SAMHSA’s Enhancing State Prevention Systems for Children & Youth: National Webinar Series Presents:

"Fostering Healthy Parenting Practices and Promoting Child Well-Being through Evidence-Based Community Approaches: The Triple P System & the CDC Legacy for Children™ Model"

- Ron Prinz, PhD
- Ruth Perou, PhD
- Susanna Visser, MS

July 9, 2013
The Triple P System as a Prevention and Intervention Strategy with Parents

Ron Prinz, Ph.D.
Professor and Director
Parenting & Family Research Center
University of South Carolina

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• Consultant to:
  – Centers for Disease Control and Prevention
  – Triple P International (joint venture with the University of Queensland)
Why we do what we do

- You are champions for children, parents, and families
- Triple P provides a framework and a vehicle that unites this effort
- The central goal is the well-being of children and families, rather than Triple P itself
Triple P—Positive Parenting Program

• Triple P
  – Multi-level system for parenting/family support
  – Programs of increasing intensity
  – Multiple formats and delivery modalities
• Spans across the continuum:
  – Promotion of child well-being
  – Prevention of child social, emotional and behavioral problems; child maltreatment
  – Early intervention
  – Treatment
• Utilizes existing workforce in many service sectors
• Developed by Matt Sanders and colleagues at the University of Queensland (UQ owns Triple P)
Outline

1. Common features of validated parenting interventions
2. Distinctive features of Triple P
3. What does it mean to adopt a population approach?
4. What about child maltreatment?
5. Ways to get more out of a population approach
Parental influence is pervasive and continuing

Influences key risk and protective factors

- Language, communication
- Social skills and peer relationships
- Emotion regulation
- Coping with adversity and life transitions
- School achievement
- Physical health and well being
- Sustained attention and problem solving

Reduced risk social, emotional and health problems
Evidence-based parenting interventions

- Reduce/prevent mental, emotional and behavioral problems in early childhood
- Promote readiness at school entry
- Reduce prevalence of child maltreatment (a major risk factor for youth substance abuse, etc.)
- Reduce risk for later adverse outcomes (e.g., academic difficulties, substance abuse, teen parenthood, delinquency)
- More generally
  - Reduce parent/family risk factors
  - Strengthen family protective factors
Empirically validated parenting interventions

• often seek similar outcomes
• share several features in common

• Triple P is no exception
Theoretically driven

• Based on empirically derived theories about:
  – Child development
  – Family interaction
  – Developmental psychopathology and resilience
  – Intervention concepts and processes

• Conceptual rationale for the intervention does not come out of thin air
Theoretical foundations for Triple P

- Social learning/social-interactional theory
- Cognitive behavioral principles
- Developmental psychopathology
- Attribution theory
- Public health concepts
- Family systems
- Communication theory
- Attachment theory
Action focused

• More than just talk
• Parents actually do things during the intervention
• Activities in the session
• Activities at home (“homework”)
Problem-solving oriented

- Address specific challenges faced by the parent
- Work towards solutions to identified problems
- At the same time building on child and family strengths
Specific parenting strategies

• Parenting strategies:
  – Specific
  – Concrete
  – Practical

• Parents can add these parenting practices to their repertoire

• Example: differential attending
  [in Triple P, involves planned ignoring, positive attention]
Collaborative goal setting

• Parent sets the goals for the child and the family
• Intervention staff member provides guidance but works collaboratively
Consultative rather than prescriptive

• Intervention staff member is a consultant rather than the “boss”
• For example, in Triple P the intervention staff member
  – Provides a menu of parenting strategy options
  – Gains a mandate from the parent (i.e., gets parent’s permission at each step)
  – Emphasizes the self-regulatory model
Adoption of a positive frame

- Non-judgmental about the parent
- Looking to build on parent and child competencies
- Emphasis on expanding positive child behaviors to displace problematic behaviors
- Optimistic, encouraging, patience in the delivery of programs
Lexicon for Triple P

