from the negative effects of ACES.</p>



<p>Slide 11</p>	<p style="text-align: center;">Genetic Factors Inform the Effects of Environment and Experience</p> <ul style="list-style-type: none"> • Traits <ul style="list-style-type: none"> • Temperament • Health-related traits • Neurodiversity • Inherited conditions/disorders <hr/> <p style="text-align: center;"> <small>Early Childhood Program www.ecpic.org</small></p>	<p>Every individual carries his or her own set of genetic characteristics. These characteristics inform how we interact with the world, and in turn how we perceive the way the world interacts with us.</p> <p>For example, if we are temperamentally very outgoing, we may have many more social interactions in the course of one day than a person who is shy. This may prove to be beneficial in the presence of a nurturing and responsive environment and caregivers, or could be dangerous in an unstable environment if interactions with unsafe strangers happened frequently.</p> <p>If we are very shy, we may appreciate when others include us in one-on-one interactions when we need to be included but also need others to understand when we need some time to be on our own. We may need help getting enough interactions to help us grow.</p> <p>When we have a physical or intellectual disability, we need our environment and interactions to be intentionally considered to make sure that we can consistently access positive interactions and participate in everyday social routines.</p>
<p>Slide 12</p>	<p style="text-align: center;">Genetic Foundations</p> <ul style="list-style-type: none"> • People are made up of trillions of units called cells • Every cell has a control center called the nucleus that contains rod-like structures <ul style="list-style-type: none"> • The rod-like structures are called chromosomes • Chromosomes store and transmit genetic information <hr/> <p style="text-align: center;"> <small>Early Childhood Program www.ecpic.org</small></p>	<p>Let's start with the foundations of our own genetics:</p>



<p>Slide 13</p>	<p style="text-align: center;">Genetic Foundations</p> <ul style="list-style-type: none"> • Genes are a unit of heredity which is transferred from a parent to offspring: <ul style="list-style-type: none"> • Determine some characteristic of the offspring <p style="text-align: center;"> Early Childhood Personnel Center www.ecpic.org</p>	
<p>Slide 14</p>	<p style="text-align: center;">Genetic Traits</p> <ul style="list-style-type: none"> • Scientists estimate that 20 to 60 percent of temperament is determined by genetics • Common characteristics: <ul style="list-style-type: none"> • Sociability • Emotionally • Activity level • Persistence <p style="text-align: center;"> Early Childhood Personnel Center www.ecpic.org</p>	
<p>Slide 15</p>	<p style="text-align: center;">Video: Temperament</p> <p>Watch this video on the next slide before discussing</p> <ul style="list-style-type: none"> • Why is it important to remember that young children with disabilities/delays also have inborn temperamental characteristics? • How do you think this knowledge might inform effective early intervention and instructional practices? <p style="text-align: center;"> Early Childhood Personnel Center www.ecpic.org</p>	<p>https://www.zerotothree.org/espanol/temperament</p> <p>Discussion: why is it important to remember that families, caregivers, and teachers remember that young children with disabilities/delays also have inborn temperamental characteristics?</p> <p>How do you think this knowledge might inform effective early intervention and instructional practices?</p> <p>Support discussion that inborn temperament exists for all of us, and that children with disabilities also have their unique traits.</p> <p>EI/ECSE practitioners must always remember to prioritize the unique attributes of the child, making sure to recognize the reality the temperaments can always represent a strength, no matter what kind of temperament we have, and we must</p>


