Approved: 5/02/06

Date

MINUTES OF THE HOUSE CORRECTIONS & JUVENILE JUSTICE COMMITTEE

The meeting was called to order by Chairman Ward Loyd at 1:30 P.M. on March 10, 2005 in Room 241-N of the Capitol.

All members were present except:
Mike Peterson- excused

Committee staff present:
Diana Lee, Revisor of Statutes Office
Jerry Ann Donaldson, Kansas Legislative Research
Becky Krahl, Kansas Legislative Research
Connie Burns, Committee Secretary

Conferees appearing before the committee:
Dr. John Calbeck, Director, SW KS Regional Prevention Center
Dr. Dennis Embry, PAXIS Institute

Others attending:
See attached list.

The Chairman welcomed the Chairman Bill Light of the Public Safety and Budget Committee.

Dr. John Calbeck, Director, Southwest Kansas Regional Prevention Center, provided the committee with a PowerPoint presentation on Prevention in Kansas. (Attachment 1) A brief history of prevention, the Public Health Model was started in the early 1900 was based on the disease model and was started by Dr. Samuel Crumbine from Dodge City. The 1960's started with scare tactics, was school based usually one shot dose not accepted as factual by youth because it was often distasteful, exaggerated and overblown. The 1970's was still one time exposure, school/community based more balanced but not more effective and stimulated youth curiosity toward drugs so usage rate increased. The early 1980's tried to relieve boredom and build self-esteem there was little evidence of effectiveness by itself so in the late 1980's tried to attempt to influence values and self esteem, focused on the individual exclusive of parents, siblings and the community, systematic studies failed to show effectiveness. A comprehensive approach in mid 1980's and into the 1990's was an ongoing combination of multiple techniques that addressed multiple "impactors", multiple risks, and multiple domains and was community based, it was promising, but complex and hard to evaluate. The modern iterations and approaches:

- Comprehensive strategies retained
- Community-based/community-powered
- Evidence/research-based
- Tested effective programs
- Prevention as a practice, not just a program
- Model approaches
- Broader collaboration (JJA, KSU, KDHE)
- Aligned with treatment in Kansas (marijuana)

Prevention in Kansas the early years 1975 – 1985 was based on Public Health Model, the War on Drugs, the Office of National Drug Control Policy, Governors' Hayden and Finney, Kansas received NIDA/NIAAA funds, and model Community Prevention Programs funded ($30,000, 13 grants, 26 counties) The visionary period (1985 -1987) Kansas SRS plans system of regional centers (average $166,000) to cover all counties, programs, training, technical assistance to focus on six CSAP Principles:

1. information dissemination
2. prevention education
3. alternatives
4. community-based process

5. problem identification
6. referral, environmental strategies

The era of regional expansion (1987 -1991) there were five centers funded in 1987 under Toward a Drug Free Kansas, plan to complete system in 10 years, 12 centers established by 1990 (13 today), and statewide risk-focused strategy developed. Community based Prevention (1991 -):

- Theoretical framework and logic model
- Risk protective model of Hawkins and Catalano (Communities That Care)
- Prevention Centers began a move from program and information to community development
- Kansas Communities That Care School Survey
- Kansas Family Partnership
- The Community Tool Box (KU Work Group)
- Inter-agency collaboration explored
- Connect Kansas
- The Governors' Cabinet
- Cultivate inter-agency partnerships

Prevention Principles:

- Focus on reducing known risk factors
- Focus on increasing protective factors
- Address risk factors at an appropriate developmental stage
- Intervene early – before the behavior stabilizes
- Include those at high risk
- Target high-risk community areas
- Target high-risk individuals
- Address multiple risks with multiple strategies

Dr. Dennis Embry, Paxis Institute, provided a PowerPoint presentation on "Saving Kansas Kids and Families, implications for Social and Fiscal Policy". (Attachment 2)

The effect of family genetic and behavioral history for alcoholism/alcohol addiction on brain responses in adult children and other issues of brain chemistry are documented and will continue to be documented (other examples listed below):

- Serotonin levels, serotonin precursors or enzymes, serotonin receptors and transporters (different for people growing up in highly chaotic circumstances versus predatory killers like the BTK serial murder).
- Different levels of dopamine, dopamine precursors or enzymes, dopamine receptors, and transporters (different for people growing up in highly circumstances versus middle class or upper class folks).
- Different levels of stress hormones and stress hormone receptors (which may be changed by environmental and social events).

Juveniles like the example Billie think and behave differently and these cognitive and behavioral issues show up as:

- High Levels of impulsivity
- Problems of sustained attention
- Low reward delay
- High "gambling" response
- Poor reasoning about adverse consequences
- Many distortions in cognition such as "automatic negative thoughts"
- Over focus on irrelevant or distracting stimuli
- Perceive neutral events as negative
- Magnify negative events as extreme threats
- More frequent sexual thought (a result of change in brain chemistry)
- Difficulty decoding non-verbal cues accurately
- Over-reactivity (chemically, cognitively, and behaviorally) to perceived stressors

Social Marketing makes use of the "Five P's of Marketing". The modern approach to marketing revolves around five P's:

1. Product – commercial marketers make sure that their product is appealing to consumers and has a catchy name that is easy to remember. (The PeaceBuilder)
2. Performance – Commercial marketers make clear what the customer must do to achieve the advertised result and what the benefits are from the product. Awareness is not performance, which must be measurable and reportable. Performance promise benefits such as "learn more, have less stress, saves time, or feel better".
3. Place – The product, activity or benefit can be easily accessible to virtually all potential consumers or targets, unlike most awareness or negative campaigns. To gain the "benefit" is visit a local school, merchant, ask your doctor, or perhaps call a toll-free number.
4. Price – is how much it costs in time, effort, energy, money, etc. Price can be expressed in clear ways, such as takes only a few minutes a day.
5. Promotion – Commercial marketers use promotion and advertising to familiarize consumers with the product and persuade them to but it or try it. Testimonials are typically among the most effective promotion.

Dr. Embry provided a list of Recommendation for Prevention, intervention and treatment. (Attachment 3)

The meeting was adjourned at 3:20 pm. The next scheduled meeting is March 14, 2005.

HOUSE CORRECTIONS AND JUVENILE JUSTICE COMMITTEE
GUEST LIST

DATE 3-10-05

NAME	REPRESENTING
Richard Samaniego	Kearney & Assoc
Janice Rutherford	Little Gov't Rel.
Dan Hermes	Public Solutions
Julia Butler	KSC
Lynette Hutcherson	Wichita, KS
Estelle T. Hughes	Wichita KS
Donna M. Dozeh	Wichita KS

A Briefing on Prevention

Kansas House of Representatives
Corrections and Juvenile Justice Committee

John B. Calbeck, M.D.
Director
Southwest Kansas Regional Prevention Center

March 10, 2005

Prevention

- Middle English
- prae (before)
- venire (to come)
- anticipate
- forestall
- act ahead of
- hinder or stop

House C & JJ
3-10-05
Attachment 1

Kansas Prevention Definition

The active process that creates and rewards conditions that lead to healthy behaviors and life styles

- Governor Kathleen Sebelius

Brief History of Prevention

The Public Health Model

- Early 1900 and ongoing
- Clinical basis
- Tied to the disease model
- Teach the **Host**
- Alter the **Agent**
- Change the **Environment**
- Dr. Samuel Crumbine M.D.