- **Level**: refers to the degree of intervention intensity; there are 5 levels of Triple P
  - Delivery format: how Triple P programming is conveyed
    - Media-based (Level 1)
    - Brief and flexible consultation (Levels 2 & 3)
    - Large group “parenting seminar” (Level 2)
    - Small group program (Levels 3 & 4)
    - Individual family in clinic or home visitation (Levels 4 & 5)
    - Intensive online delivery (Level 4)
- **Variant**: versions of Triple P for specific populations or circumstances
  - children with developmental disabilities (Stepping Stones Triple P)
  - parents of teens (Teen Triple P)
  - childhood obesity (Lifestyles Triple P)
  - Infants and prenatal (Baby Triple P)
  - divorcing families (Transitions Triple P)
Triple P System

Breadth of reach

Intensive family Intervention

Broad focused parenting skills training

Narrow focus parenting skills training

Brief parenting advice

Media and communication strategy

Intensity of intervention

Level 5

Level 4

Level 3

Level 2

Level 1
Core Principles of Positive Parenting


1. Safe engaging environment
2. Responsive learning environment
3. Assertive discipline
4. Reasonable expectations
5. Taking care of self
17 Specific Parenting Skills

- Promoting a positive relationship
  - Brief quality time
  - Talking to children
  - Affection

- Encouraging desirable behavior
  - Praise
  - Positive attention
  - Engaging activities

- Teaching new skills and behaviors
  - Modeling
  - Incidental teaching
  - ASK, SAY, DO
  - Behavior charts

- Managing misbehavior
  - Ground rules
  - Directed discussion
  - Planned ignoring
  - Clear, calm instructions
  - Logical consequences
  - Quiet time
  - Time out

Specific skills
In practical terms

• Triple P aims to help parents reduce reliance on coercive and counter-productive parenting, such as:
  – Yelling or berating
  – Spanking/hitting
  – Humiliating
  – Criticizing in harsh language
  – Disregarding unsafe situations
  – Inflicting pain or discomfort
Triple P aims to increase positive parenting, such as:

- Setting clear and simple rules (including limit setting)
- Recognizing and celebrating child behaviors (small steps, goal achievement, effort, prosociality)
- Parent staying calm, focused, facilitative
- Frequent use of engaging interactions, affection
- Replacing criticism with positive parenting strategies (differential attending, constructive coaching, modeling)
Self-regulatory framework

- Parental Self-regulation
- Self-management
- Self-efficacy
- Personal agency
- Self-sufficiency

Minimally Sufficient Intervention

Reduced need for support
Collaborate with parents in ways that empower them

Ultimate goal is parental independence and autonomy

Parent decides on goals, strategies and values

Parent has plan, monitors, evaluates outcome and revises accordingly

Provide parent with support and advice to “minimally sufficient” degree needed
Principle of minimal sufficiency

• Match the amount of intervention to solve the problem
• Every parent does not need a long-duration intervention
• Provide only the amount of prompting and assistance necessary for the parent to catch on to the parenting strategy
Other distinctive features

- Media strategy
  - Intervention in its own right (Level 1 Triple P)
  - Validated, well linked to other levels of Triple P
- Adopts approach that seeks to normalize parenting and family support, and diminishes stigma
- Designed as a public health strategy meant to achieve population impact
Targeting

- Prevalence reduction
- Cumulative impact on the whole population
- Changes at the level of individual families
  - are necessary but not sufficient
  - need to be part of a larger, public health strategy
Broad coverage

• Universal access
  – Every parent doesn’t have to receive services
  – But any parent who wants or needs parenting and family support should be able to access it

• Incorporating
  – Prevention
  – Early intervention
  – Treatment
  – Promotion of child well-being
Targeting multiple outcomes

- Prevention of child maltreatment
- Reduction of coercive parenting more generally
- Prevention and treatment of children’s (early) behavioral and emotional problems
- Promotion of child well-being
  - addressing common parenting challenges
  - strengthening parental competence and confidence
  - improving child adjustment at school entry
The benefits for children

- Conduct problems
- Risk of substance abuse
- ADHD
- Internalizing problems
- Peer relationship problems
- School problems
- Heath related behavior

- Improved social and emotional skills
- Positive relationships with parents, siblings, and peers
- Enhanced emotion regulation
- School readiness
Creation of multiple access points

To give parents easy access:

• Multidisciplinary
  – Service providers from many disciplines who serve families
  – No discipline “owns” or controls Triple P

• Utilize the existing workforce

• Train large numbers of service providers

• Involve many settings where parents have routine contact
Cost effective for dissemination

- Streamlined system
- Financially viable to extend across the population
- Takes advantage of efficiencies associated with pursuing several outcome goals with the same intervention system
Media strategies

Why should individual practitioners care about Triple P media strategies?

• Parental receptivity
  – Normalize seeking of parenting/family support
  – De-stigmatize participation
  – Stimulate interest and action

• Validate positive parenting

• Reinforce practitioners

• Extend practitioners’ work
Different types of evidence
140 evaluation studies on Triple P

- Meta-analysis: 8 studies
  - 17,577 families included
  - 460 Researchers
  - 129 Institutions
  - 14 Countries
  - 43% Independent evaluations
  - 25% developer led

- N=1: 13 studies

- Population trials: 3 studies

- Effectiveness/Service-based studies: 46 studies

- RCTs: 70 studies
How effective is Triple P?
Child and parent effects
N=17,577 families

Parenting practices overall $d=0.57$

Child outcomes overall $d=0.45$

Role of practitioner is critical

- Triple P is a framework and comprehensive set of tools
- Training in Triple P is in-service (not pre-service)
  - Triple P not meant to replace basic disciplinary training
- Triple P is NOT a cookbook
- “Manual with a brain”
- Don’t leave communication and analytical skills at the door
- Beyond training:
  - Self-regulation of professional development
  - Peer support networks (to learn from peers)
“It doesn’t work with my families”

• The “It” (Triple P) is a framework with many different “ITS”

• Same thing is sometimes spoken in schools:
  – “Some children cannot learn”
  – “I cannot get through to this child”

• When faced with challenging situations:
  – Focus heavily on process
  – Utilize supervisory and peer support resources
  – Simplify the initial goals
  – Make sure that a mandate from the parent has been achieved
Peer support networks

- Within and across agencies
- Diversity of client populations is good
- Collective problem-solving
- Expanding your repertoire
Parents as consumers

• Let parents in the community know about Triple P
• Involve parents and parent advocates in community planning committees
• Document parental opinions about Triple P
Triple P as value added

• Triple P is not meant to supplant other kinds of services
• Child trauma treatment
• Substance abuse treatment of parents
• Housing, health care, and sustenance needs
Prevention of child maltreatment
Adverse Childhood Experiences (ACE) study

• Demonstrates
  – Long-term, corrosive impact of childhood adverse life events on health and development

• Underscores need for
  – Prevention of adverse childhood experiences
  – Promotion of child well-being
Prevention: Two-fold focus

1. Mitigate impact of childhood adverse events

2. Prevent adverse experiences during childhood

For parenting intervention/support--

How do we achieve both goals concurrently?
1. Mitigation of adverse events

• Improve implementation of evidence-based programs and practices

• Examples:
  – Trauma-focused CBT
  – Pathways Triple P
  – SafeCare
  – Other evidence-based mental health treatment strategies
2. Prevent adverse experiences

• Several of the adverse events link to parent/family variables
• Improvement of parenting is critical
• Need:
  – a broad strategy to reach many parents
  – public health approach
Applying a public health strategy to prevention of child maltreatment and other adverse experiences

• Rationale
• What is required
• Is it possible?
• Is it cost prohibitive?
Main goal of prevention

Prevalence reduction
Rationale

1. Parenting difficulties are widespread
Underestimation of child abuse

- Des Runyan and colleagues conducted a random household telephone survey of parents.
- Self-reported incidence of physical abuse: 40 times greater than official records.

Widespread parenting practices

• Our own random household telephone survey of 3,600 parents of children under 8 years old
• 49% reported heavy reliance on coercive discipline strategies for child misbehavior
• 10% reported they spanked using an object on a frequent or very frequent basis
Key argument

• Child maltreatment is severely detrimental to child development
• Problematic parenting is a continuum much broader than official abuse
• Goal is to improve child well-being for many children

Child maltreatment prevention, then, requires broad reach
1. Problematic parenting is widespread
2. Need to sidestep the issue of stigma
Institute of Medicine underscores:

• Endorsing a population health perspective
• Providing families with easy access to evidence-based preventive interventions
• Minimizing stigma
Diminish stigma by

- Normalizing parent support
- Adopt intervention content appealing to broad range of parents
- Avoid compartmentalizing parent support:
  - example: “Hi, I’m with the Child Abuse agency—can I be of help?”
  - instead: “Every parent faces challenges. What are your concerns as a parent?”
Rationale

1. Problematic parenting is widespread
2. Need to sidestep the issue of stigma
3. Creation of efficiencies by addressing multiple goals through parenting/family intervention
Address multiple goals with the same parenting intervention system:

• Prevention of children’s social, emotional and behavioral problems
• Prevention of risk for academic failure, substance abuse, and delinquency
• Promotion of readiness for school
• and of course, prevention of child maltreatment
1. Problematic parenting is widespread
2. Need to sidestep the issue of stigma
3. Creation of efficiencies by addressing multiple goals through parenting/family intervention
4. Draw on a variety of strategies to reach wide segments of the population
Make use of

• Multiple access points (organizations, agencies, settings)
• Variety of formats to match parental preferences
• Media strategies that do not require substantial professional time
What is required for a public health approach
Requirements

- Interventions with broad reach
- Tapping multiple formats and modalities (including media strategies)
- Multiple levels of programming intensity
- Make use of the principle of minimum sufficiency
- Drawing on evidence-supported parenting strategies
- Make use of existing workforces
- Cost effective and efficient
Is a public health approach to child maltreatment prevention possible?
Example

• The Triple P system of parenting and family support interventions
• Designed to build towards achieving community-wide impact

• Another example: The Purple Crying Program for prevention of shaken baby syndrome
U.S. Triple P System
Population Trial
Basic thrust

• Place randomization trial (counties randomly assigned to Triple P versus usual programming)
• Disseminate Triple P system to entire communities
  – Making use of existing workforces in several venues
  – Implement all levels of the Triple P system, including media intervention
• Reduce prevalence of child-maltreatment related indicators
• Eligible population: 85,000 families with at least one child birth to 8 years of age
• Direct delivery of Triple P for approximately 14% of those households
Significant effects

Counties receiving Triple P showed:

1. Lower rates of child out-of-home (foster care) placements
2. Lower rates of hospital-treated maltreatment injuries
3. Slowed growth of substantiated maltreatment
Is a public health approach cost prohibitive?
Benefit-cost analysis (child welfare)

Washington State Institute for Public Policy
directed by health economist Steve Aos

- Examined Triple P benefits and costs in the context of the child welfare system
- Triple P system (all five levels)
- Benefit to Cost Ratio (return on one dollar investment)

$6.06
Conclusion

• Two-pronged approach:
  – Use evidence-based programs to mitigate trauma
  – Adopt public health approach for prevention

• Public-health approach to parenting/family support
  – Blended prevention combining universal, selected, and indicated prevention, as well as treatment
  – De-stigmatized approach to achieve multiple goals with the same system of parenting interventions
  – Strive for reduction in the prevalence of childhood adverse events and mental health problems
References


Dissemination of Triple P:

Triple P America

contact.us@triplep.net

or

Contact Kat Green, TPA Operations Director

kat@triplep.net 803.451.2278 ext 205
Legacy for Children™
A Public Health Parenting Program

Ruth Perou, PhD and Susanna Visser, MS

SAMHSA and NASMHPD present:
Enhancing State Prevention Systems for Children and Youth:
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CDC Mission

Collaborating to create the expertise, information, and tools that people and communities need to protect their health – through health promotion, prevention of disease, injury and disability, and preparedness for new health threats.