		<p>leverage the value of a child’s temperament to support positive outcomes.</p> <p>Children with disabilities are too often required to be more compliant than typically-developing children as a whole – important to make space for who they are and value their unique personality traits.</p>
<p>Slide 16</p>	<p style="text-align: center;">Video: Temperament</p> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div>	<p>https://vimeo.com/103169734</p>
<p>Slide 17</p>	<p style="text-align: center;">Genetic Foundations</p> <ul style="list-style-type: none"> • Two forms of each gene occur at the same place on the chromosomes <ul style="list-style-type: none"> • One from the female and one from the male • Each gene is called an allele • Alleles from both parents are called a homozygous • Alleles that differ are called heterozygous <div style="text-align: center;">  </div>	<p>Let’s take some time to think about the foundations of genetic inheritance</p>
<p>Slide 18</p>	<p style="text-align: center;">Genetic Foundations</p> <ul style="list-style-type: none"> • Heterozygous pairings, dominant-recessive inheritance occurs when one allele affects the child’s characteristics <ul style="list-style-type: none"> • Referred to as dominant • The second allele, which has no effect, is called recessive <div style="text-align: center;">  </div>	<p>Genetic interaction: contain conflicting information; one tall parent, one short parent – child average height</p> <p>Gene-environment interactions: environment the child is exposed to (in utero) and throughout life can impact genes</p>



Slide 19	<p style="text-align: center;">Genetic Foundations</p> <ul style="list-style-type: none"> • Human characteristics and disorders follow the rules of dominant-recessive inheritance • Gene expression: depends on genetic interaction and gene-environmental interactions <hr/> <p style="text-align: center;"> Early Childhood Program Center www.ecpc.org</p>	
Slide 20	<p style="text-align: center;">Genetic Disorders</p> <ul style="list-style-type: none"> • Autosomal Dominant Diseases <ul style="list-style-type: none"> • Huntington disease • Marfan syndrome <hr/> <p style="text-align: center;"> Early Childhood Program Center www.ecpc.org</p>	
Slide 21	<p style="text-align: center;">Genetic Disorders</p> <ul style="list-style-type: none"> • Recessive Diseases <ul style="list-style-type: none"> • Cooley's anemia • Cystic fibrosis • Phenylketonuria (PKU) • Sickle cell anemia • Tay-Sachs disease • Duchenne muscular dystrophy • Diabetes insipidus <hr/> <p style="text-align: center;"> Early Childhood Program Center www.ecpc.org</p>	
Slide 22	<p style="text-align: center;">Genetic Disorders</p> <ul style="list-style-type: none"> • Chromosomal abnormalities can be a cause of developmental delays • Examples <ul style="list-style-type: none"> • Fragile X • Down Syndrome <hr/> <p style="text-align: center;"> Early Childhood Program Center www.ecpc.org</p>	




<p>Slide 23</p>	<p>Environmental Factors: Prenatal and Perinatal Influences on Development</p> <ul style="list-style-type: none"> • Preterm birth/Low birthweight • Maternal health/pregnancy complications • Infectious agents • Environmental Toxins • Maternal substance use • Maternal depression <hr/> 	<p>There are wide varieties of influences that can affect prenatal and perinatal development, and have negative lifelong consequences for the baby. The most common indicators of a negative prenatal influence are low birthweight and/or prematurity</p>
<p>Slide 24</p>	<p>Preterm Birth and Low Birthweight</p> <ul style="list-style-type: none"> • Premature birth: Before 37 weeks gestation – 10.23% of all births • Low birthweight: less than 2500 grams – 8.31% of all births • Rates rising in the US • Associated with increased mortality and developmental delays • Early intervention important to scaffold developmentally appropriate planning using adjusted-age milestones <hr/> 	<p>A developing baby goes through important growth throughout pregnancy, all the way up to the final months and weeks. Premature birth is when a baby is born too early, before 37 weeks of pregnancy. Despite national efforts to prevent premature births, roughly 1 in 10 babies are born too early. The earlier a baby is born, the higher the risk of death or serious disability. Low birthweight accounts for close to 20% of all infant deaths. Babies who survive can have breathing issues, intestinal problems, and bleeding in their brains. Long-term problems may include developmental delay and problems in school. <i>(Facilitator can open “premature birth” to show the group the resources that can be found on the March of Dimes website)</i></p> <p>https://www.marchofdimes.org/mission/prematurity-campaign.aspx</p> <p>There are important ways we can support the needs of premature babies and their families when they come home from the hospital! <i>(Facilitator can access “early intervention” link to create activity around how EI providers can support premature babies and their families)</i></p> <p>https://www.marchofdimes.org/complications/getting-services-for-your-baby-after-the-nicu.aspx</p>



