# Participant Guide: Child Development: Understanding How Genes and Environment Interact

# Objectives

<ul> <li>Session 1</li> <li>Identify genetic predisposition and define interplay between genes and environment.</li> </ul>	<ul> <li>Session 2</li> <li>Understand the stages of prenatal brain development and environmental risk factors during this period.</li> </ul>
<ul> <li>Session 3</li> <li>Identify critical periods of the postnatal brain development and impact of early risk factors.</li> <li>Define the concepts of adverse experiences and toxic stress in early development and their impact on brain development.</li> <li>Utilize the understanding of brain development to build successful programs for children.</li> </ul>	<ul> <li>Session 4</li> <li>Plan ways that child-care settings can partner with families to prevent the impact of the toxic stress on child development.</li> </ul>

Know	Want to Know/Learn	Learned

# Session 1

Mn Department of Health website – Diseases and Conditions Identified in Children

http://www.health.state.mn.us/divs/cfh/topic/diseasesconds/index.cfm

**Assignment for Session 2:** Practice your new knowledge from this session in your place of work between sessions. Write a few reminders between sessions about your work experiences and to be prepared to share what you practiced and learned at the beginning of the next session.

## Session 2

#### Additional Information about Fetal Alcohol Syndrome Disorder

National Organization on Fetal Alcohol Syndrome https://www.nofas.org/

American Academy of Pediatrics Fetal Alcohol Spectrum Disorders Program <u>https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/fetal-alcohol-spectrum-disorders-toolkit/Pages/default.aspx</u>

**Assignment for Session 3:** Practice your new knowledge from this session in your place of work between sessions. Write a few reminders between sessions about your work experiences and to be prepared to share what you practiced and learned at the beginning of the next session.

Notes:

## Session 3

Adverse Childhood Experiences Study (ACES) and prevalence and impact among MN's children Excellent summary information can be found at <u>http://www.health.state.mn.us/divs/cfh/program/ace/</u>

#### **Assignment for Session 3:**

- Pick a child in their child care setting and observe what activities support language development in the brain.
- Think and list five more activities that will support brain development in this area.
- Use the Zero to Three website on brain development as a resource for your assignment. *Zero to Three* at <u>https://www.zerotothree.org/</u>

Notes:

## Session 4

Notes: