Delinquency Prevention and Early Intervention for Pima County Children Ages 0-6

Juvenile Services Coordinating Council
Tucson, Arizona

Report and Recommendations
March 14, 2000

This report was developed with support from the Flinn Foundation, St. Luke’s Charitable Health Trust and TMC HealthCare
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Tera’s Story

Tera came into the Dependency system at age two years. The initial case report described Tera as filthy, lice infested and exhibiting a generalized fear of all men. Tera was placed in foster care. When she initially came into the system, she was not seen by a physician or a psychologist. Tera finally was seen by a physician for a cough and cold about three months after her removal to foster care. Tera at age three began acting out sexually with the family dog that resided in the foster home. Shortly after that incident Tera was moved...she was moved some twelve times between her second and fifth birthday. Tera was never evaluated for sexual abuse indicators, Tera never received a thorough medical exam, and no one had taken the time to provide a comprehensive staffing to evaluate Tera’s life and its impact on her psychological and emotional state.

By age six Tera was demonstrating difficult to manage behaviors in her classroom and continued to act out sexually. During her sixth year of life she told her caseworker that her new foster parents had been physically and sexually abusing her. She was moved to another foster home. By her seventh birthday she was placed in an adoptive home. By her eighth birthday she was back in the foster care system and was labeled as a long-term foster care case.

At age eight Tera was again placed back into the foster care system. This time she was with a family who fought for mental health services. To some degree they were successful. For the first time Tera was attending counseling and things were going reasonably well. The foster family asked if they could adopt Tera and by age ten she was an official part of a family.

At age twelve Tera began to skip school and was picked up by the police for shoplifting and curfew violations. At age thirteen she began to hang out with a “gang” at school. Tera graduated to smoking cigarettes and using drugs. Before her fourteenth birthday her adoption had disrupted. Her family was no longer able to control her. She was violent, rageful and had to be hospitalized in a locked care facility because she was found to be a danger to herself. Tera was regularly cutting her wrists and thighs. Tera continued to come to the attention of the police department and the probation department.

Before her fifteenth birthday she had been picked up for possession, prostitution and auto theft. Tera now had a probation officer, a mental health case manager, and a child welfare worker assigned to her. She had graduated from foster care and adoptive placements. Tera now would reside in facilities with much higher levels of security and care management.

Source: Case history from Pima County Model Court (Tera is a pseudonym)
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Delinquency Prevention and Early Intervention for Pima County Children Ages 0-6

Executive Summary

Pima County youth face many challenges: poor prenatal care, neglect and abuse, domestic violence, poverty, and substance abuse and its exposure. As adults we can help young people and our community at large by applying our knowledge in a systematic and collaborative way.

Our Charge: We, the members of the Juvenile Services Coordinating Council, came together with one goal—to reduce the number of children in Pima County who become juvenile delinquents.

To develop strategies to accomplish this goal, we commissioned this study to:

- Develop a set of indicators for children at risk of becoming juvenile delinquents;
- Identify populations of children ages 0-6 in Pima County who are at risk of delinquency;
- Identify prevention programs that are nationally recognized as being effective with this age group;
- Develop outcome measures for programs and services; and
- Develop an action agenda for the Council and the community to support programs and services for young children and their families to accomplish the goal of reducing juvenile delinquency.

We chose to focus on the youngest and most at-risk children (rather than older children having a record of delinquency), based on new knowledge of prevention, child well-being and development. This choice brought us to look carefully for indicators of risk that have been used to design effective prevention programs. Pima County and Tucson demography and community indicators suggest that increasing cohorts of children will enter the prime years for delinquent behavior. Girls as well as boys may be violent, truant, and self-destructive in larger numbers if we do not apply the lessons of earlier "crime waves" associated with increases in youth population. We must work for prevention.

We identified the best practices (national and local) and Model Programs for implementation in Pima County using criteria of strong research design, replicability, cost and cost benefit, sustained effect, evidence of preventive or deterrent effect, and ease of implementation.

We linked research and programs to indicators at community and family levels in a Matrix to guide decision and action.

We assembled a Resource Text, to further substantiate the needs of Pima County children, and the rationale in research and best practices for interventions.

We invite your inspection and comments on the Report and Resource Text and look forward to joining with you in action to help our most at-risk children.
Why Ages 0-6

What the Literature Tells Us\(^1\): Basing Action in Knowledge and Experience

The link between early childhood and prenatal experience, serious pre-school problem behaviors and a high risk of juvenile delinquency are becoming clear. Several decades-long studies completed in this country and overseas have established links between observed behavior and physiology or neurology, social events, changes in child development, and even change in various medical markers. We understand some of the mechanics of how heredity might play a role in long-term antisocial behavior.

These works give us clues of why some tactics have worked and others have not.

First, antisocial behavior has deep roots in the make up of human beings. There are clear issues of heritability and changes in neurophysiology associated with antisocial behaviors.

Second, antisocial behavior has a chain of causation that can be influenced by prenatal events, postnatal experiences, early childhood circumstances and school-age events.

Third, antisocial behavior is malleable. Humans have accumulated a large reserve of knowledge about how to change the life course of a child which might result in either competence or antisocial outcomes.

Fourth, antisocial behaviors are often an adaptation to certain conditions. These behaviors make sense from a biological or evolutionary perspective, though the victims of such behavior may be harmed or we as society may feel outrage. This helps us understand why early sexual maturity, teen pregnancy, multiple partners, substance abuse and other behaviors happen in clusters.