CDC seeks to accomplish its mission by working with partners throughout the nation and the world to

• Monitor health
• Detect and investigate health problems
• Conduct research to enhance prevention
• Develop and advocate sound public health policies
• Implement prevention strategies
• Promote healthy behaviors
• Foster safe and healthful environments
• Provide leadership and training
The Public Health Model

Define the problem
Identify risk and protective factors
Develop and test prevention strategies
Assure widespread adoption

Adapted from Mercy et al. (1993)
Childhood Poverty as a Childhood Risk Factor

- In 2009, 15 million US children were living in poverty

- These children...
  - are 1.3 times more likely to experience learning disabilities and developmental delays, and
  - exhibit more behavioral and peer social problems

  ...than their more advantaged peers.
Childhood Poverty as a Life Course Risk Factor

- Poverty impacts widen and accumulate over time

- Adolescents and adults who grew up in poverty:
  - engage in more risk behaviors
  - have lower academic performance
  - complete 2 fewer years of school, and
  - earn less than half as much

...as those who were more advantaged in childhood.
Pathways of Poverty’s Influence

- Poverty impacts parents’ ability to provide a safe, stable nurturing environment through:
  - higher levels of neighborhood chaos and violence
  - lower community physical and social resources, and
  - challenges to caregiver mental health.

- BUT, positive parenting is a powerful protective factor
1994: Emerging literature on effects of poverty on child cognitive outcomes

1994-1998: CDC meetings with other Fed agencies and external experts

Prevailing models of early intervention:
- high-quality preschools
- behavioral parent training
- home visits

Conclusion: need a public health approach to improve outcomes for children in poverty by promoting positive parenting practices
**Legacy for Children™ Model**

- **Group-based parenting program that includes:**
  - Weekly group sessions
  - Community-building
  - One-on-one time

- **Intervention goals are to increase:**
  - Parental investment of time/energy
  - Mothers’ sense of community
  - Sensitive, responsive mother-child interactions
  - Mothers’ guidance of children’s emotional and behavioral regulation
  - Mothers’ facilitation of cognitive and verbal development
All children deserve an opportunity to reach their full potential.

Parents can successfully parent, regardless of life circumstances.

Promoting positive parenting requires time and is a dynamic process.

Legacy mechanisms:
- Mother-child interactions
- Promoting sense of community
- Enhancing self-efficacy

Mothers can have a significant, positive influence.

Mother-child relationship is more important than any one experience.

Mothers’ commitment & sense of responsibility is important.

Mothers can be positive parents best when supported.

There are multiple pathways to positive mother-child relationships.

Promote maternal responsibility, investment, & devotion of time and energy.

Promote responsive, sensitive mother-child relationships.

Support mothers as guides to their children’s behavioral & emotional regulation.

Promote mothers’ sense of community.

Promote mothers’ facilitation of children’s verbal and cognitive development.

Intervention Activities
- Mother and mother-child group sessions
- 1-on-1 sessions
- Community events and activities
<table>
<thead>
<tr>
<th></th>
<th>UCLA</th>
<th>Miami</th>
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<tbody>
<tr>
<td><strong>Child Age</strong></td>
<td>Prenatal to 3 years</td>
<td>6 weeks to 5 years</td>
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<tr>
<td><strong>Session Periodicity</strong></td>
<td>Weekly for 10 weeks with ~4 week breaks</td>
<td>Weekly</td>
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<tr>
<td><strong>Group Size</strong></td>
<td>~10 mothers</td>
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<tr>
<td><strong>Curriculum</strong></td>
<td>Developed based on <em>Legacy</em> goals</td>
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<tr>
<td></td>
<td>Sequential and developmentally ordered</td>
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<td></td>
<td>Multiple coverage of the same topic (varies by developmental stage)</td>
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<tr>
<td><strong>Session Length</strong></td>
<td>2 hours</td>
<td>1.5 hours</td>
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<tr>
<td><strong>Parent-Child Component</strong></td>
<td>Alternating mother only with mother-baby days</td>
<td>Children involved in a component of every session</td>
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<tr>
<td><strong>Community Building</strong></td>
<td>FUN Club</td>
<td>Building Sense of Community</td>
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<tr>
<td><strong>Session Structure</strong></td>
<td><em>Session Topic</em> <em>(rotating component)</em> FUN Club</td>
<td><em>(each session)</em> Building Sense of Community Main Session Topic Parent-Child Time Together</td>
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</table>

*Legacy* refers to a program focused on early childhood development.
Legacy in Action
Before the Group Convenes

- Staff are carefully selected, trained, & supported
  - 4 day pre-implementation training
  - On-going training and technical assistance

- Intervention site is prepared
  - Space, toys, supplies, food preparation, program management tools, etc.