Scare Tactics

- The 1960s
- Depict harmful consequences to youth
- School-based
- Usually a "one-shot" dose
- Often distasteful, exaggerated, overblown
- Not accepted as factual by youth
- Norman and Turner, 1963

Accurate Information

- 1970s
- Accurate information to youth
- Infrequent or "one-time" exposures
- School/community-based
- More balanced, but no more effective
- Stimulated youth curiosity toward drugs
- Increased usage rates
- Botvin,1995; Elmquist, 1995; Weisheit, 1983

Alternatives Approach

- Early 1980s
- Involve youth in non-drug related activities
- Keep them busy, productive, satisfied
- Relieve boredom, build self-esteem
- Non-use was not always primary focus
- School/Community/Agency-based
- Little evidence of effectiveness by itself
- Norman and Turner, 1993

Affective Education Approach

- Late 1980s
- School-based
- Attempt to influence values and self esteem
- Focused on the individual exclusive of parents, siblings, and the community
- Systematic study failed to show effectiveness
- Elmquist, 1995; Moskovitz, 1989

Comprehensive Approach

- Mid 1980s and into the 1990s, ongoing
- Combination of Multiple Techniques
- Address multiple "impactors"
- Address multiple risks, multiple domains
- Community-based
- Promising, but complex and hard to evaluate
- Hawkins, Catalano, Farrington, Benson, Embry, many others

Modern Iterations and Approaches

- Comprehensive strategies retained
- Community-based/community-powered
- Evidence/research-based
- Tested effective programs
- Prevention as a practice, not just a program
- Model approaches
- Broader collaboration (JJA, KSU,KDHE)
- Aligned with treatment in Kansas (marijuana)

Prevention in Kansas

The Early Years (1975-1985)

- Public Health Model
- War on Drugs
- Office of National Drug Control Policy
- Governors' Hayden and Finney
- Kansas receives NIDA/NIAAA funds
- Model Community Prevention Programs funded ($30,000, 13 grants,26 counties)

The Visionary Period (1985-1987)

- Kansas SRS plans system of regional centers (average $166,000)
- To cover all counties
- Programs, training, technical assistance
- To focus on six CSAP Principles (information dissemination, prevention education, alternatives, community-based process, problem identification and referral, environmental strategies)

Era of Regional Expansion(1987-1991)

- Five centers funded in 1987 under Toward a Drug Free Kansas
- Plan to complete system in 10 years
- From $3 million to $32 million in 5 years
- 12 centers established by 1990 (13 today)
- Statewide risk-focused strategy developed

Community-based Prevention (1991-)

- Theoretical framework and logic model
- Risk-protective model of Hawkins and Catalano (Communities That Care)
- Prevention Centers began a move from program and information to community development
- Kansas Communities That Care School Survey
- Kansas Family Partnership
- The Community Tool Box (KU Work Group)
- Inter-agency collaboration explored
- Connect Kansas
- The Governors' Cabinet
- Cultivate inter-agency partnerships

Communities That Care

The Social Developmental Strategy

- Individual Characteristics
- Opportunities, Skills, Recognition
- Bonding (Attachment and Commitment)
- Healthy Beliefs and Clear Standards
- Healthy Behaviors

Channing-Bete Company, Inc, 2003 (Developmental Research and Programs, Hawkins and Catalano, 2000

Communities That Care

The Problem Behaviors

- Substance Abuse
- Delinquency
- Teen Pregnancy
- Violence
- School Drop-Out

Channing-Bete Company, Inc, 2003 (Developmental Research and Programs, Hawkins and Catalano, 2000

Communities That Care

The Risk Factors

- Availability of Drugs
- Availability of Firearms
- Community Laws and Norms
- Media portrayals of violence
- Transitions and Mobility
- Low neighborhood attachment and community disorganization
- Family History of the problem behaviors
- Family management problems
- Family conflict
- Favorable parental attitudes toward problem behavior
- Academic failure beginning in elementary school
- Early and persistent antisocial behavior
- Rebelliousness
- Friends who engage in the problem behavior
- Gang involvement
- Favorable attitudes toward the problem behavior
- Early initiation of the problem behavior
- Constitutional factors

Channing-Bete Company, Inc, 2003 (Developmental Research and Programs, Hawkins and Catalano, 2000

Communities That Care

The Protective Factors

- Healthy beliefs and clear standards (belief in the moral order)
- Opportunities for prosocial involvement in the community
- Rewards for prosocial involvement in the community
- Family attachment
- Opportunities for prosocial involvement in the family
- Rewards for prosocial involvement in the family
- Opportunities for prosocial involvement in school
- Rewards for prosocial involvement in school
- Social Skills
- Impulsiveness

Channing-Bete Company, Inc, 2003 (Developmental Research and Programs, Hawkins and Catalano, 2000

Prevention Centers

Southwest Kansas
Regional Prevention Center

Overview of Prevention Centers

- As diverse as Kansas (though perhaps not as big as you think)
- 13 Centers roughly conforming to the areas defined by SRS
- Aligned with many different hosts / partners
- Activities and objectives tailored to meet local needs
- United by a common framework/logic model
- Part of a statewide infrastructure

Kansas Prevention Infrastructure

- Regional Prevention Centers
- Kansas Family Partnership
- Educational Service Center at Greenbush (the Kansas CTC School Survey)
- KU Work Group on Health Promotions and Community Development (The Community Tool Box and ODSS)
- Kansas National Guard
- YouthFriends

What, in a nutshell, do we do?

Bring people together for planning, programs, policies, and practices

How do we do that?

- Science-based technical assistance, support, and training for more than 200 community coalitions, task forces, and partnerships
- Strive to build greater competence in communities to cultivate leadership, assess needs, evaluate their environment, plan outcomes, leverage resources, perform social marketing, and deploy community-based processes.

Wow! That's a mouthful! Is it really that complicated?

Yes, but no. It's all about relationships. At all levels. Bringing people together for programs, planning, policy, and practice.

Prevention Principles

- **Focus on reducing known risk factors**
- **Focus on increasing protective factors**
- **Address risk factors at an appropriate developmental stage**
- **Intervene early – before the behavior stabilizes**
- **Include those at high risk**
- **Target high-risk individuals**
- **Target high-risk community areas**
- **Address multiple risks with multiple strategies**

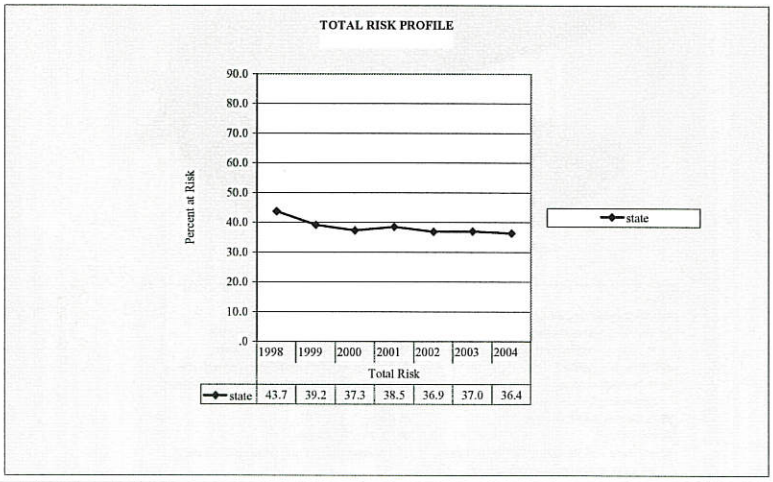
Center for Substance Abuse Prevention Prevention Principles

- Information Dissemination
- Prevention Education
- Problem Identification and Referral
- Alternatives
- Community-based processes
- Environmental strategies

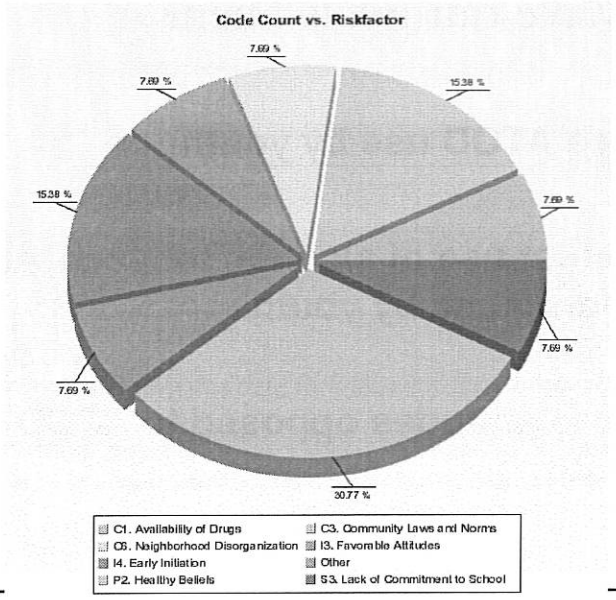
What have our goals been?