**Too many children in Pima County may become delinquent if we do not do our best.** Much attention has been placed on the behavior and actions of juvenile delinquents, and many of us are concerned about the violence that has occurred in many communities around the country, including our own. To prevent delinquency, and especially violent delinquent acts, we must address factors in the family and community which impact the child and his or her early development.

\(^1\) Good reviews of these findings can be found in the literature such as Flannery & Huff (eds.), *Youth Violence: Prevention, Intervention and Social Policy* (American Psychiatric Press, 1999) or in Rutter, Giller and Hagell (eds.), *Antisocial Behavior by Young People* (Cambridge University Press, 1998). Issues regarding the physiological markers can be found in such academic works as Adrian Raine, *Crime as a Developmental Psychopathology* (Academic Press, 1999) or Debra Niehoff (The *Biology of Violence* (Plenum, 1999).
We want every child in Pima County to have a good start. When our youngest children do not get a good start they are more at risk of:

- making poor decisions as adolescents
- living on the streets
- becoming teen parents
- getting involved in violent relationships
- failing in schools and at jobs
- becoming a perpetrator or victim of crime
- developing mental health problems
- and abusing drugs, alcohol and tobacco.

As children, they are at high risk of delinquent behavior. As adults, they become inadequate parents whose children repeat the cycle of dependency and delinquency.

**Prevention is not free, but it costs less than delinquency.** Delinquency costs the general public. Our citizens may become victims of crime or live in fear of crime. They pay for increased policing, court costs and high incarceration rates. The juveniles involved pay with losses of their own—loss of freedom and the pursuit of happiness. The children of these juveniles will pay a price as well.

We have identified several groups of our youngest children who are in danger. The first group are the children who find themselves pulled out of bed at night or separated from their families by violence or neglect to become wards of the court—the dependency cases. These are the children who need a court appointed special advocate.

The second group is made up of children whose anger, stress and hopelessness erupt in violent and aggressive behavior in pre-school. Child and Family Resources has developed a program to train teachers and caregivers to work with these troubled children.

Then there are children who lose their parents for long periods of time to jail or prison, leaving them in the care of the courts or of elders in the family. These children of incarcerated parents need support if they are to stay out of the juvenile or adult corrections system.

Perhaps even more at risk, because they may not be identified to any of the systems, are the thousands of local children growing up in households where domestic violence and substance abuse occur frequently or with severity.

A fifth identified group is the young siblings of chronic truants and their families.

There are thousands of these children in Pima County. They and their families need intensive support and interventions, or these children will become the delinquents of the future. Based on a careful review of what is known locally and nationally, we selected the groups of children in most critical need.
This report contains descriptions of the programs and services nationally recognized as the best practices for working with children and families. In addition, by developing policy and service coordination based on local and national expertise, we can help children develop the skills they need to grow up to become productive and healthy members of our community.

There are solutions. We have some excellent programs in Pima County and Tucson that could be expanded to help these children. New programs and policy need to be developed based on new research. We need to work together to enhance cooperation and improve services for children.

We know more kids will grow to productive adulthood if we do our best-- provide safety, nurturing, love, and early learning. All service providers and court workers can recall children, like Tera, who slipped through their fingers—but might not have if they had worked more collaboratively and effectively in assessment, coordination of data, and service provision.

All of Pima County's youngest residents deserve a good start -- tender caretakers, health care adequate to their needs, lives free of alcohol abuse and illegal drugs, a safe home and hope for themselves and their families. When children don't get what they need to grow up healthy and to develop their full potential, all of us in Pima County pay the price.

Using What We Know

Research on individual factors are summarized into several tables as follows. These reflect individual child and family factors and behaviors, which must be considered in developing prevention and early intervention strategies and programs for this age group.

In the subsequent section of the report, we identify and summarize community and social indicators predictive of poor child outcomes. These community indicators of risk can leave children like Tera vulnerable for victimization and delinquent behavior if we do not act to ameliorate them.

Finally, we put all of this together and link the indicators with the best program practices into a Matrix that supports our Action Agenda.

Early prevention can work if we address these dynamics; we have Model Programs (described here in outline, p.22-23) that alter the trajectory of serious antisocial behavior.

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2 The accompanying Resource Text includes a book chapter by Embry and Flannery (1999) which provides a more comprehensive review of the literature and its meaning in terms of prevention, intervention and social policy issues related to the scientific discoveries.
The following tables reflect individual child and family factors and behaviors, which must be considered in developing prevention and early intervention strategies and programs for this age group.

