Principles of Substance Abuse Prevention for Early Childhood: A Research-Based Guide (In Brief)

Published in 2016, this document summarized information on principles of prevention for use in the early years of a child’s life (prenatal through age 8). This information was detailed in the full report, Principles of Substance Abuse Prevention for Early Childhood (above). For the latest information on prevention research, visit NIDA’s prevention webpage.

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This brief guide highlights seven evidence-based principles of prevention for use in the early years of a child’s life (prenatal through age 8), developed from research funded in full or in part by NIDA. This guide also lists evidence-based prevention and intervention programs that work with different populations and age groups.

Introduction

Substance use, misuse, and addiction are preventable disorders that interfere with normal healthy functioning. They contribute to physical and behavioral health problems, injuries, lost income and productivity, and family problems. While most substance use begins in the teen years, there are known biological, psychological, social, and environmental factors that contribute to the risk, starting even before birth. This creates opportunities to intervene very early in a child’s life to prevent substance use disorders and, along with them, a range of other related problems.

*Principles of Substance Abuse Prevention in Early Childhood: A Research-Based Guide (In Brief)* highlights seven evidence-based principles of prevention for use in the early years of a child’s life (prenatal through age 8), developed from research funded in full or in part by the National Institute on Drug Abuse (NIDA). This guide also lists evidence-based prevention and intervention programs that work with different populations and age groups. More detailed information can be found in the original online-only publication on the NIDA website at [www.nida.nih.gov/earlychildhood](http://www.nida.nih.gov/earlychildhood).

**Evidence based** refers to programs or principles developed using scientific methods and subjected to rigorous testing. Testing often includes an intervention group and a control group to ensure effectiveness is due to the program, not some other factor. Strategies that are not evidence based may seem to make sense but are not supported by data.
Principles

- **Principle 1 (Overarching Principle): Intervening early in childhood can alter the life course trajectory in a positive direction.** 1, 2 Substance abuse and other problem behaviors that are seen in the teen years have their roots in developmental changes that occur earlier — as far back as before birth. While prevention can be effective at any age, it can have particularly strong effects when applied early in a child’s life.

The following specific principles collectively provide support for Principle 1.

- **Principle 2: Intervening early in childhood can both increase protective factors and reduce risk factors.** 3, 4 Risk factors are qualities of children and their environments that place them at greater risk of behavioral problems and substance abuse. Protective factors are qualities that help young people cope and adapt to reduce risks. All children have a mix of both. Interventions focus on building protective factors.

- **Principle 3: Intervening early in childhood can have positive long-term effects.** 5, 6 Early childhood interventions help set the stage for positive self-regulation and other protective factors that ultimately reduce the risk of drug use.

- **Principle 4: Intervening in early childhood can have effects on a wide array of behaviors.** 7–12 Risk factors for substance use may also put a child at risk for other problems such as mental illness or trouble at school. This is why intervening to prevent one undesirable outcome may have a broad effect, improving the child’s life trajectory in multiple ways.

- **Principle 5: Early childhood interventions can positively affect children’s biological functioning.** 13, 14 Research has shown that interventions in childhood can improve physical health as well as behavioral and psychological outcomes.

- **Principle 6: Early childhood prevention interventions should target the proximal environments of the child.** 15, 16 The family environment is the most influential environment in early child development, so parents and primary caregivers are a major focus of many early childhood interventions. 17, 18 But as a child grows older, he or she typically spends more and more time out of the home, perhaps attending day care, then attending preschool followed by elementary
Interventions targeting different age groups and different types of problems should focus on the most relevant context(s) — the home, school, day care, or a combination.

- **Principle 7:** Positively affecting a child’s behavior through early intervention can elicit positive behaviors in adult caregivers and in other children, improving the overall social environment. Behavioral changes in children and the adults who interact with them can influence each other. Improving the child’s family or school environment can, over time, cause the child’s social behavior to become more positive and healthy (or pro-social). This, in turn, can lead to more positive interactions with others and improve the social environment as a result.

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### Research-Based Early Intervention Substance Abuse Prevention Programs

NIDA-supported research over the past 3 decades has led to evidence-based early intervention and substance abuse prevention programs that span the prenatal period, infancy and toddlerhood (0 to 3 years), preschool (ages 3 to 6), and the transition to elementary school (ages 6 to 8). The programs listed in this section are arranged by developmental period. Within each age range, programs are presented according to level of prevention — universal, selective, and tiered.