<p>Slide 25</p>	<p>Risk Factors for Prematurity and LBW</p> <ul style="list-style-type: none"> • Maternal Health • Diet • Environmental toxins • Substance use during pregnancy • Infectious agents • Stress and depression • Racial disparities <hr/> 	
<p>Slide 26</p>	<p>Maternal health and pregnancy complications</p> <p>Some health problems that occur before a woman is pregnant, or those that occur while she is pregnant, can have a negative effect on outcomes for both the mother and her baby. These include:</p> <p>Anemia</p> <p>Diabetes</p> <p>Hypertension</p> <p>Infections</p> <p>Obesity and weight gain</p> <hr/> 	<p>Early prenatal care can make the difference between a good birth outcome or a tragic one, It is important for all EI/ECSE providers to promote access to affordable maternal health care as early as possible – even before she is pregnant! (<i>Facilitator may choose to create breakout groups to explore each topic separately, and report back about what they learned about the negative impact of the health condition they learned about</i>)</p> <p>https://www.womenshealth.gov/a-z-topics/iron-deficiency-anemia</p> <p>https://www.cdc.gov/reproductivehealth/maternalinfanthealth/diabetes-during-pregnancy.htm</p> <p>https://www.cdc.gov/bloodpressure/about.htm</p> <p>https://www.womenshealth.gov/pregnancy/youre-pregnant-now-what/pregnancy-complications#4</p> <p>https://www.cdc.gov/obesity/index.html</p>



<p>Slide 27</p>	<p style="text-align: center;">Maternal Diet</p> <ul style="list-style-type: none"> • Adequate nutrition during pregnancy is important to the healthy development of the growing fetus and to the health of the mother • Some nutrients are particularly important during pregnancy, and are best provided in a prenatal supplement in addition to a healthy diet, including folic acid, calcium, and iron <hr/> <p style="text-align: center;"> Early Childhood Program Center www.ecpic.org</p>	<p>Adequate nutrition during pregnancy is important to the healthy development of the growing fetus and to the health of the mother</p> <p>https://health.gov/myhealthfinder/topics/pregnancy/nutrition-and-physical-activity/eat-healthy-during-pregnancy-quick-tips</p> <p>Important to take in adequate nutrients, especially iron, calcium and folic acid, to support the growth of the fetus while maintaining a healthy weight</p> <p>Low levels of folic acid have been associated with fetal neural tube defects</p> <p>Low levels of iron are associated with low birth weight and premature birth, and increased risk of maternal complications</p> <p>Maternal obesity is associated with high blood pressure, preeclampsia, preterm birth, and gestational diabetes</p> <p><i>(Facilitator may access link to provide additional information to the group about nutrition during pregnancy).</i></p> <p>https://www.cdc.gov/ncbddd/folicacid/about.html</p> <p>https://www.cdc.gov/nutrition/infantandtoddlernutrition/vitamins-minerals/iron.html</p>
<p>Slide 28</p>	<p style="text-align: center;">Infectious Agents</p> <p>HIV, CMV, Toxoplasmosis, Listeria, Rubella, and Zika are all known to pose serious threats to the healthy development of the fetus</p> <hr/> <p style="text-align: center;"> Early Childhood Program Center www.ecpic.org</p>	<p>Infectious agents can cause serious birth abnormalities during pregnancy, especially when a mother is exposed to the infection agent in the first trimester. Birth defects like these can be avoided when pregnant women are aware of the presence of these pathogens, and take steps to avoid infection:</p> <p>Group activity: Assign groups to one of the 6 links above and ask them to share</p> <ol style="list-style-type: none"> 1. One surprising fact about the infections agent they read about 2) what the impact on the developing fetus is and 3) what steps could be taken to avoid exposure