1) **Health Factors**

<table>
<thead>
<tr>
<th>Child Attributes</th>
<th>Rationale for Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ History of physical trauma, including TBI (traumatic brain injury), and sexual abuse</td>
<td><em>Prenatal exposure to tobacco is linked to lifetime risk of serious antisocial behavior, possibly because of direct effects on the limbic system of the brain. These effects may be more durable than exposure to cocaine, per data from the Denmark Birth Registry. (8.7% of 1997 Tucson births were to women who smoked during pregnancy.)</em></td>
</tr>
<tr>
<td>♦ Delayed development</td>
<td><em>Early brain injury (from intentional injuries by caretakers shaking or hitting) is a consistent pattern among juvenile serious offenders.</em></td>
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<tr>
<td>♦ Physiological indicators, e.g., heart rate, EEG.</td>
<td><em>Very low heart rate and very high heart rate predict different types of antisocial behavior, as much as a decade or more later. The heart rate (low rate) data are proxy measures for sensation seeking risk marker or trauma exposure and reactive aggression (high rate).</em></td>
</tr>
<tr>
<td>♦ Family history of substance use (alcohol, tobacco, controlled substances, inhalants, etc.)</td>
<td></td>
</tr>
</tbody>
</table>

2) **Social Competencies**

<table>
<thead>
<tr>
<th>Child Attributes</th>
<th>Rationale for Action</th>
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</thead>
<tbody>
<tr>
<td>♦ Aggressive behavior</td>
<td><em>Early aggressive behavior is one of the best-documented, easily measurable predictors of lifetime antisocial behavior. Early aggression often results in peer and adult rejection.</em></td>
</tr>
<tr>
<td>♦ Suspended, expelled, or denied access to enrollment in preschool or elementary school</td>
<td><em>Earlier precursors of aggression include inability to soothe, poor imitation of sociable behaviors, and over stimulation to reinforcement.</em></td>
</tr>
<tr>
<td>♦ Lack of soothing in response to caregiving</td>
<td><em>The child frequently lacks positive behaviors or competencies that recruit peer or adult attention and connection. (e.g., child bids poorly to join play, rarely compliments others, has difficulty following instructions, has little humor, has inappropriate responses to pain or injury, et al.)</em></td>
</tr>
<tr>
<td>♦ Reciprocal imitation</td>
<td></td>
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<tr>
<td>♦ Responsiveness to reinforcement</td>
<td></td>
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<tr>
<td>♦ Age appropriate achievement of social/developmental milestones</td>
<td></td>
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</tbody>
</table>
3) Behaviors of Concern

<table>
<thead>
<tr>
<th>Child Attributes</th>
<th>Rationale for Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Aggressive</td>
<td>The pattern of early aggressive behavior has continuity to more serious, negative behaviors during late childhood or early adolescence.</td>
</tr>
<tr>
<td>♦ Bullying, cruel</td>
<td>A pattern of intense negative behaviors present around age 10 years or earlier with aggressive behavior on the playground coupled with other measures, is highly predictive of the child committing serious crimes before age 15, based on longitudinal studies.</td>
</tr>
<tr>
<td>♦ Destructive to property</td>
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<tr>
<td>♦ Explosive, threatening</td>
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<tr>
<td>♦ Poor impulse control</td>
<td></td>
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<tr>
<td>♦ Withdrawn and/or aggressive behavior</td>
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<tr>
<td>♦ Non-compliant</td>
<td></td>
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<tr>
<td>♦ Intentionally cruel</td>
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4) Cognitive/Emotional Factors

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<thead>
<tr>
<th>Child Attributes</th>
<th>Rationale for Action</th>
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<tbody>
<tr>
<td>♦ Emotional immaturity</td>
<td>Child development studies have revealed useful markers of long-term antisocial behavior that do not come readily to mind. Ex: children on a trajectory of problem behavior are not typically responsive to pain. Additionally, they make many cognitive errors in prediction of behavior, cause and effect and are likely to infer negative intent from neutral events.</td>
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<tr>
<td>♦ Inappropriate responses to the pain and suffering of others</td>
<td></td>
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<tr>
<td>♦ Very high or very low pain threshold</td>
<td></td>
</tr>
<tr>
<td>♦ Poor cause and effect predictors</td>
<td></td>
</tr>
<tr>
<td>♦ Prone to cognitive errors</td>
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</tbody>
</table>

5) Individual Family Factors

<table>
<thead>
<tr>
<th>Family Attributes</th>
<th>Rationale for Action</th>
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</thead>
<tbody>
<tr>
<td>♦ History of anti-social behavior among parents</td>
<td>A child’s social, emotional and cognitive competencies emerge in context. Caregivers early interactions “train” the child’s mind to see the world as dangerous or unresponsive or both with adverse effect. Obviously harmful actions can be seen in this light. Maternal depression, however, seems benign, except that the child may fail to learn that his or her behavior produces cause and effect. Factors that are known to affect parent behavior then may affect the child’s development. For example, social isolation increases maternal depression, which, in turn, increases attention to negative child behavior or no attention.</td>
</tr>
<tr>
<td>♦ History of mental illness/maternal depression</td>
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<tr>
<td>♦ Chronic or acute illness of parents as it may affect caregiving behavior</td>
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<tr>
<td>♦ Parental substance abuse</td>
<td></td>
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<tr>
<td>♦ Social isolation</td>
<td></td>
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<tr>
<td>♦ Age of mother</td>
<td></td>
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<tr>
<td>♦ Prior sexual abuse</td>
<td></td>
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<tr>
<td>♦ Domestic violence</td>
<td></td>
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<tr>
<td>♦ Incarcerated parents</td>
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</table>
6) Social Factors

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<tr>
<th>Social Conditions</th>
<th>Rationale for Action</th>
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</thead>
<tbody>
<tr>
<td>♦ High frequency of relocation of housing</td>
<td>These factors have long been the focus of study of sociologists. Because of more careful observations of people in these contexts, we now understand better the way these factors affect actual behavior. For example, lack of employment may reduce the social reinforcement of adult behaviors that in turn affect caregiving. Inadequate multi-family housing may be associated with higher opportunities to witness and copy antisocial behavior.</td>
</tr>
<tr>
<td>♦ Lower income level</td>
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<tr>
<td>♦ Substandard housing</td>
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<tr>
<td>♦ Unemployment</td>
<td></td>
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<tr>
<td>♦ Lack of social support groups</td>
<td></td>
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<tr>
<td>♦ Social isolation</td>
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</tbody>
</table>

No matter what the inborn characteristics, or early or prenatal exposures, each child’s development can be improved by our actions as adults. Similarly, the context for child development in the community can be improved.