- Groups are formed

- Preparation for a specific group begins weeks earlier
  - Review content, address logistics, on-going retention efforts
Legacy in Action – Miami
The Day of the Group

- Participant arrival and welcome
- Part 1: Building Sense of Community
- Part 2: Main Session Topic
- Part 3: Parent-Child Time Together
  - Closing activities
    - Circle time and closing song
  - Departure
  - Complete session summaries (monitoring tools)
A Sample Session from Year 2

- Legacy for Children™ Year 2, Session 19: Getting Through the Day with Your Toddler
- Parent handout:
  - Handling Toddler Behavior
- Supporting Video Clip: From Parents Action, I Am Your Child
  - Dr. T. Berry Brazelton:
  - “Discipline: Teaching Limits with Love”
Handling Toddler Behavior

Prevention and routines
➢ Use routines throughout the day. Your children will know what to expect and they will be less likely to misbehave.

Ignore
➢ Choose what issues are important to deal with. Pick your battles.

Give choices
➢ Give your child choices that you are ok with. For example, when your child is thirsty let your child choose between milk and juice and not soda when they really want soda.

Redirect
➢ Switch children’s attention and give your child a toy or book to focus on.

Encourage
➢ Say things like, “Good Job!” and “Way To Go!”

Model good behavior
➢ Children learn from YOU. If you don’t want them to do something, then you shouldn’t do it either.

Use humor
➢ Laugh sometimes instead of getting angry.

Use songs and chants to make routines and things they have to do fun
➢ Singing always makes things fun! Remember the Brush Your Teeth and Clean Up songs.

Give toddlers words for their feelings
➢ Teach children how to express what they are feeling.


OUTCOME EVALUATION AND RESULTS UP TO AGE 5
Evaluation Methods

- **Two RCTs: Los Angeles and Miami**
  - Intervention begins prenatal or at birth, ends age 3 or 5
  - ~300 mothers at each site
  - Randomized 3 intervention to 2 comparison
  - Extensive efforts to minimize attrition

- **Multi-method Data Collection**
  - Qualitative and quantitative
  - Mother report and observation
  - Process, implementation & fidelity
  - Mother and child outcomes
  - Costs
## Legacy Outcome Assessment Domains

<table>
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<tr>
<th>Domain</th>
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<td>Maternal Constructs</td>
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Inclusion criteria:

- \( \geq 18 \) years of age
- live within the catchment area
- have custody of the target child
- speak English
- have at least some prenatal care,
- have income < 200% of the poverty level

574 mothers

- Mean age = 24 years
- 57% African-American or Black non-Hispanic
- 25% Hispanic
- 78% unmarried
- Median income <\$20,000/year
Legacy™ Evaluation: Descriptives

- Site differences
  - Older mothers
  - Higher education
  - % married
  - % Hispanic
  - % employed
  - % home ownership

- No demographic differences by group at either site
Behavioral and Socioemotional Outcomes

- **Brief Infant-Toddler Social and Emotional Assessment (BITSEA)**
  - Competence Score, Problem Score, and “High Screen”
  - at 12 months

- **Devereux Early Childhood Assessment (DECA)**
  - Protective Factors and Behavioral Concerns
  - at 24, 36, 48 and 60 months

- **Strengths and Difficulties Questionnaire (SDQ)**
  - Conduct Problems, Hyperactivity, Emotional Symptoms, Peer Problems, and Prosocial Behavior
  - at 48 and 60 months
Intent-to-Treat (ITT) Analyses

- **Logistic regression**
  - Previously validated cutoffs
  - Odds ratios and 95% confidence intervals
  - Likelihood of developmental delays and challenges by group