		<p>https://www.cdc.gov/hiv/group/gender/pregnantwomen/index.html</p> <p>https://www.cdc.gov/cmrv/</p> <p>https://www.cdc.gov/listeria/risk-groups/pregnant-women.html</p> <p>https://www.cdc.gov/parasites/toxoplasmosis/gen_info/pregnant.html</p> <p>https://www.cdc.gov/rubella/pregnancy.html</p> <p>https://www.cdc.gov/zika/about/index.html</p>
Slide 29	<p style="text-align: center;">Environmental Toxins</p> <ul style="list-style-type: none"> • Environmental toxins in the air, water, and soil pass through the placenta and accumulate in the fetus • Prenatal exposure linked to adverse outcomes • In the US, minority populations are more likely to live in the counties with higher levels of outdoor air pollution, as well as indoor pollutants such as lead and pesticides • Prevention starts when we increase awareness about toxic environmental agents <hr/> <p style="text-align: center;"></p>	<p>Environmental toxins in the air, water and soil can pose risks to the developing fetus in ways that we don't fully understand.</p> <p>Prenatal exposure linked to adverse outcomes for the developing fetus Toxins include: Methyl mercury, lead, pesticides, endocrine disruptors (found in a variety of industrial products, fuels and plastics)</p> <p>In the US, minority populations are more likely to live in the counties with higher levels of outdoor air pollution, as well as indoor pollutants such as lead and pesticides</p> <p><i>(Facilitator may access link to facilitate discussion about the impact of pollution on minority populations. Invite participants to access the toolkit at the link and produce at least one way that they/their agency/state can increase awareness about toxic environmental agents' effect on health: Pediatric Environmental Health - the Toolkit (ucsf.edu)).</i></p> <p>https://peht.ucsf.edu/</p>

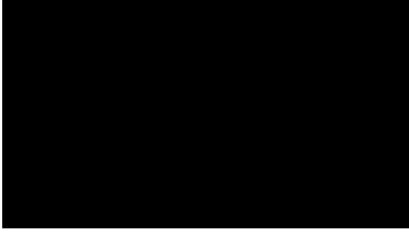
<p>Slide 30</p>	<p style="text-align: center;">Substance Use During Pregnancy</p> <p>Opioid use during pregnancy</p> <ul style="list-style-type: none"> • Increased exponentially over the past decade • Infants chronically exposed to opioids in utero are often born with Neonatal Abstinence Syndrome (NAS) • Long-term opioid use has also been linked to preterm birth, stillbirth, and specific birth defects <hr/> <p style="text-align: center;"> Early Childhood Research Center www.ecpc.org</p>	<p>https://www.cdc.gov/pregnancy/opioids/index.html</p> <p>Depending on the state, infants born with NAS qualify for early intervention services. In addition, infants with NAS are at increased risk of developmental delay.</p> <p>When Part C interventionists are able to connect with families at the very start, they are in a privileged position to meet mothers where they are without judgement - to support their capacity to connect with their baby. This is especially important for babies with lingering symptoms of NAS who may continue to be disorganized and fussy for the first few months at home. <i>(Facilitator may access links for additional information about opioid use during pregnancy and NAS)</i></p> <p>https://pediatrics.aappublications.org/content/pediatrics/146/5/e2020029074.full.pdf</p> <p>https://www.cdc.gov/ncbddd/fasd/facts.html</p>
<p>Slide 31</p>	<p style="text-align: center;">Substance Use During Pregnancy: Alcohol</p> <ul style="list-style-type: none"> • Fetal Alcohol Spectrum Disorders (FASD): variety of disorders that can occur when a pregnant woman drinks alcohol. • Fetal Alcohol Syndrome (FAS) • Alcohol-Related Neurodevelopmental Disorder (ARND) • Alcohol-Related Birth Defects (ARBD) <hr/> <p style="text-align: center;"> Early Childhood Research Center www.ecpc.org</p>	<p>Fetal Alcohol Spectrum Disorders (FASD) is a term used for a variety of disorders that can occur when a pregnant woman drinks alcohol. Symptoms range from mild to severe.</p> <p>Fetal Alcohol Syndrome (FAS): Most severe end of the FASD spectrum and can include: CNS problems, facial differences, and growth problems. People with FAS can have problems with learning, memory, attention span, communication, vision, or hearing.</p> <p>Alcohol-Related Neurodevelopmental Disorder (ARND): Children with ARND can have intellectual disabilities and problems with behavior, learning, impulse control</p> <p>Alcohol-Related Birth Defects (ARBD): Children with ARBD can have problems with the heart, kidneys, or bones or with hearing</p>