- **Reduce ATOD use by youth**
- **Delay first use of alcohol, tobacco, and other drug use by youth**
- **Increase attitudes opposed to ATOD use by youth**

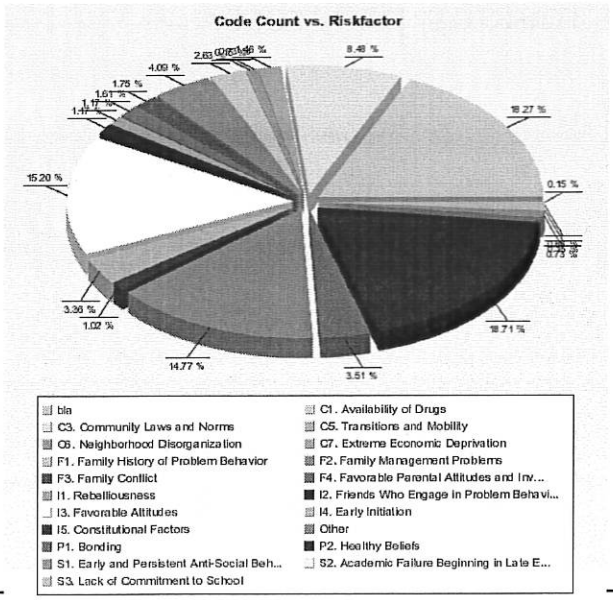
Are we making progress?



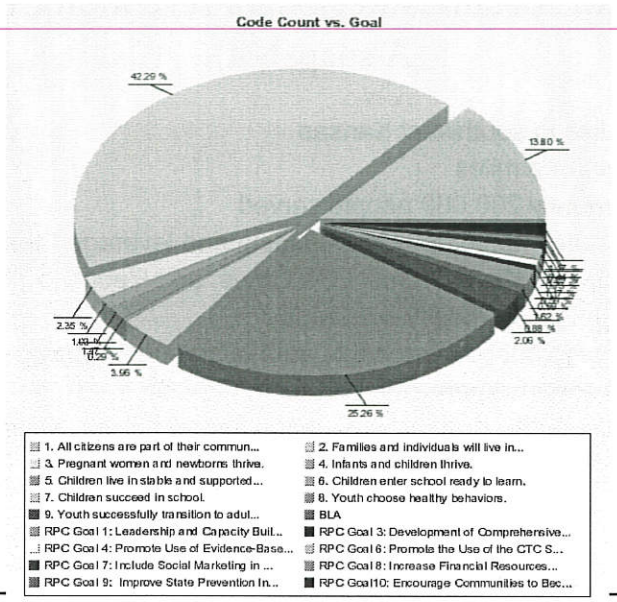
Actions



Services

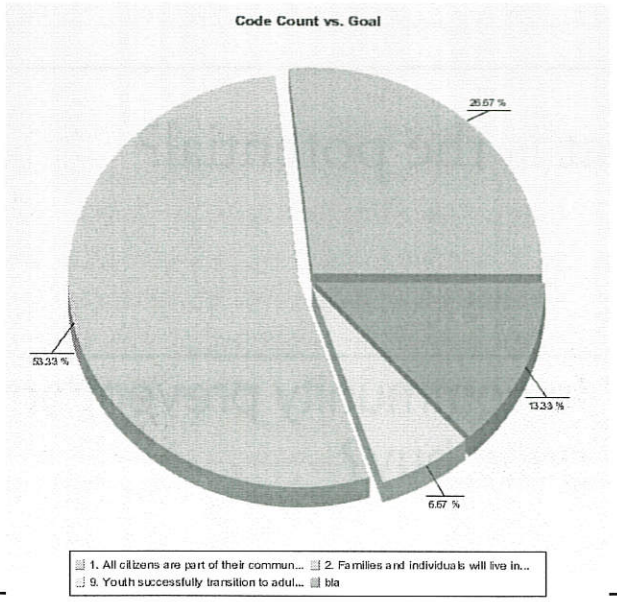


SW Region Goals



Scott County Partners for Youth, Inc.

Goals



Southwest Kansas Regional Prevention Center (A snapshot)

- 25 counties in southwest Kansas
- 20,000 square miles
- Approximately 200,000 people served
- Approximately $200,000 base-funding and leveraged resources
- John Calbeck, Kaye Cronin, Lois Limes, and Rebecca Thomas
- 10 functional community coalitions
- Website with online searchable data base and shopping cart
- A willing and indispensable partner in GCCC
- The power of the Kansas Prevention Infrastructure, Kansas citizens, and many partners and resources

What is the potential?

Is community prevention a good buy?

Haskell County (population 4,307)
PATCH and CHOC Coalitions

- Identified targeted risk and protective factors
- Published action plans/logic models
- Continuous assistance opportunities from the Prevention Center since their inception
- Established local leaders and executive directors
- Interdependent and collaborative within the county
- An average of 20 citizens meeting 12x/year for two hours at each meeting (between the two)
- $8/hr x 480 hours = $3,840 x 2 (networking/projects)= $7,680
- Health Fairs, school programs, information dissemination, programs, parenting
- $20,000 funding from KDHE CHIPr grant
- ~$20,000 funding from local sources
- Total $47, 680

Garden City Project EFFORT

- Stones Intermediate School Project - $3,500
- After school mentoring BBBS, parenting support through PTO (bilingual, diverse)
- 21st Century Learning Community - $6,000,000 over three years, 13 schools
- Programs bilingual, diverse, remedial, recreational, tailored to needs identified at each building
- 2,000 – 2,500 students K-12
- 2 hours, 3x per week, 36 weeks=216 hours/student
- 2,000 students x 216 hours = 432,000 hours
- 432,000 hours x $8/hr = $3,560,000; x $20/hr =$8,640,000
- Effective prevention may require up to 30 focused contact hours (Kumpfer et al) per person

Next Steps: Good to Great

1. **Good is the enemy of great:** don't settle for being good
2. **Level 5 Leadership:** common mobilizing vision, unwavering focus
3. **First who... then what:** enhance the workforce
4. **Confront the brutal facts:** distill the complexity of all of this down into something that communities and citizens can readily, absorb, understand, implement, and measure
5. **The Hedgehog Concept:** help communities find what they do best, locate their economic fulcrum, and execute with passion... over and over and over
6. **A culture of discipline:** generalize, simplify, and broadcast our wisdom; capitalize on the synergy of broad collaboration at the top and single purpose at the bottom (rinse the cottage cheese)
7. **Accelerate the technology:** develop affordable programs; **simple**, flexible, elegant, and effective
8. **The Flywheel and the Doom Loop:** those who do radical restructuring fail to make the leap to greatness

Ten Disciplines for Prevention Work

1. **Value the knowledge worker**
2. **Recognize what the non-user values**
3. **Address Institutional and Policy Constraints**
4. **Insist on a common mobilizing vision**
5. **Develop a philosophy of engagement**
6. **Abide by the rules of the network economy**
7. **Plan for "real-time" strategic change**
8. **Strive for organizational clarity, then over-communicate that clarity**
9. **Don't mistake a clear view for a short distance**
10. **Tolerate messiness at the edges**

(2)

Saving Kansas Kids and Families

Implications for Social and Fiscal Policy:
Low Cost Strategies To Turn the Tide on Prevention and Treatment of Multi-Problem Behavior Affecting Kansas Health, Safety and Human Capital

Dennis D. Embry, Ph.D., President, PAXIS Institute
PO Box 68494, Tucson, AZ 85750
Phone: 520-299-6770
FAX: 520-299-6822
Email: dde@paxis.org
Website: www.paxtalk.com

Presentation to Legislative Committees
March 10, 2005
Topeka, KS

This presentation reviews how many decades of research can be used plot a sane, sensible and safe course of prevention and treatment. Further, the presentation focuses on how the concept of "one Kansas government"—instead of disconnected agencies and programs—can be used to leverage existing and new resources to prevent the future burden of incarceration and related sydemics (multiple related afflictions) harming the health, safety, welfare and wellbeing of the state. Using both a scientific logic and business logic model, it becomes quickly apparent that public good, social justice, fiscal soundness, and good government unite in common cause around good science and practice for the benefit of Kansas.

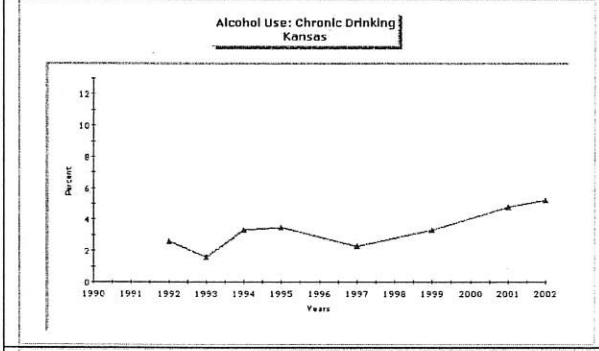
"We are prisoners of ideas."
~ Ralph Waldo Emerson, US essayist & poet (1803 - 1882)

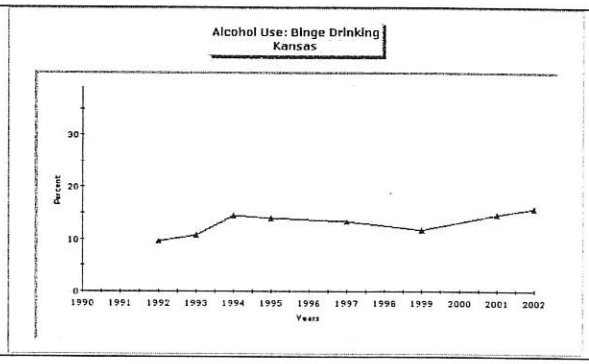
House C & JJ
3-10-05
Attachment 2

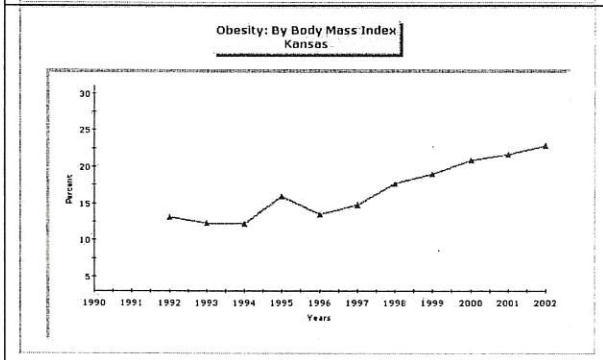
Introductory Comments

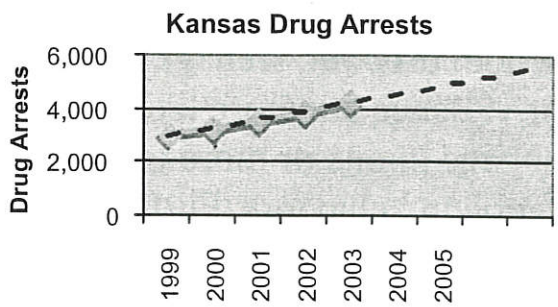
Why does it matter to save Kansas kids and families?

1. ~~November 22, 1948 example.~~
2. Our public health, safety and well-being.
3. Our future.

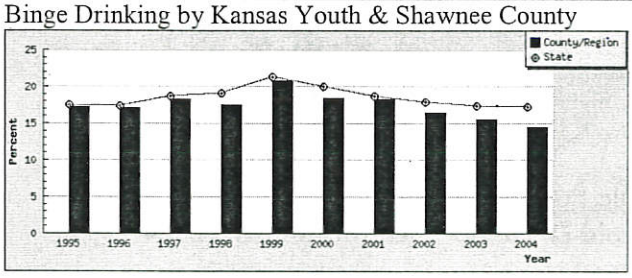




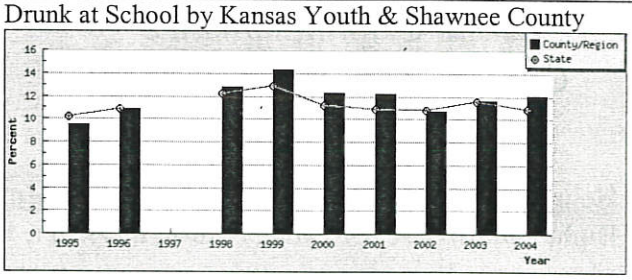




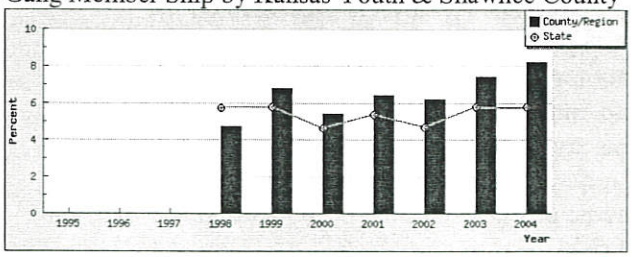
Binge Drinking by Kansas Youth & Shawnee County



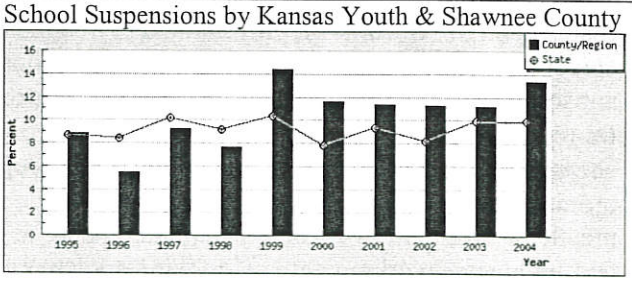
Drunk at School by Kansas Youth & Shawnee County



Gang Member Ship by Kansas Youth & Shawnee County



School Suspensions by Kansas Youth & Shawnee County



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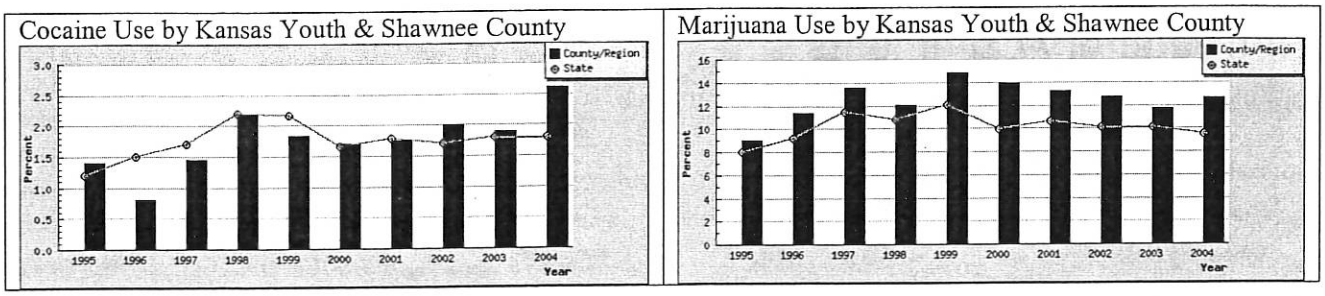


The story of Billy—the parable of pain and cost

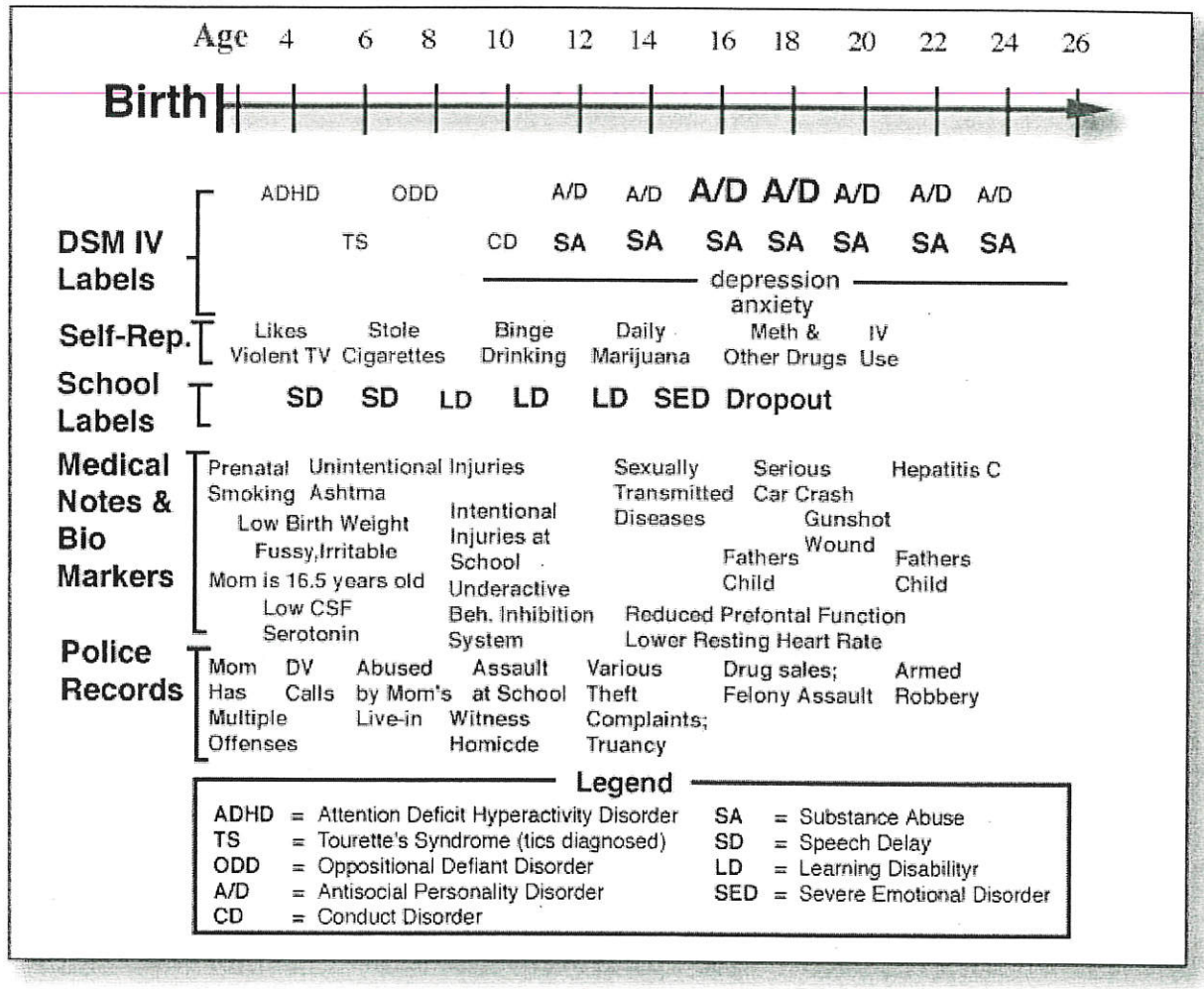
The story of Billy is the story of real experiences relevant to the goals and purposes of health and social social policy issues. It illustrates the burdens, causes, prevention, interventions and possibly treatment opportunities to change policy, procedures, practices and state-level outcomes to improve public safety, public health, fiscal stability in the state, and human capital in Kansas.

Young people who are seriously involved in either juvenile delinquency, substance abuse, school dropout, teenage pregnancy, or violence are more likely to engage in one or more of the other problem behaviors. Furthermore, all of these teen problems share many common risk factors.

— *Arizona Criminal Justice Commission, November, 2002*

Helping Adolescents at Risk: Prevention of Multiple Problem Behaviors. (Edited by Anthony Biglan, Patricia A. Brennan, Sharon L. Foster, Harold D. Holder). Guilford Press, 2004.

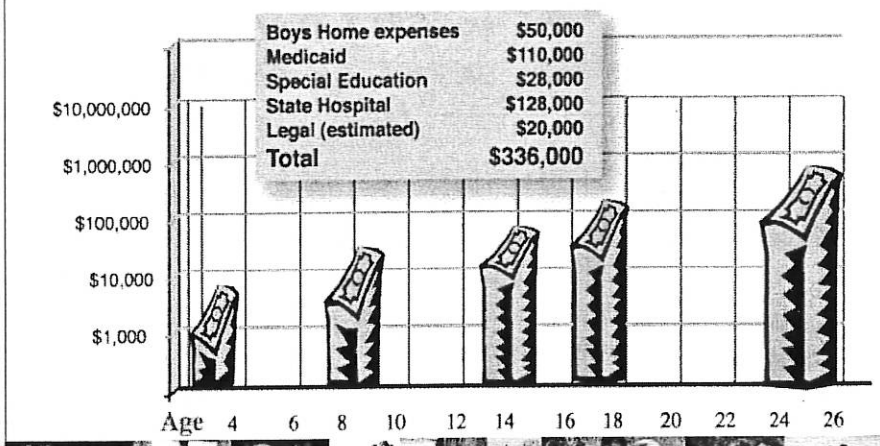
This comprehensive volume reviews current knowledge about multiple problem behaviors in adolescence, focusing on 'what works' in prevention and treatment. Cutting-edge research is presented on the epidemiology, development, and social costs of four youth problems that frequently co-occur: serious antisocial behavior, drug and alcohol misuse, tobacco smoking, and risky sexual behavior. A framework for reducing these behaviors is outlined, drawing on both clinical and public health perspectives, and empirically supported prevention and treatment programs are identified. Also addressed are ways to promote the development, dissemination, and effective implementation of research-based intervention practices. Authored by an interdisciplinary panel of experts, this is a state-of-the-science sourcebook and text for anyone working with or studying adolescents at risk.

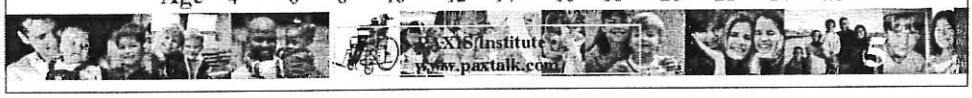

Age 4 6 8 10 12 14 16 18 20 22 24 26
Birth
DSM IV Labels
ADHD ODD A/D A/D A/D A/D A/D A/D A/D
TS CD SA SA SA SA SA SA SA
depression
anxiety
Self-Rep.
Likes Violent TV
Stole Cigarettes
Binge Drinking
Daily Marijuana
Meth & Other Drugs
IV Use
School Labels
SD SD LD LD LD SED Dropout
Medical Notes & Bio Markers
Prenatal Smoking
Unintentional Injuries Ashtma
Low Birth Weight
Fussy,Irritable
Mom is 16.5 years old
Low CSF Serotonin
Intentional Injuries at School
Underactive Beh. Inhibition System
Sexually Transmitted Diseases
Serious Car Crash
Gunshot Wound
Fathers Child
Fathers Child
Hepatitis C
Reduced Prefontal Function
Lower Resting Heart Rate
Police Records
Mom Has Multiple Offenses
DV Calls
Abused by Mom's Live-in
Assault at School
Witness Homicde
Various Theft Complaints; Truancy
Drug sales; Felony Assault
Armed Robbery
Legend
ADHD = Attention Deficit Hyperactivity Disorder
TS = Tourette's Syndrome (tics diagnosed)
ODD = Oppositional Defiant Disorder
A/D = Antisocial Personality Disorder
CD = Conduct Disorder
SA = Substance Abuse
SD = Speech Delay
LD = Learning Disabilityr
SED = Severe Emotional Disorder

2-4

Saving Kansas Kids and Families

Case History Cost





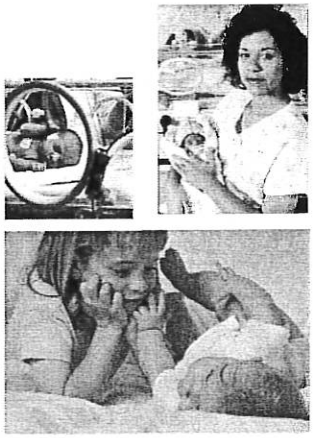
Saving Kansas Kids and Families

Pre-Birth, Birth and Infancy Costs

The Billy's of the world have a number of potential high costs:

- Eight days of neonatal intensive care **$20,000**
- His pregnant teen mother had a medical complications for herself **$6,000**
- Post-partum depression & suicide attempt of his mother **$17,000**
- Child protective services during period **$6,000**
- Infant health care **$9,000**

Total **$58,000**



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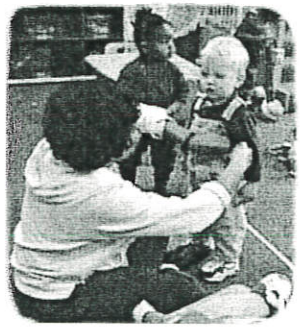
Toddler-Era Costs

- Early special education costs **$14,000**
- Emergency care for asthma **$4,500**
- Child protective services associated with domestic violence & drugs **$3,800**

Total **$22,300**

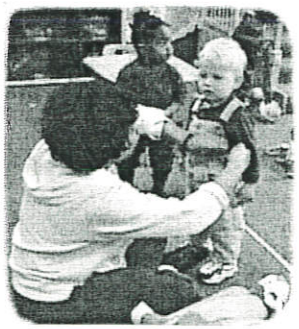


Saving Kansas Kids and Families

Preschool-Age Costs

- Behavioral health **$4,000**
- Emergency asthma care **$3,500**
- Treatment of ADHD **$3,800**
- Injuries caused to others at head-start **$700**

Total **$12,000**



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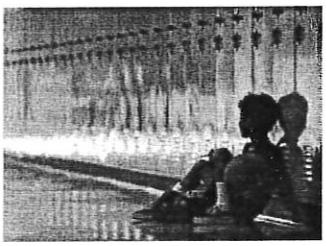
Primary Grade Costs

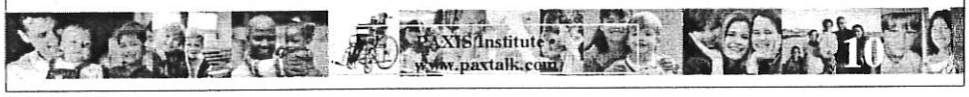
• Speech therapy	**$1,200**
• Behavioral health	**$1,800**
• Child-protective services	**$2,200**
• Other special ed services	**$3,200**
• Emergency asthma care	**$2,500**
• Hospital care for being accidental injuries	**$17,000**
• Treatment of ADHD/TS	**$5,400**
• Injuries caused to others at school	**$1,600**
• Law enforcement	**$500**
Total	**$47,400**

Saving Kansas Kids and Families

Intermediate Grade Costs

• Behavioral health	$1,800
• Child-protective services	$2,200
• **Juvenile court services**	$2,000
• Other special ed services	$5,800
• Treatment of ADHD/TS/ODF	$6,400
• Injuries caused to others at school	$2,000
• Law enforcement	$1,500
• Vandalism	$5,000
Total	$26,700





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Other Elementary School Costs

• Classroom disruptions	77,760
• Physical hits on others	6,480
• Hours of instruction disruptive	360 hrs
• Items stolen from others	1,350
• Administrative hours lost	144 hrs
• Teacher hours lost in meetings	90 hrs
• Janitor, secretary and aide hours	180 hrs
• Threats of lawsuits	2
• Complaints to superintendent	5
• Nurses office visits for meds, illnesses, injuries, etc.	1,200

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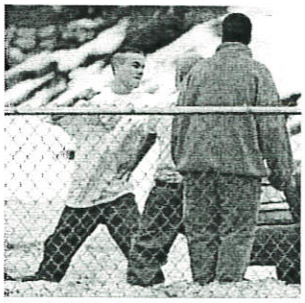
Other Adolescent Period Costs

• Behavioral health for victims	$2,800
• School legal costs from complaints	$1,200
• School vandalism and theft losses	$4,200
• STD and pregnancy costs	$23,500
• Special ed costs for his kids	$20,000
• Victim theft and burglary losses	$15,000
• Victim hospital care for car, alcohol and fighting injuries	$55,000
• Illegal sales of drugs	$12,400
• Law enforcement for crimes	$5,600
Total	$139,700



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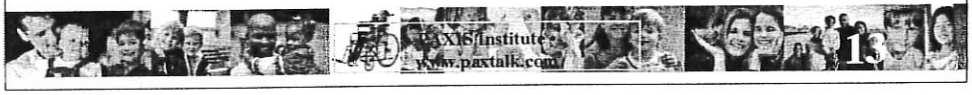
Some Other Adult Costs

• Seven years of adult corrections	$154,000
• Hepatitis C and related illnesses	$45,000
• Other substance abuse illnesses	$10,000
• Drug sales	$45,000
• Child protective services for kids	$25,000
• Special ed & health costs for kids	$75,000
• Other victim losses	$10,000
• Cost of crime, injuries, treatment and illnesses by his drug buyers	$500,000
• Other costs	$20,000
• Added law-enforcement costs	$10,000
Total	$894,00



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The Costs Attributable to Abuse

• Pre-birth & infancy	**$58,000**
• Early childhood years	**$34,300**
• Elementary school years	**$74,100**
• Secondary & teen years	**$475,700**
• Other adult years	**$894,00**
• **Total**	**$1,536,100**

2-9

Saving Kansas Kids and Families

Costs Averted by 100 Kids P/YR

• Pre-birth & infancy	**$5,800,000**
• Early childhood years	**$3,430,000**
• Elementary school years	**$7,410,000**
• Secondary & teen years	**$47,570,000**
• Other adult years	**$89,400,000**
• **Total**	**$153,610,000**

Simplistic estimate

How much do Billy's cost us in total in Kansas? A newly released (February 17, 2005) report from Oklahoma, our slightly larger neighboring state, provide a potential estimate—about $1,000 per man, woman and child in the state. The summary table from that report, available at http://www.odmhsas.org/ is reproduced in the next table for direct costs for mental illness, substance abuse and domestic violence—the triple evils that curse the development of Billy's in our state and nation.

The balance of this present of the presentation discusses how Kansas Billy's might be changed by actions of this committee and other, related initiatives in this state, and recommendations for the Kansas Legislature and leadership to undertake to achieve this.

Table 1: Syndemic Costs in Oklahoma Related to Billy's (see Feb. 17, 2005 report http://www.odmhsas.org/)

FY 2003 Direct Costs in Oklahoma
Mental Health, Substance Abuse and Domestic Violence/Sexual Assault

	Mental Health	Substance Abuse	Domestic Violence	Totals SFY 2003
OKLAHOMA	**$1,765,411,954**	**$1,408,129,407**	**$244,319,308**	**$3,417,860,670**
CRIMINAL JUSTICE SYSTEM	**213,508,640**	**787,923,409**	**92,893,939**	**1,094,325,987**
Attorney General	0	0	473,000	473,000
Corrections Department	74,051,090	206,968,419	45,653,853	326,673,362
District Attorney's Council	10,712,756	44,578,320	9,134,348	64,425,436
Indigent Defense System	2,667,809	7,594,158	1,682,538	11,944,504
State Bureau of Investigation	4,070,704	11,587,629	2,567,319	18,225,652
Narcotics and Dangerous Drugs	0	6,715,000	0	6,715,000
Pardon and Parole Board	395,472	1,125,747	249,417	1,770,636
Public Safety Department	0	51,359,514	0	51,359,514
Office of Juvenile Affairs	6,149,356	29,360,036	1,116,350	36,625,710
State Legal and Judiciary	11,461,646	32,626,623	7,228,653	51,316,924
Federal Government	9,445,236	73,268,046	1,349,319	84,062,604
County/Municipal Government	92,554,556	322,738,946	23,439,141	438,732,646
HEALTH CARE SERVICES	**1,057,617,172**	**398,369,618**	**74,797,096**	**1,530,783,886**
Oklahoma DMHSAS	143,989,491	50,439,952	5,553,685	199,983,133
Community Mental Health Centers	70,340,782	4,205,556	0	74,546,339
Child Abuse Programs	0	0	2,638,773	2,638,773
Domestic Violence Programs	204,189	1,812,845	16,930,460	18,947,498
Substance Abuse Treatment	0	48,871,855	0	48,871,855
Residential Care	3,296,764	0	0	3,296,764
State Health Department	3,170,736	2,976,765	20,846,312	26,993,815
Native American Health Care	36,977,470	24,081,969	2,550,000	62,709,439
Hospitals	237,424,716	142,285,569	1,029,162	480,739,447
Special Injuries and Conditions	0	109,080,923	25,248,708	134,329,631
Physicians	67,438,982	0	0	67,438,982
Other Health Care Professionals	31,129,655	0	0	31,129,655
Home Health	0	0	0	0
Nursing Homes	126,066,340	0	0	126,066,340
Prescription Drugs	200,097,541	0	0	200,097,541
Workforce Development	37,860,934	12,626,978	0	50,507,912
Federally Sponsored Research	499,575	1,987,186	0	2,486,761
SOCIAL AND HUMAN SERVICES	**428,930,881**	**83,443,666**	**54,345,544**	**566,720,094**
Commission on Children and Youth	724,090	472,900	77,734	1,274,724
JD McCarty Center	5,195,400	0	0	5,195,400
Department of Human Services	86,351,959	61,904,353	47,789,233	196,045,506
Federal OASDI Payments	290,252,856	11,199,257	0	211,452,113
Federal SSI Payments	124,200,300	1,229,471	0	125,429,771
County Government	723,038	461,157	323,395	1,507,575
Municipal Government	11,309,502	8,078,216	4,846,930	24,234,648
Native American Services	173,786	98,304	1,308,268	1,580,357
EDUCATION	**19,517,951**	**19,693,906**	**1,683,154**	**40,895,006**
Elementary and Secondary	16,551,001	5,509,575	1,036,579	25,097,156
Higher Education	0	11,265,000	0	11,265,000
CareerTech	966,950	2,918,325	646,575	4,531,850
NON-PROFIT SERVICES	**45,837,316**	**31,590,699**	**20,599,575**	**98,027,584**
SPECIAL INTEREST ISSUES	**0**	**87,108,112**	**0**	**87,108,112**
Property Loss - Crime	0	31,648,030	0	31,648,030
Property Loss-Accidents	0	30,314,591	0	30,314,591
Direct DUI Expense	0	15,512,250	0	15,512,250

