Polysubstances use may include, but is not limited to, combinations of:
- nicotine
- alcohol
- marijuana
- opiates
- methamphetamine
- cocaine
- heroin
- synthetics

Exposure to Polysubstances during pregnancy/infancy or extreme stress, neglect, abuse, and/or trauma changes the developing brain of the child.

- The brain stem is over-activated: leading to magnified fear and/or anger response.
- The cerebellum & limbic system is under-activated: leading to withering of emotional control.
- The cortex is under-activated: leading to diminished learning, memory, and higher order thinking.
- Downshifting under threat and stress, the brain shuts down layer by layer-
  - “Go Reptilian!”

Polysubstance Use Affects More Than Pregnancy

- Egg
- Sperm
- In-utero
- Environmental Exposure
- Lifestyle & Parenting
- Nutrition
- Medical
- Dietary
- Attachment
- Self-Regulation
- Executive Functioning
- Developmental Skills
Effects on Brain and Central Nervous System Development:

- Disruption in migration of cells - movement along branches
- Shorter dendrites - difficulty carrying information
- Reduced myelin insulating the neurons - slower information processing and less white matter
- Impaired cell survival

Observations of Children in Psychiatric Residential Treatment who are likely polysubstance exposed

1. Non-categorical delays: across many life domains
2. Autism-like symptoms: communication, socialization, behavior
3. Psychotic symptoms: disorganized thinking, personality changes, limited insight, social impairments
4. Childhood schizophrenia symptoms: auditory/visual hallucinations, paranoia, delusions, bizarre behavior
5. “Children with no skin!”
6. “FAS on steroids!”

Polysubstance Exposure Impacts:

- Working Memory and Information processing
- Provide extra processing time
- Offer visual cues/multisensory learning

- Face-emotion labeling
  - Requires direct instruction, repetition & overlearning
  - Prerequisite for empathy skills

- Focus/attention in emotional situations
  - Use coping/calming techniques before presenting verbal information or directives

POLYSUBSTANCE EXPOSURE IS CHARACTERIZED BY LONG RANGE UNDER-CONNECTIVITY

- Impacts integration of skills important for language, social skills, and sensory-motor.

- Impacts frontal lobe executive functions:
  - Working memory
  - Planning and organization
  - Self-regulation
  - Perspective taking
  - Empathy and compassion
Processing Coping Skills are designed to help you work through thoughts and feelings you have about challenging situations. Some suggestions:

- Make a coping box
- Write poetry
- Use a journal
- Use a feelings thermometer
- Create a playlist to listen to

Social Emotional Learning Competencies

“"This isn’t something else on the plate; this is our plate. Once you get the plate established, everything else flourishes.”"