<p>Slide 32</p>	<p style="text-align: center;">Stress and Depression</p> <ul style="list-style-type: none"> • Depression occurs at around double the rate for a woman of childbearing age during pregnancy • The effect of depression shares overlap with the impact of high levels of maternal stress. • Associated with higher rates of prematurity <hr/> <p style="text-align: center;"></p>	<p><u>Depression</u> occurs at around double the rate during pregnancy than for the female population of childbearing age at large</p> <p>Early evidence suggests that clinical depression during pregnancy may produce epigenetic changes in the developing fetus</p> <p>The effect of depression shares overlap with the impact of high levels of maternal stress, which are independently associated with both epigenetic changes and higher rates of premature births and low birthweights</p>
<p>Slide 33</p>	<p style="text-align: center;">Social Determinants of Health (SDOH)</p> <ul style="list-style-type: none"> • Conditions in the environments where people are born, live, learn, work, play, worship, and age affect a wide range of health, functioning, and quality-of-life outcomes and risks. <hr/> <p style="text-align: center;"></p>	<p>EI/ECSE practitioners and teachers who work with children with disabilities/delays and their families will always need to consider how environmental systems are active to promote – or constrain – the health and development of the children they work with.</p> <p>We know well that conditions on the environments where children and their families are born, live, work, play, and worship directly influence physical health and well-being.</p> <p>Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [date graphic was accessed], from https://health.gov/healthypeople/objectives-and-data/social-determinants-health</p>
<p>Slide 34</p>	<p style="text-align: center;">Examples: Social Determinants of Health</p> <ul style="list-style-type: none"> • Safe housing, transportation, and neighborhoods • <u>Racism</u>, discrimination, and violence • Education, job opportunities, and income • Access to nutritious foods and physical activity • Polluted air and water • Language and literacy skills <hr/> <p style="text-align: center;"></p>	<p>https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2020/11/RacismInfographic_2020.pdf</p> <p>SDOH also contribute to wide health disparities and inequities. For example, people who don't have access to grocery stores with healthy foods are less likely to have good nutrition. That raises their risk of health conditions like heart disease, diabetes, and obesity — and even lowers life</p>

		<p>expectancy relative to people who do have access to healthy foods.</p> <p>(If desired, the facilitator may access the linked pdf on the slide from the Harvard Center on the Developing Child to facilitate a discussion about how racism can affect child development)</p> <p>Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [date graphic was accessed], from https://health.gov/healthypeople/objectives-and-data/social-determinants-health</p>
Slide 35	<p style="text-align: center;">Social Determinants of Health: 5 Domains</p> <ol style="list-style-type: none"> 1. Economic stability 2. Education access and quality 3. Health care access and quality 4. Neighborhood and built environment 5. Social and community context <div style="text-align: center;">  </div>	<ul style="list-style-type: none"> • Many people face challenges and dangers they can't control — like unsafe neighborhoods, discrimination, or trouble affording the things they need. This can have a negative impact on health and safety throughout life. • (read bullets) <p>Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [date graphic was accessed], from https://health.gov/healthypeople/objectives-and-data/social-determinants-health</p>
Slide 36	<p style="text-align: center;">1. Economic Stability</p> <ul style="list-style-type: none"> • Child health and development outcomes are directly impacted by conditions of economic instability • Unemployment, underemployment • Low income despite multiple jobs • Limited access to food, healthcare, housing <div style="text-align: center;">  </div>	<p>In the United States, 1 in 10 people live in low-resourced communities, and many people can't afford things like healthy foods, health care, and housing. People with disabilities, injuries, or conditions like arthritis may be especially limited in their ability to work. In addition, many people with steady work still don't earn enough to afford the things they need to stay healthy. Research shows up that when children grow up in conditions of economic instability, they face a much higher likelihood of academic, physical and mental health problems over the lifespan.</p> <p>Healthy People 2030, U.S. Department of</p>