More detailed information on each of these programs can be found in the original publication on the NIDA website at [www.drugabuse.gov/earlychildhood](http://www.drugabuse.gov/earlychildhood).

- **Universal:** for everyone in the population regardless of risk — for example, all children in a preschool or first-grade classroom or all children in a community.
- **Selective:** for groups of children who are at risk due to some factor they have in common — for example, children with behavior problems or those living in a high poverty or crime area or in foster care.
- **Tiered:** targets more than one level of risk — for example, a universal intervention that also screens for more severe problems and risks and provides additional services for those in need.
## NIDA - Funded Early Interventions

### Prenatal/Infancy and Toddlerhood

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<th>Universal Programs</th>
<th>Description</th>
<th>Target Population</th>
<th>Context</th>
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<tr>
<td>Durham Connects(^{23})</td>
<td>Postnatal nurse home-visiting program</td>
<td>Mother</td>
<td>Family</td>
</tr>
<tr>
<td><a href="http://www.childandfamilypolicy.duke.edu">www.childandfamilypolicy.duke.edu</a></td>
<td></td>
<td>Father (when possible)</td>
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<td></td>
<td></td>
<td>Child</td>
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<thead>
<tr>
<th>Selective Programs</th>
<th>Description</th>
<th>Target Population</th>
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<tbody>
<tr>
<td>Early Steps, Family Check Up(^{6})</td>
<td>Supports families with young children (ages 2 through 5) who may have stress due to income or other family issues</td>
<td>Mother</td>
<td>Family</td>
</tr>
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<td></td>
<td></td>
<td>Child</td>
<td></td>
</tr>
<tr>
<td>Family Spirit(^{24})</td>
<td>Prenatal and early childhood (up to age 3) home visitation for American Indian teen mothers and their children</td>
<td>Mother</td>
<td>Family</td>
</tr>
<tr>
<td><a href="https://www.jhsph.edu/research/affiliated-programs/family-spirit/">https://www.jhsph.edu/research/affiliated-programs/family-spirit/</a></td>
<td></td>
<td>Child</td>
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<tr>
<td>Nurse Family Partnership(^{25})</td>
<td>Prenatal and infancy home visitation program for young first-time mothers from low socio-economic backgrounds and their children through age 2</td>
<td>Mother</td>
<td>Family</td>
</tr>
<tr>
<td><a href="http://www.nursefamilypartnership.org">www.nursefamilypartnership.org</a></td>
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<td>Father (when possible)</td>
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### Preschool
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<th>Selective Programs</th>
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<th>Target Population</th>
<th>Context</th>
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| **Multidimensional Treatment Foster Care for Preschoolers**<sup>26</sup>  
[www.oslc.org](http://www.oslc.org)  
[www.oslccp.org](http://www.oslccp.org) | Parenting training and access to resources for foster parents and therapy for 3- to 6-year-old children in foster care who are referred from the child welfare system by their caseworkers                                                                 | Foster family  
Child | Family  
School |