In the subsequent section, we identify and summarize community and social indicators predictive of poor child outcomes. These community indicators of risk can leave children like Tera vulnerable for victimization and delinquent behaviors if we do not act to ameliorate them.
To provide a context for assessing the Pima County situation, we looked at national, state and local level indicators of youth delinquency. Traditionally we have focused on arrest rates, truancy rates, etc. among children 11-17. Selecting or developing indicators for children 0-6 requires looking not only at exhibited behaviors, but also at family and social factors which place the children at risk of developing delinquency behaviors as they grow older.

We looked at national indices to help set a local index and to demonstrate seriousness of need. National and state indicators paint a picture of where and how our children live. From these indicators we can set valid and measurable criteria for local program design and policy setting.

### Family Risk Index

**Annie E. Casey Foundation**

Children living in families *with four or more* of the following characteristics are considered "high risk":

- Child is not living with two parents
- Household head is high school dropout
- Family income is below the poverty line
- Child living w/ parent(s) w/o steady, full-time employment
- Family is receiving welfare benefits
- Child does not have health insurance

% of children living in "high-risk" families, AZ: 14%

11,000 Pima County children 0-6 live in “high-risk” families

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### Child at Risk Index

**US Census Department (CENBR/97-2)**

Children living in families *with two or more* of the following characteristics are considered at "high risk":

- **Poverty** -- 21% of US children under age 18 lived in poverty in 1995, in 1970 only 15% lived in poverty; *Arizona: 26% (1999, Kids Count)*
- **Welfare dependence** -- 15% of US children lived in households receiving food stamps or cash assistance
- **Both parents absent** -- in 1996 4% of children lived with neither parent up from 3% in 1970. The number living with grandparents, with neither parent went from 1 million to 1.4 million between 1990 and 1996.
- **One-parent families** -- 28% of US and Arizona children lived in one parent families in 1996 (12% in 1970)
- **Unwed mothers** -- 9% of US children lived with a never-married mother in 1996 (1% in 1970)
- **Parent who has not graduated from high school** -- 19% lived with a parent or guardian who had not graduated from high school; *Tucson, 29% (1999, Kids Count)*
Pima County has 20 percent of the population of the State of Arizona. We collected and analyzed available national research to link Pima County, State, and census data indicators to best practice programs. To prevent our most-at-risk children from becoming delinquent we need to consider current conditions:

- Pima County has 79,605 children between the ages of 0-6 (1996 estimate)
- In Pima County, there are 11,000 children between the ages of 0-6 living with high-risk families per the Casey Index above.³

We identified criminal status or court dependency as undesirable child outcomes.

**Crime or Dependency cases**
- 26.6% juvenile arrest rate in Pima County (percent of the State arrests, Uniform Crime Report, UCR, 1998)
- 17,341 juveniles arrested in Pima County in 1998 (UCR)
- 4,685 juvenile status offender referrals in Pima County in 1998 (curfew, truancy, runaway, tobacco violations) per UCR
- 830.8 runaway juveniles per 100,000 persons in Tucson in 1998, up from 261.2 per 100,000 in 1982 (Tucson Police Department)
- 226 Pima County juveniles transferred to Superior Court in 1998 (per Prop 102-up from 100 in 1996) per UCR
- Pima County has consistently higher juvenile arrest rates for violent crime: 3.6 per 1000 juveniles (Arizona 2.8 per 1000), UCR 1998
- 6,865 children in foster care in Arizona (12/31/98, Children’s Action Alliance)
- 1,250 Pima County child dependency cases (per year); and
- Approximately 11% of dependency cases are dually adjudicated (both dependent and delinquent) in Pima County (average 1,250 cases; 93 on probation, 45 in Department of Juvenile Corrections) per Pima County Model Court

Child outcomes are predicted by core conditions of risk. To affect change in outcomes we must improve core community-level conditions as well as individual/family-level behaviors and health status.

**Parent and Birth Status**
- 40.2% births to unmarried mothers in Tucson, 1997; in Arizona, nearly 38% (28,472); legal paternity will only be established for about one-third of these children (Kids Count)
- 15.6% of total births to Tucson women under twenty in 1997 (Kids Count)
- 2,534 births in 1997 to Tucson women with less than 12 years of education (29% of births, Kids Count)

³ Percent of children living in "high-risk" families, AZ: 14% (In Pima County, over 11,000 children under the age of 6).
Family and Educational Factors
- 3,889 domestic violence injuries in Pima County
- 5,007 other acts of domestic violence
- 13 homicides stemming from domestic violence
  (in 1998, per Southern Arizona Child and Family Advocacy Center Report, 9/99)
- 29% of Tucson births in 1997 were to mothers with less than 12 years of education
  (Kids Count)
- 30.6% of Tucson children live with single/parent families in 1990 (Kids Count)
- 47% of Arizona 4th grade students scored below basic reading level, 1998 (Kids Count)