		<p>Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [date graphic was accessed], from https://health.gov/healthypeople/objectives-and-data/social-determinants-health</p>
<p>Slide 37</p>	<p style="text-align: center;">2. Education Access and Quality</p> <ul style="list-style-type: none"> • Limited access to good schools • Racial and disability bias in the educational environment • Inadequate educational supports and accommodation for children with disabilities • Vulnerability to social discrimination like bullying and exclusion <hr style="width: 50%; margin: 10px auto;"/> 	<p>Children from low-income families, children with disabilities, and children who routinely experience forms of social discrimination — like bullying — are more likely to struggle in school. They’re also less likely to graduate from high school or go to college. This means they’re less likely to get safe, high-paying jobs and more likely to have health problems like heart disease, diabetes, and depression.</p> <p>Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [date graphic was accessed], from https://health.gov/healthypeople/objectives-and-data/social-determinants-health</p>
<p>Slide 38</p>	<p style="text-align: center;">3. Health Care Access and Quality</p> <ul style="list-style-type: none"> • 1 in 10 people in US do not have health insurance • Parents and caregivers lack access to care • The rate of uninsured children has increased rapidly since 2017 • Developmental trajectories are impacted when children do not have access to health care <hr style="width: 50%; margin: 10px auto;"/> 	<p>About 1 in 10 people in the United States don’t have health insurance. People without insurance are less likely to have a primary care provider, and they may not be able to afford the health care services and medications they need for themselves and for their children.</p> <p>https://ccf.georgetown.edu/2020/10/08/children-uninsured-rate-rises-by-largest-annual-jump-in-more-than-a-decade-2/</p> <p>Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [date graphic was accessed], from https://health.gov/healthypeople/objectives-and-data/social-determinants-health</p>

<p>Slide 39</p>	<p>4. Neighborhood/Built Environment</p> <ul style="list-style-type: none"> • High rates of violence • Unsafe air and water • High levels of noise pollution • Limited transportation to access health, food, education resources <p style="text-align: center;"> Early Childhood Program Center www.ecpc.org</p>	<p>Many families in the United States live in neighborhoods with high rates of violence, unsafe air or water, and other health and safety risks. Racial/ethnic minorities and people with low incomes are more likely to live in places with these risks. In addition, some people are exposed to things at work that can harm their health, like secondhand smoke or loud noises.</p>
<p>Slide 40</p>	<p>5. Social and Community Context</p> <ul style="list-style-type: none"> • Unsafe neighborhoods • Discrimination • Low access to community support • Positive relationships increase family capacity to care for their children <p style="text-align: center;"> Early Childhood Program Center www.ecpc.org</p>	<ul style="list-style-type: none"> • Many parents and caregivers face challenges and dangers they can't control — like unsafe neighborhoods, discrimination, or trouble affording the things they need. In addition, children of color may be seen as “bad” based on ongoing societal biases. This can have a negative ongoing impact on health throughout life. <p>Positive relationships at home, at work, and in the community can help reduce these negative impacts. But some children whose parents are in jail and adolescents who are bullied — may be on their own without the protection they need to be safe, and to develop in a healthy way. Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [date graphic was accessed], from https://health.gov/healthypeople/objectives-and-data/social-determinants-health</p>
<p>Slide 41</p>	<p>Bringing It All Together To Support Healthy Development</p> <ul style="list-style-type: none"> • Brain Wonders: Nurturing Healthy Brain Development from Birth • How do the concepts in this video inform the essential components of intervention for children with delays and disabilities as well as for typically-developing children? <p style="text-align: center;"> Early Childhood Program Center www.ecpc.org</p>	<p>https://www.zerotothree.org/resources/156-brain-wonders-nurturing-healthy-brain-development-from-birth</p> <p>https://vimeo.com/103169425</p> <p>How do the concepts in this video inform the essential components of intervention for children with delays and disabilities as well as for typically-developing children?</p>