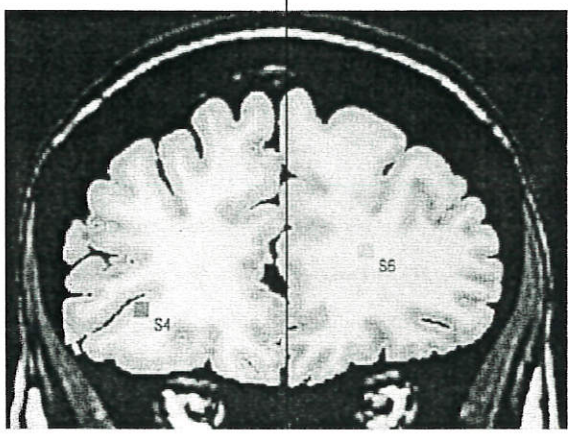
Brain, Cognitive, Behavior, and Polygene Issues

This section reviews key scientific issues that lay the foundation for action by the Committee, the state and its citizens. Without understanding these issues, any actions are less likely to succeed.

Brain Issues

There are well-documented differences in brain structures, brain chemistry, and brain responses of individuals like Billy and the Kansas citizens we are trying to help. Expecting the cognition, behavior or even health to be the same as others is foolhardy at best. Here are visual examples from research that will be discussed.

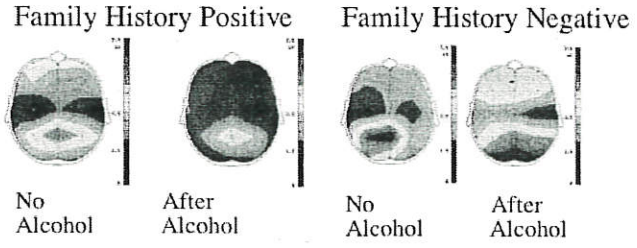
Figure 1: Brain Issues Related to Billy's



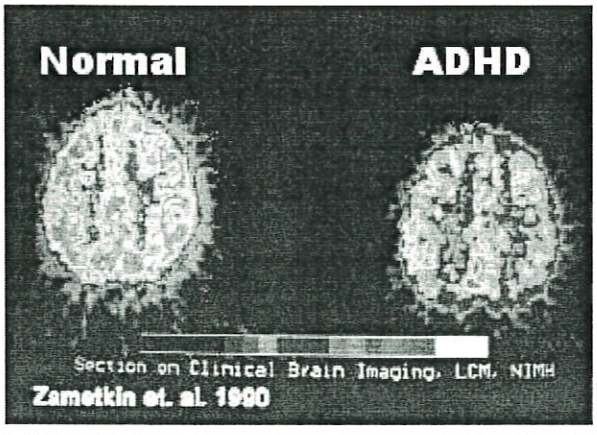
Reduced Prefrontal Gray Matter Volume and Reduced Autonomic Activity in Antisocial Personality Disorder
(*Arch Gen Psychiatry.* 2000;57:119-127)

The effect of family genetic and behavioral history for alcoholism/alcohol addiction on brain responses in adult children after exposure to alcohol in blind test. With family history of alcoholism, persons are more likely to be aggressive and depressed after drinking. With no history, persons are more extroverted and social.

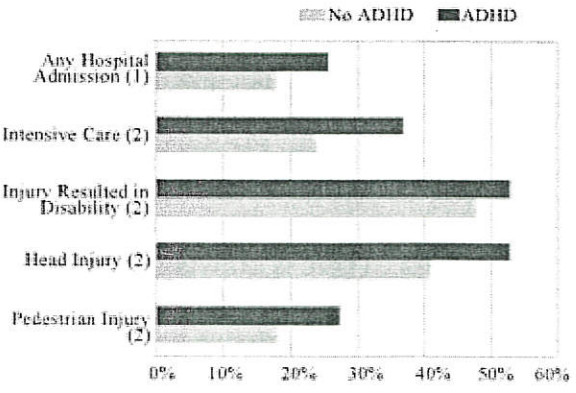
http://www.andybak.connectfree.co.uk/gallery/genetics/science_02.htm



ADHD brain needs more "stimulation"



Persons with ADHD more likely to be injured.



Other issues of brain chemistry are documented and will continue to be, such as the examples below:

- Serotonin levels, serotonin precursors or enzymes, serotonin receptors and transporters (different for people growing up in highly chaotic circumstances versus predatory killers like the BTK serial murder).
- Different levels of dopamine, dopamine precursors or enzymes, dopamine receptors, and transporters (different for people growing up in highly circumstances versus middle class or upper class folks).
- Different levels of stress hormones and stress hormone receptors (which may be changed by environmental and social events).

These mechanisms are probably evolutionary adaptations to predatory events in human culture, since other human beings are the most effective predator of other humans. Consider the parable of testosterone and serotonin levels as a function of harsh prison experiences. (Related orally).

Cognitive and Behavioral Issues

For the most part, individuals like Billy think and behave differently. In general, these cognitive and behavioral issues show up as:

- High levels of impulsivity
- Problems of sustained attention
- Low reward delay
- High "gambling" response
- Poor reasoning about adverse consequences
- Many distortions in cognition such as "automatic negative thoughts"
- Over focus on irrelevant or distracting stimuli
- Perceive neutral events as negative
- Magnify negative events as extreme threats
- More frequent sexual thoughts (a result of change in brain chemistry)
- Difficulty decoding non-verbal cues accurately
- Over-reactivity (chemically, cognitively, and behaviorally) to perceived stressors

Polygenes

Most of us know Mendellian qualitative genetics from high-school or college, which is about as advanced as the Ford Tri-Motor is to the Boeing 747 that took me to visit Singapore and Bali. The real scientific advances have been happening in quantitative genetics since the 1990s. In quantitative genetics, genes can be metaphorically "added, subtracted, divided and multiplied." In many instances, polygenes can be turned off or on by environment or social events, such as perceived stress. There is growing research that men and women in the correctional system may have genetic vulnerabilities that place them at risk for substance abuse, DSM-IV diagnoses, risk of PTSD, and risk of aggressive behavior. If so, "prison as usual" is likely to increase the adverse outcomes, and harm the intent of the 3R committee. Issues of rehabilitation, restoration and recodification will have to address these findings—just as medicine has had to address them in understanding and treating such things as breast cancer. The figure below provides one glimpse of the issue from the work of Dr. David Comings.

Figure 2: Polygenic Effects of Dopamine Genes on ADHD and Alcoholism, Mediated by Perceived Stress

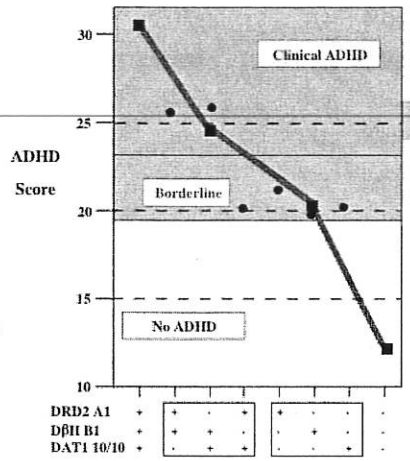


Table 3
Mean MAST Score by Occupational Stress Level and DRD2 Allele

	Stress Level					
	Low		Moderate		High	
DRD2 TaqI	Mean±CI	(N)	Mean±CI	(N)	Mean±CI	(N)
A1A1	0.56±0.66	(9)	2.22±1.78	(9)	7.00± 2.48	(4)
A1A2	2.51±1.15	(37)	1.75±0.78	(44)	4.80± 1.30	(5)
A2A2	2.87±0.97	(55)	3.67±1.13	(46)	3.24± 0.95	(0)