Poverty
- 26% of Arizona children in poverty (Kids Count 1999)
- 11% Arizona children in extreme poverty (income below 50% of the poverty line)
  per Kids Count 1999
- Number of families in Pima County (1990 Census) w/children <5yrs old below poverty line:
  Married Couple family: 1,550 families
  Male householder (no wife): 523 families
  Female householder (no husband): 1,783 families
- 64% of elementary students in Tucson Unified School District qualify for free or subsidized
  lunches (TUSD, 1998)

Health and Health Care
- 9% of mothers in Tucson received little or no prenatal care in 1994 (7% in Phoenix), per Kids Count
- 11.7% of Pima County babies born pre term <37 weeks gestation (Kids Count, 1999)
- 26% of Arizona two year olds are not immunized (Kids Count 1999)
- 23% of Arizona children without health insurance in 1996 (Kids Count, 1999); US-- 14%
  (Hispanic--29.9% nationally)
- 150 children in Arizona are born each year with Fetal Alcohol Syndrome (FAS): 19.5 per
  10,000 per National Organization of Fetal Alcohol Syndrome)
- 750 Arizona children are born each year with alcohol-related neurodevelopmental disorders
  per FAS Resource Center data (1999)
The impact of these facts becomes evident when we review risk factors affecting the current adolescent population incarcerated in the Arizona Juvenile Corrections system.

### Juveniles Incarcerated in the Arizona Juvenile Corrections System

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Male (n=836)</th>
<th>Female (n=114)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Criminality</td>
<td></td>
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<tr>
<td>- Record of convictions/adjudications within 10 years</td>
<td>19%</td>
<td>17%</td>
</tr>
<tr>
<td>- One or more caregivers and/or siblings currently incarcerated</td>
<td>19%</td>
<td>26%</td>
</tr>
<tr>
<td>History of Abuse/Neglect as a Victim</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Physical, sexual or emotional abuse or neglect alleged</td>
<td>21%</td>
<td>49%</td>
</tr>
<tr>
<td>- Substantiated physical, sexual, emotional abuse or neglect</td>
<td>13%</td>
<td>27%</td>
</tr>
<tr>
<td>Substance Abuse of Caregivers</td>
<td></td>
<td></td>
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<tr>
<td>- Either 1) one caregiver or other adult caregiver; or 2) both caregivers display some alcohol or drug abuse; or 3) one or both adult caregivers display severe alcohol or drug abuse</td>
<td>38%</td>
<td>67%</td>
</tr>
<tr>
<td>Conflict in Home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Domestic violence resulting in the involvement of law enforcement</td>
<td>12%</td>
<td>37%</td>
</tr>
<tr>
<td>Parenting Skills</td>
<td></td>
<td></td>
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<tr>
<td>- One or both caregivers display destructive/abusive parenting</td>
<td>11%</td>
<td>39%</td>
</tr>
</tbody>
</table>

### Using Individual, Family and Community Indicators to Locate Vulnerable Children

Community indicators help us identify groups or sub-populations of children at risk-- they tell us where to look for children at risk, but they do not give us all the information to **identify individual children, assess their level of individual risk** or **individualize appropriate effective intervention**.

As community leaders we wish to help the community's children "at scale". Yet as Tera's case study suggests, it can be more effective to help each child as an individual with unique strengths and vulnerabilities. For this we look to individual and family risk factors and attributes and assessments.

As a guide to future decision-making, we assembled the following matrix to help the readers to integrate the multiple indicators of risk.

The following table is a matrix, *Pulling the Pieces Together*, that can be used by policy makers, program planners and evaluators. The matrix matches the salient child, family, and community factors for the children ages 0-6 who are at highest risk according to the key indicators. The Matrix lists assessment tools, interventions and strategies that are proven best practices, and the outcome measures to be used in assessing effectiveness.

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4 Excerpted from Arizona Department of Juvenile Corrections: *Youth in the Institution as of midnight 3/2/2000*. Complete breakdown is available in *Resource Text*. 
## Matrix

### Putting the Pieces Together: Individual and Family Indicators, Assessment Tools, Interventions, Strategies, Outcome Measures