Slide 42	<p>Brain Wonders: Nurturing Healthy Brain Development from Birth</p>  <p style="text-align: center;">E C P C Early Childhood Program Center www.ecpcta.org</p>	<p>https://vimeo.com/103169425</p>
Slide 43	<p style="text-align: center;">Group Activity</p> <ul style="list-style-type: none"> • Read Maria's Story • Identify the genetic, prenatal, environmental, and experiential influences you see as important this case • What social determinants of health may be active for this family? What strengths do you see? Needs? <p style="text-align: center;">E C P C Early Childhood Program Center www.ecpcta.org</p>	<p>https://ecpcta.org/wp-content/uploads/sites/2810/2021/02/Case-Study-Maria-Professionalism.pdf</p> <p>How do the concepts in this video inform the essential components of intervention for children with delays and disabilities as well as for typically-developing children?</p> <p>Facilitator can use the discussion and resources text on the right side of the document to support discussion about the social determinants of health, the barriers that exist for this family to access safe housing, physical and mental health care services. Discuss the high likelihood that their family is exposed to higher than average environmental toxins due to the fact that they live in an under-resourced community.</p> <p>Family is likely very worried about their undocumented immigration status and may not trust the school and EI providers, at least at first. Language is a significant barrier as well.</p> <p>Strengths – this family works hard not only to provide for their family, but to be present for them for protection and learning while they are together. They want the best for their children.</p>

Slide 44	<p style="text-align: center;">References and Resources</p> <ul style="list-style-type: none"> • Berk, L.E., (2019). Child Development, 10th Edition. Pearson. • Centers for Disease Control and Prevention: Preventing Adverse Childhood Experiences Violence Prevention Injury Center CDC • Nelson, C.A., Bhutta, Z.A., Harris, N.B, Danese, A., & Samara, M., (2020). Adversity in childhood is linked to mental and physical health throughout life. <i>British Medical Journal</i>, 371:m3048; http://dx.doi.org/10.1136/bmj.m3048 <hr/> <p style="text-align: center;"> Early Childhood Prevention Center www.ecpic.org</p>	<p>https://www.cdc.gov/violenceprevention/aces/fastfact.html</p> <p>https://www.bmj.com/content/371/bmj.m3048</p>
Slide 45	<p style="text-align: center;">References and Resources</p> <ul style="list-style-type: none"> • Patrick, S.W., Barfield, W.D., & Poindexter, B.B., (2020). Neonatal Opioid Withdrawal Syndrome, <i>Pediatrics</i>; Vol. 146(5) e2020029074; DOI: 10.1542/peds.2020-029074 <hr/> <p style="text-align: center;"> Early Childhood Prevention Center www.ecpic.org</p>	<p>https://pediatrics.aappublications.org/content/pediatrics/146/5/e2020029074.full.pdf</p>
Slide 46	<p style="text-align: center;">References and Resources</p> <ul style="list-style-type: none"> • March of Dimes: Getting services for your baby after the NICU (marchofdimes.org) • Zero to Three: Temperament https://www.zerotothree.org/espanol/temperament • Office on Women’s Health: Iron-deficiency anemia Office on Women’s Health (womenshealth.gov) <hr/> <p style="text-align: center;"> Early Childhood Prevention Center www.ecpic.org</p>	<p>https://www.marchofdimes.org/complications/getting-services-for-your-baby-after-the-nicu.aspx</p> <p>https://www.zerotothree.org/espanol/temperament</p> <p>https://www.womenshealth.gov/a-z-topics/iron-deficiency-anemia</p>
Slide 47	<p style="text-align: center;">References and Resources</p> <ul style="list-style-type: none"> • Diabetes During Pregnancy Maternal Infant Health Reproductive Health CDC • High Blood Pressure Symptoms and Causes cdc.gov • Pregnancy complications Office on Women’s Health (womenshealth.gov) • Overweight & Obesity CDC <hr/> <p style="text-align: center;"> Early Childhood Prevention Center www.ecpic.org</p>	<p>https://www.cdc.gov/reproductivehealth/maternalinfanthealth/diabetes-during-pregnancy.htm</p> <p>https://www.cdc.gov/bloodpressure/about.htm</p> <p>https://www.womenshealth.gov/pregnancy/you-re-pregnant-now-what/pregnancy-complications#4</p> <p>https://www.cdc.gov/obesity/index.html</p>