Transition to Elementary School
<table>
<thead>
<tr>
<th>Universal Programs</th>
<th>Description</th>
<th>Target Population</th>
<th>Context</th>
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</thead>
<tbody>
<tr>
<td><strong>Caring School Community Program</strong>&lt;sup&gt;27&lt;/sup&gt;</td>
<td>Family and school intervention for children making the transition to elementary school to strengthen students' &quot;sense of community&quot;</td>
<td>School</td>
<td>School</td>
</tr>
<tr>
<td><a href="https://www.collaborativeclassroom.org/programs/caring-school-community/">https://www.collaborativeclassroom.org/programs/caring-school-community/</a></td>
<td></td>
<td>Teacher</td>
<td>Family</td>
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<tr>
<td></td>
<td></td>
<td>Family</td>
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<td></td>
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<td>Child</td>
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<tr>
<td><strong>Classroom-Centered Intervention</strong>&lt;sup&gt;28&lt;/sup&gt;</td>
<td>Multi-component, first-grade intervention that enhances teachers’ behavior management and instructional skills through the “Good Behavior Game” and provides enhanced reading and math curricula</td>
<td>Class-room</td>
<td>School</td>
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<tr>
<td><a href="http://www.jhsph.edu/prevention">www.jhsph.edu/prevention</a></td>
<td></td>
<td>Child</td>
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<tr>
<td></td>
<td></td>
<td>Family</td>
<td></td>
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<tr>
<td><strong>Linking the Interests of Families and Teachers</strong>&lt;sup&gt;29&lt;/sup&gt;</td>
<td>Multi-component intervention for students in the 1st and 5th grades in schools in districts with high levels of juvenile delinquency to improve school and family environments while reinforcing stronger links between the two</td>
<td>Class-room</td>
<td>School</td>
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<tr>
<td><a href="http://www.partnersforourchildren.org">www.partnersforourchildren.org</a></td>
<td></td>
<td>Child</td>
<td>Family</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family</td>
<td></td>
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<td></td>
<td></td>
<td>Classroom</td>
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<tr>
<td><strong>Raising Healthy Children</strong>&lt;sup&gt;4&lt;/sup&gt;</td>
<td>School- and home-based intervention targeting children in grades 1 through 12 with teacher education, parent workshops, and child programs along with support</td>
<td>Family</td>
<td>School</td>
</tr>
<tr>
<td><a href="http://www.sdrg.org">www.sdrg.org</a></td>
<td></td>
<td>Child</td>
<td>Family</td>
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<tr>
<td></td>
<td></td>
<td>Classroom</td>
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</table>
| SAFEChildren\(^{15}\)  
[https://curry.virginia.edu/faculty-research/centers-labs-projects/youth-nex](https://curry.virginia.edu/faculty-research/centers-labs-projects/youth-nex) | Intervention developed specifically for 1st graders from urban, disadvantaged, or low-income neighborhoods that includes multi-family meetings and tutoring in school | ▪ Family  
▪ Child | ▪ School  
▪ Family |
| Seattle Social Development Project\(^{10}\)  
[https://clinicaltrials.gov/ct2/show/NCT04075019](https://clinicaltrials.gov/ct2/show/NCT04075019) | Intervention for elementary school children that includes parenting classes, including drug abuse prevention, and teacher training to improve students’ academic performance and social skills | ▪ School  
▪ Parent / Family  
▪ Child | ▪ School  
▪ Family |

<table>
<thead>
<tr>
<th>Selective Programs</th>
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</thead>
</table>
| Early Risers "Skills for Success" Risk Prevention Program\(^{30}\)  
[www.oslc.org](http://www.oslc.org) | Intervention for elementary school-aged children ages 6 to 10 at higher risk for serious conduct problems based on risk factors such as exposure to stressful life experiences and/or early aggressive and disruptive behaviors | ▪ Parent  
▪ Child | ▪ School  
▪ Family |
| Kids in Transition to School\(^{31}\)  
[www.oslc.org](http://www.oslc.org) | Designed for children in the foster care system as they enter school by giving caregivers skills for helping with the transition and becoming involved in the child’s schooling, including therapy, and support groups | ▪ Child       | ▪ School        |
<table>
<thead>
<tr>
<th>Tiered Programs</th>
<th>Description</th>
<th>Target Population</th>
<th>Context</th>
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</thead>
</table>
| **Fast Track Prevention Trial for Conduct Problems**[^32]  
www.fasttrackproject.org  
www.channing-bete.com  
https://epis.psu.edu/  
https://pathsprogram.com/ | Comprehensive intervention delivered in grades 1 through 10 including a universal program for all students and selective interventions for high-risk children showing aggression at home and school, as assessed in kindergarten | ■ Family  
■ School  
■ Classroom  
■ Child | ■ School  
■ Family  
■ Community |
| **Incredible Years**[^16]  
www.incredibleyears.com | Multi-component prevention and treatment intervention for use in day care, preschool (2 to 5 years), and early primary grades (6 to 8 years) | ■ Family  
■ Child  
■ Classroom | ■ School  
■ Family |
| **Positive Action**[^33]  
www.positiveaction.net | Multi-component, school-based, social-emotional and character development program that includes programs for the classroom, school, families, and the community | ■ Family  
■ School  
■ Classroom  
■ Child | ■ School |
| **Schools and Homes in Partnership**[^34]  
www.ori.org | Intervention for children in kindergarten through 3rd grade who have aggressive behavior or reading problems that includes parent training, social behavior intervention, and reading instruction | ■ Parent  
■ Child | ■ School  
■ Family |
Selected References