<table>
<thead>
<tr>
<th>Factors</th>
<th>Indicators</th>
<th>Assessment Tool</th>
<th>Intervention</th>
<th>Strategies</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) <strong>CHILD HEALTH FACTORS</strong>&lt;br&gt;Physical History&lt;br&gt;Delayed development&lt;br&gt;Physiological indicators, e.g., heart rate, EEG.&lt;br&gt;History of substance use and abuse</td>
<td>Physical examination and developmental assessment</td>
<td>Medical&lt;br&gt;Psychosocial&lt;br&gt;Rehabilitative&lt;br&gt;Reconstructive (depending on outcome of assessment)</td>
<td>Design, implement and revise assessment system based on current best practice and future scientific developments</td>
<td>Improved diagnosis/treatment plan&lt;br&gt;Reduction in mortality/morbidity&lt;br&gt;Improved developmental progress</td>
<td></td>
</tr>
<tr>
<td>2) <strong>CHILD SOCIAL COMPETENCIES</strong>&lt;br&gt;Peer and adult preferred behaviors that increase positive engagement and reduce social rejection and function as a gateway to positive social/emotional adjustments</td>
<td>Aggressive behavior&lt;br&gt;Exclusion from daycare/preschool because of aggressive behavior&lt;br&gt;Appropriateness of emotional responses&lt;br&gt;Age appropriate achievement of social/developmental milestones and empathic development</td>
<td>Use established and standardized behavioral evaluations including direct observation by professionals, caregivers and teachers.</td>
<td>Medical&lt;br&gt;Psychosocial&lt;br&gt;Rehabilitative&lt;br&gt;Reconstructive (depending on outcome of assessment)</td>
<td>Design and implement appropriate services and programs including: &lt;br&gt;<em>Nurse Home Visitation</em>&lt;br&gt;<em>Healthy Families</em>&lt;br&gt;<em>Parents as Teachers</em>&lt;br&gt;<em>Family Literacy</em>&lt;br&gt;Age and gender appropriate individual, family, and group therapy&lt;br&gt;<em>First Step</em>&lt;br&gt;<em>Functional Family Therapy (FFT)</em></td>
<td>Improved diagnosis&lt;br&gt;Individual treatment plan&lt;br&gt;Reduction in mortality/morbidity&lt;br&gt;Improved developmental progress</td>
</tr>
<tr>
<td>3) <strong>CHILD NEGATIVE BEHAVIORS</strong>&lt;br&gt;Behavior that decreases positive social engagement and increases social rejection and failure in educational environments.</td>
<td>Withdrawn, aggressive or noncompliant behavior</td>
<td>Use established and standardized behavioral evaluations including direct observation by professionals, caregivers and teachers.</td>
<td>Medical&lt;br&gt;Psychosocial&lt;br&gt;Rehabilitative&lt;br&gt;Reconstructive (depending on outcome of assessment)</td>
<td>Behavior management&lt;br&gt;Training for caregivers, peers and siblings&lt;br&gt;Bonding and attachment therapy&lt;br&gt;Medication</td>
<td>Improved diagnosis/treatment plan&lt;br&gt;Improvement in social competencies&lt;br&gt;Reduction in negative behavior</td>
</tr>
<tr>
<td>Factors</td>
<td>Indicators</td>
<td>Assessment Tool</td>
<td>Intervention</td>
<td>Strategies</td>
<td>Outcome Measures</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4) CHILD COGNITIVE/EMOTIONAL FACTORS</td>
<td>♦ Emotional immaturity ♦ Empathic responses ♦ Pain threshold ♦ Low conditionability ♦ Poor cause and effect predictors ♦ Prone to cognitive errors ♦ Automatic negative thoughts</td>
<td>♦ Developmentally appropriate testing, pre-post or repeated measures.</td>
<td>♦ Therapeutic for child, education for caregivers and teachers.</td>
<td>♦ CBT (Cognitive Behavioral Therapy) ♦ First Step ♦ Impulsivity receptivity and self-control training ♦ Care provider and teachers trained in CBT to reinforce training cues and behaviors</td>
<td>♦ Increased rate of compliance ♦ Improved diagnosis ♦ Near normal or normal rates of impulsive/aggressive behavior ♦ Changes in physiological markers - cognition and emotional regulation ♦ Heart rate near normal boundaries</td>
</tr>
<tr>
<td>5) FAMILY FACTORS</td>
<td>♦ Social, mental and physical health history of parents ♦ Parental substance abuse ♦ Social isolation ♦ Age of mother ♦ Prior sexual abuse ♦ Domestic violence ♦ Incarcerated parents</td>
<td>♦ Home inventory ♦ Direct observations ♦ ATOD testing ♦ Criminal history review and structural health history interview</td>
<td>♦ Medical ♦ Psychosocial ♦ Rehabilitative ♦ Reconstructive (depending on outcome of assessment) ♦ Legal intervention</td>
<td>♦ Implement appropriate services and programs including: &lt;em&gt;Home/community-based interventions&lt;/em&gt; Home Nurse Visitation Parents as Teachers Functional Family Therapy (FFT) Domestic violence diversion program</td>
<td>♦ Decrease in abusive behaviors ♦ Reduction in dependency petitions ♦ Reduction in rates of incarceration</td>
</tr>
<tr>
<td>6) SOCIAL FACTORS Community Conditions</td>
<td>♦ High frequency of relocation of housing ♦ Lower income level ♦ Substandard housing ♦ Unemployment ♦ Lack of social support groups ♦ Social isolation</td>
<td>♦ Parental questionnaire ♦ Direct observation ♦ Socio-metric mapping ♦ Self report of daily/weekly interactions with others</td>
<td>♦ Inventory of motivational factors that influence family change (Select tools to measure)</td>
<td>♦ Motivational and contextually relevant to the family</td>
<td>♦ Increase in appropriate social interaction with normative adults ♦ Improved physical and social environment</td>
</tr>
</tbody>
</table>
To reduce the likelihood of the most serious offenders, reduce damage to children and community, and to intervene in the intergenerational cycles of dependency, violence and criminality, we chose to focus on vulnerable children, those most at risk. **We defined children at highest risk, as those who meet two criteria:**
- Children who belong to high risk groups (statistical likelihood of having poor child outcomes as suggested by indicators noted above)
- Children within those risk groups who also have individual and family attributes strongly suggestive of less than adequate caretaking and current or future poor child outcomes across social, cognitive, emotional or physical aspects of development.