- **Effect sizes**
  - Chinn’s method for converting odds ratios to effect sizes analogous to Cohen’s $d$

- **Longitudinal analyses via GEE**
  - DECA scales at 24, 36, 48 and 60 months
Longitudinal ITT Analysis

Miami: DECA Behavioral Concerns

- Y2: Intervention
- Y3: Intervention
- Y4: Intervention
- Y5: Intervention

Comparison
2000 vs. 2010 SDQ Cutoffs

Los Angeles: Hyperactivity, 60 Months

- Hyperactivity (Goodman 2000 cut-off): 8.6%
- Hyperactivity (Ullebo 2011 cut-off): 11.3% (Intervention), 26.7% (Comparison)
- Comparison: 42.3%
Results Summary

- **In Los Angeles,**
  - Marginal effect on “high screen” at 12 months
  - Marginal effect on socioemotional delays at 60 months
  - Hyperactivity at 60 months

- **In Miami,**
  - Behavior problems at 24 months
  - Socioemotional delays at 48 months
  - Mean behavior problems from 24-60 months
# Results in Context

<table>
<thead>
<tr>
<th>Program or Model</th>
<th>Child Outcome</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Legacy™</em> Miami</td>
<td>Behavior problems (age 5)</td>
<td>.32</td>
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<tr>
<td><em>Legacy™</em> Miami</td>
<td>Socioemotional competence (age 5)</td>
<td>.00</td>
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<tr>
<td><em>Legacy™</em> Los Angeles</td>
<td>Behavior problems (age 5)</td>
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<td>Early Head Start</td>
<td>Aggressive behavior (age 3)</td>
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<tr>
<td>Infant Health &amp; Development Program</td>
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<td>Behavioral parent training (meta analysis)</td>
<td>Externalizing behaviors</td>
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<td>Behavioral parent training (meta analysis)</td>
<td>Social skills</td>
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<tr>
<td>Family support programs (meta analysis)</td>
<td>Socioemotional outcomes</td>
<td>.22</td>
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</tbody>
</table>
Implications

- These results translate into…
  - 16% fewer children with behavioral concerns at 24 months (Miami)
  - 9% fewer with socioemotional delays at 48 months (Miami)
  - 11% fewer meeting either criteria at 12 months (LA)
  - 8% fewer with socioemotional delays at 60 months (LA)
  - 16% fewer meeting 2011 hyperactivity cutoff (LA)

- Early child behaviors and delays predict later…
  - Clinical levels of behavior problems
  - Developmental disabilities
  - Longer-term social, academic and economic outcomes
Contributions and Considerations

- **Strengths of Legacy™**
  - Public health approach
  - Early intervention
  - Rigorous evaluation
  - Two sites

- **Limitations of these analyses**
  - Parent-reported outcomes
  - Study attrition
  - Program participation/dose not analyzed here
  - Generalizability of samples
Evaluation

- Results and process reports forthcoming
  - Child cognitive outcomes
  - Mother-child interaction outcomes
  - Methods and curriculum papers
  - Economic evaluation
- Long-term follow-up (grade 3)

Dissemination

- Curricula and training available to the public
- Feasibility study with ACF/Head Start
- Exploring feasibility implementation pilots with SAMHSA, AAP, HRSA (Healthy Start)
Feasibility Lessons Learned

- **Head Start infrastructure provides an opportunity to build on and support an existing community**
  - Support of leadership is critical
  - Implementation should follow the natural timing of the center’s programs

- **Legacy** may complement other parent engagement efforts and is relevant to this population

- Technical assistance is valued

- **Legacy** mothers are building their self-efficacy
  - Education/jobs
  - Maternal feedback
More Information on Legacy

- **Legacy website**
  - [http://www.cdc.gov/ncbddd/childdevelopment/legacy.html](http://www.cdc.gov/ncbddd/childdevelopment/legacy.html)

- **Papers**

- **Child Development website**
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- **Original Legacy Staff**

  ...and all of the *Legacy* families.
Thank you!
Questions? Please contact:
Ruth Perou, PhD: RPerou@cdc.gov

For more information please contact Centers for Disease Control and Prevention
1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

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