<p>Slide 48</p>	<p style="text-align: center;">References and Resources</p> <ul style="list-style-type: none"> • Pregnant Women, Infants, and Children Gender HIV by Group HIV/AIDS CDC • Cytomegalovirus (CMV) and Congenital CMV Infection CDC • People at Risk - Pregnant Women and Newborns Listeria CDC • CDC - Toxoplasmosis - General Information - Pregnant Women • Pregnancy and Rubella CDC • About Zika Virus Disease Zika virus CDC <hr/> <p style="text-align: center;"> Early Childhood Personnel Center www.ecpca.org</p>	<p>https://www.cdc.gov/hiv/group/gender/pregnantwomen/index.html</p> <p>https://www.cdc.gov/cmrv/</p> <p>https://www.cdc.gov/parasites/toxoplasmosis/gen_info/pregnant.html</p> <p>https://www.cdc.gov/listeria/risk-groups/pregnant-women.html</p> <p>https://www.cdc.gov/rubella/pregnancy.html</p> <p>https://www.cdc.gov/zika/about/index.html</p>
<p>Slide 49</p>	<p style="text-align: center;">References and Resources</p> <ul style="list-style-type: none"> • Office of Disease Prevention and Health Promotion: Eat Healthy During Pregnancy: Quick tips - MyHealthfinder health.gov • University of California San Francisco, Pediatric Environment Health Toolkit: Pediatric Environmental Health - the Toolkit (ucsf.edu) • Opioid Use During Pregnancy CDC <hr/> <p style="text-align: center;"> Early Childhood Personnel Center www.ecpca.org</p>	<p>https://health.gov/myhealthfinder/topics/pregnancy/nutrition-and-physical-activity/eat-healthy-during-pregnancy-quick-tips</p> <p>https://www.cdc.gov/pregnancy/opioids/index.html</p> <p>https://peht.ucsf.edu/</p>
<p>Slide 50</p>	<p style="text-align: center;">References and Resources</p> <ul style="list-style-type: none"> • Basics about FASDs CDC • Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [date graphic was accessed], from https://health.gov/healthypeople/objectives-and-data/social-determinants-health <hr/> <p style="text-align: center;"> Early Childhood Personnel Center www.ecpca.org</p>	<p>https://www.cdc.gov/ncbddd/fasd/facts.html</p> <p>https://health.gov/healthypeople/objectives-and-data/social-determinants-health</p>
<p>Slide 51</p>	<p style="text-align: center;">References and Resources</p> <ul style="list-style-type: none"> • Brain Wonders: Nurturing Healthy Brain Development from Birth • ZERO TO THREE • Early Childhood Personnel Center Website: Cross disciplinary case studies, Maria's story Case-Study-Maria-Professionalism.pdf (ecpcta.org) <hr/> <p style="text-align: center;"> Early Childhood Personnel Center www.ecpca.org</p>	<p>https://www.zerotothree.org/resources/156-brain-wonders-nurturing-healthy-brain-development-from-birth</p> <p>https://ecpcta.org/wp-content/uploads/sites/2810/2021/02/Case-Study-Maria-Professionalism.pdf</p>