We believe these children can be identified and helped. The table below suggests their numbers and locations and lists desired outcomes for all.

<table>
<thead>
<tr>
<th>Population (number if known)</th>
<th>Location</th>
<th>Desired Outcomes for All Target Populations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependency Cases (n=1250/year)</td>
<td>Pima County Juvenile Court/Model Court</td>
<td>Reduction in risk factors for delinquency</td>
</tr>
<tr>
<td>Preschool Violent Children (n=600/year)</td>
<td>Child and Family Resource/schools 600 children in Tucson have been identified in pre-school as at risk due to aggression and concerns about bonding and attachment</td>
<td>Reduction in number of dually adjudicated children</td>
</tr>
<tr>
<td>Children of incarcerated parents</td>
<td>Pima County Jail Arizona Department of Corrections and Department of Juvenile Corrections</td>
<td>Reduction in problem behaviors</td>
</tr>
<tr>
<td>Children in families with substance abuse problems</td>
<td>Community Partnership of Southern Arizona</td>
<td></td>
</tr>
<tr>
<td>Children of families experiencing domestic violence</td>
<td>Arresting law enforcement agencies</td>
<td></td>
</tr>
<tr>
<td>Children in families with older siblings who are chronic truants</td>
<td>Pima County Attorney’s Office Act-Now Truancy Program</td>
<td></td>
</tr>
</tbody>
</table>
Rewriting Tera’s Story

This report begins and ends with Tera’s story. It is important to remind ourselves that, right now, there are thousands of children in Pima County who are suffering and who are living with problems that will have a far reaching impact on all of us.

Like Tera, they are children. We can find them. We know what we need to do to help them and our community.

What clues were missed in assessment in Tera's early years? How might a pediatrician or childcare worker spot Tera's early risk for abuse and neglect?

- Was there a visiting nurse or promotora in her neighborhood?
- What did Tera need on arrival in "the system"; at age two?
- What information needs to be shared? Was any information "too confidential"?
- What training or support did Tera's first foster and adoptive parents need?
- Did the court have a developmentally-based assessment tool?
- How could her first caseworker's choices have lead to fewer placements?
- Ask yourself and other leaders what you do now to make the right intervention at the right time.

Tera is not alone. Juvenile delinquency prevention is the responsibility of adults. Tera was the victim of neglect and a crime by adults. She needed access to appropriate medical and social services provided by responsible adults.

Tera's case illustrates that the "most at-risk children" can benefit from what we do.

- Early and thorough prenatal care and home visitation would educate, support, end isolation, and monitor risky conditions for Tera's mom
- Literacy and job training for parents would provide support and hope to prevent Tera's disastrous beginning
- Collaborative relationships with early intervenors, including police, would open the door for Tera's mother to seek services and improve her own life, reducing Tera's risk for removal
- Adequate medical and psychological assessment of Tera's needs should occur as soon as she is placed in foster care
- If Tera is placed in a foster or adoptive home, we must ensure that her foster or adoptive parents have adequate training, respite and social supports (peer and professional) to ensure Tera positive permanency
- Tera should be provided with appropriate counseling and interventions to enable her to develop healthy social behaviors

We can take steps to ensure Tera's story has a better ending-- and her children have a better beginning. We offer a Delinquency Action Agenda and Model Programs for vulnerable children.
**Delinquency Prevention Action Agenda**

The following Delinquency Action Agenda makes recommendations for actions that can be undertaken by individual members of the Juvenile Services Coordinating Council or by the group collectively. The items listed vary from support for legislation currently being considered in the Arizona State Legislature, to areas of program development that would require community-wide collaboration.

Members of the JSCC are asked to 1) review the findings of the report; and 2) develop specific program recommendations based on the expertise and jurisdiction of their agencies and organizations.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Proposed Action</th>
</tr>
</thead>
</table>
| 1) Early individual assessments, diagnosis and treatment plans for all dependency cases | ♦ Complete report on existing assessments, procedures, protocols, and funding issues  
♦ Support Administrative Office of the Courts (AOC) request for funding for assessment of children and families in dependency cases |
| 2) Collaborate in development of early intervention program services for victims of domestic violence | ♦ Assess outcomes of existing diversion program for families and children experiencing first domestic violence incident, especially what is being done for the children  
♦ Support further development of Southern Arizona Child and Family Advocacy Center |
| 3) Family centered intervention for families with truant children with younger siblings | ♦ Establish uniform reporting system for chronic truancy  
♦ Establishment of county-wide Juvenile Assessment Center with coordinated services from schools, law enforcement, and social services |
| 4) Support for the implementation and expansion of proven prevention programs | ♦ Support Healthy Families Initiative to secure funding for pre-natal and early childhood programs.  
♦ Recommend increased funding from the City and County for increased services for identified best practices (Parents as Teachers, First Step, Nurse Home Visitation, etc.) |
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>5) Behavioral health services and programs specifically directed to needs of the target population</td>
<td>♦ Collaborate with the local Regional Behavioral Health Authority, the Community Partnership of Southern Arizona (CPSA) and the Model Court and other agencies to develop and implement needed therapeutic programs such as Cognitive Behavioral Therapy (CBT) and Functional Family Therapy (FFT)</td>
</tr>
<tr>
<td>5) Develop child care and pre-school resources appropriate to needs of at risk children and accessible to their families</td>
<td>♦ Develop a collaboration of child welfare, child care and preschool providers to develop model programs/centers to provide services for traumatized children at risk and identify resources for funding</td>
</tr>
</tbody>
</table>
| 7) Increased services for parents with substance abuse problems and their children | ♦ Develop Family Drug Court  
♦ Legislation such as Arizona Senate Bill 1280 program proposed by Sen. Solomon and Rep. Huffman; proposal to use $10 million dollars of TANF (Temporary Assistance to Needy Families) to fund substance abuse treatment to parents involved in Child Protective Services (CPS) cases |
| 7) Identification of neighborhoods with multiple risk factors and conditions | ♦ GIS Mapping to identify neighborhoods with large numbers of families who match the indicators listed in the Casey Family Risk Index and have high rates of crime against children and families |
| 9) Data sharing and exchange between law enforcement, courts, social and health service agencies | ♦ Community wide implementation of data sharing/warehousing system being developed through the Juvenile Court project funded by Title V funds. |
Model Programs

The following chart outlines evaluated programs aimed at early childhood. These selections are based on the literature search and data collection and analysis of model prevention/early intervention programs aimed at reducing risk factors in children, ages 0-6 with primary focus on strong research design, evidence of significant prevention or deterrence effects, multiple site replicability, and sustained effects. *Detailed program descriptions are available in Resource Text.*

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Target Population</th>
<th>How Implemented</th>
<th>Risk Factors Addressed</th>
<th>Resiliency Factors Addressed</th>
<th>Success Rate</th>
<th>Cost/Ease of Implementation</th>
</tr>
</thead>
</table>
| 1) Health Start                                  | Pregnant women             | Assistance with accessing prenatal and family health care | ♦ Low birthweight babies  
♦ Lack of prenatal care, proper nutrition, immunizations, preventative health care behaviors | ♦ Access to health education and community and public services including employment services | Data pending                               | Data pending                |
| 2) Healthy Families                              | Families of newborns to age 5 | In hospital assessments at birth Home visits Linkages to services including support services for fathers | ♦ Child abuse and neglect  
♦ Parental substance abuse  
♦ Lack of access to health, counseling and social services | ♦ Parent-child bonding  
♦ Coping and decision-making skills | Data pending                               | Data pending                |
| 3) Prenatal and Infancy Nurse Home Visitation Program *(Blueprint)* | Pregnant women at risk of pre-term delivery and low birthweight infant | In-home visits during pregnancy and first two years after birth | ♦ Child abuse and neglect  
♦ Maternal behavioral problems/arrests  
♦ Time interval between children  
♦ Arrests, substance abuse of children | ♦ Literacy  
♦ Economic success  
♦ Healthy early childhood development | Sustained effect through age 15 per Blueprints Program review | Generalizable--Two and a half year program: $3,200 per year in start-up phase; $2,800 per year when staff training is complete |
<table>
<thead>
<tr>
<th>Program Name</th>
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<th>Success Rate</th>
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</tr>
</thead>
</table>
| 4) Family Literacy Program           | Children, preschool to fifth grade and their family unit (parent(s); grandparent(s); aunt/uncle) | Course work takes 5 hours/4 days per week during the entire school year. Home visits by family literacy teachers. Currently at 11 sites in Tucson; 1300 families since 1991 | ♦ Iliteracy  
♦ Child abuse  
♦ Family conflict  
♦ Poor school performance  
♦ Low educational level of parents | ♦ Literacy  
♦ Employment/Economic success  
♦ Family cooperation | Three follow-up studies show positive impact in progress toward educational goals and enhanced parent participation in schools and community | $6,500 per family/year                                                                                                   |
| 5) First Step to Success             | Antisocial kindergartners                                                        | Collaborative home and school approach                                           | ♦ Aggression  
♦ School failure  
♦ Delinquency | ♦ Improved school performance  
♦ Cooperation, friendship skills | Behavior changes documented up to two years beyond intervention | Two-three month implementation in regular class and home settings  
$145 for “First Step to Success Starter Kit” | |
| 6) Parents as Teachers (PAT)         | Family support and education. Has served 600 families in Tucson since 1995       | In-home supervision, parenting skills, coaching. Group meetings                  | ♦ Family conflict  
♦ Poor school performance | ♦ Strong family bonds  
♦ Literacy | Excellent per 1985 and 1994 longitudinal study of the original Missouri program | $800-$1000 per school year                                                                                             |
| 7) Functional Family Therapy (FFT)   | At-risk, disadvantaged adjudicated youth, 11-18 and their families               | Family therapy-in-home                                                          | ♦ Behavioral Disorders  
♦ Family Conflict | ♦ Cooperation skills  
♦ Conflict resolution skills and experience | Sustained effect 30 months post treatment  
Widely tested since 1969 | 90 day program cost range from $1350-$3750 per family for an average of 12 home visits per family |
The accompanying Resource Text for the Report on *Delinquency Prevention and Early Intervention for Pima County Children Ages 0-6* includes detailed information on:

- all sources used in compiling the report
- community demographics and conditions
- descriptions of model programs
- additional information on social and health issues
- prevention theories and strategies
- considerations for evaluation
- information on prevention programs
- funding patterns for current Pima County programs