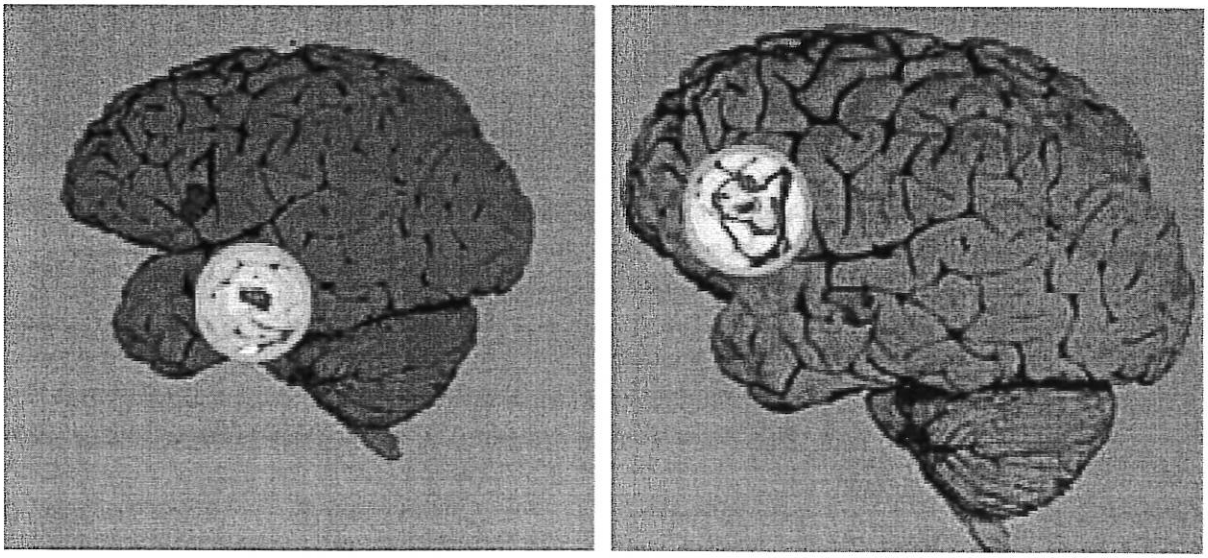
Madrid, G. et al., (2001). Stress as a Mediating Factor in the Outcome of Studies of the *DRD2 Taq*I Polymorphism and Alcoholism

Racial, Gender and Developmental Issues

Oral testimony will discuss some examples of racial, gender and developmental (age related trends) known to affect issues of "criminal behavior." Consider the example below.

Figure 3: Developmental Brain Differences in Perception of Fear

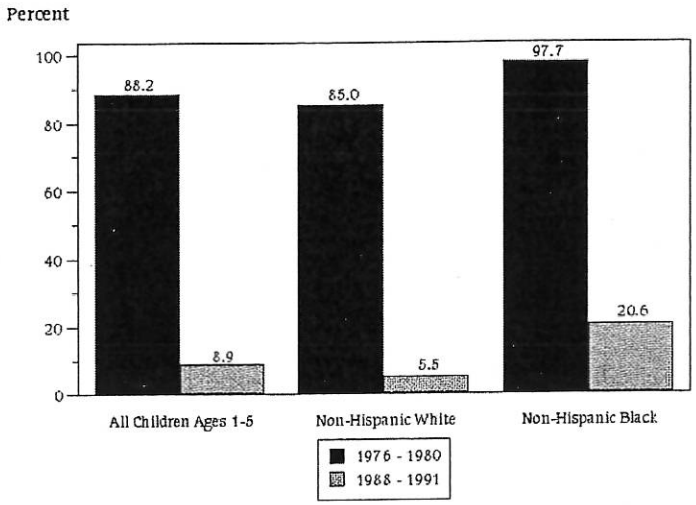
Teens Adults



For some time, lead exposure (measured in persons or the environment) has been shown to correlate strongly with delinquency, incarceration and homicides. This is particularly true for children and adults of African American heritage who carry genes that appear to be adaptive to conditions of Africa (protect against sunlight and dry conditions), by that cause increase absorption of (Pb, Lead) especially from airborne sources. See

http://aspe.hhs.gov/hsp/97trends/hc2-9.htm for more details. These same genes may be implicated in a variety of diseases such as hypertension.

Figure 4: Percentage of Children Ages 1-5 With Blood Lead Levels Greater Than or Equal To Ten Micrograms per Deciliter



Examples of Strategies That Might Work With Billy's

The following are low-cost, evidence-based kernels or behavioral vaccines that can significantly save more Kansas kids and families in the new few years from major problems that cause great personal, family and community pain. We have organized the strategies by developmental targets or age groups, which cut across multiple domains of Kansas' government (different state agencies) plus city, county and school district cost centers. All of these problems dramatically affect Kansas' business climate and general competitiveness. These are examples—not an exhaustive list—of evidence-based kernels or behavioral vaccines that could be implemented broadly with public health, safety and human capital outcomes.

Pre-Natal & Post-Natal

The following are illustrative low-cost strategies that improve outcomes of infants who are at risk for serious problem behaviors. These are a a few examples of the research findings.

Low-Cost Strategy	How It Works	Scientifically Proven Benefits	Cost Savings
Vouchers for biological confirmed smoking/alcohol cessation [1]	Pregnant women earn vouchers for not smoking or using alcohol. Their significant others earn vouchers, too, for being "smober."	Confirmed cessation rates jump from about 6%-9% to 30%	More cost effective in reducing LBW and early developmental complications than 'best practices'

Omega 3, Folic Acid and calcium supplementation in higher—risk pregnant mothers [2-18]	Pregnant and post-partum women receive high-quality supplementation Omega 3 (EPA-DHA), calcium and Folic Acid. High-risk mothers (e.g., stressed, alcohol, tobacco, drug using, poor nutrition) have abnormal levels. Some affect brain development.	Reduced post-partum depression; better fetal development; lower rates of pregnancy complications.	The savings are likely to accrue from reduced prenatal or post-natal complications; improved early parenting.
Kangaroo Care and infant massage for drug exposed infants and neonates or by mothers exposed drugs/violence [19-43] (See www.kangaroomothercare.com; and www.marchofdimes.com/prematurity/5430_6074.asp)	Post-partum mothers or caregivers provide massage to the child or carry the child "skin to skin," especially for babies born pre-term, LBW or drug exposed. Changes brain chemistry of infant.	Improved health and development of the child; improved health and behavioral health of mother.	Fewer post-natal complications associated with high-cost care. Better child health and development.
Teaching caregiver(s) to do Mothers Neonatal Assessment (The Brazelton) [44-55] (See www.**brazelton-**institute.com)	The Mother's Own Neonatal Behavioral Assessment (MBAS) is taught to the caregiver and practiced several times, teaching the caregiver to recognize the child's modal responses to various stimuli.	This procedure produces reliable improvements in parenting behavior, health outcomes and reduced risk of early child abuse and neglect.	Reduced health care utilization and reduced infant child abuse or neglect.

Early Childhood (Preschool through 2nd grade)

The following are illustrative low-cost strategies that improve outcomes of young children who are at risk for serious problem behaviors.

Low-Cost Strategy	How It Works	Scientifically Proven Benefits	Cost Savings
12 or more specially constructed storybooks [56-64]. The books also feature character or parenting behaviors. [65-68]	Specially constructed books prompt parent-child interaction. The prompts are at the bottom of each page. The books can be enhanced by having the story about the listening child, while depicting the child and caregiver as heroes.	Parent-child interaction are better. Parent and child can learn skills that reduce conflict and behavior or health problems. Literacy can be improved into 2nd grade.	Remedial education costs reduced. Treatment costs for health and behavioral health reduced.
Errorless compliance training [69-80]	Parents or caregivers give a child graded sets of instructions that evoke compliance with high probability and generate high rates of reinforcement, sprinkled in with requests that are less likely to be followed. The procedure uses check sheets and can be augmented by fun activities (e.g., songs and games) that involving copying.	Rapid improvements in conduct problems and coercive parent-child interactions.	Reduces conduct disorders and serious negative parent child interactions, which predict lifetime serious problems.
Solution focused advice recipes for families [81-94].	Simple evidence-based recipes that help solve every problems of living with children in family circumstances. The recipes do not require clinical diagnoses.	Reducing in a host of behavior problems typically associated with DSM-IV	Dramatically extends improved family functioning at

		problems	modest cost.

Elementary School

The following are illustrative low-cost strategies that improve outcomes of elementary-school age students who are at risk for serious problem behaviors.

Low-Cost Strategy	How It Works	Scientifically Proven Benefits	Cost Savings
Good Behavior Game [95-101] (See www.hazelden bookplace.com/ paxgame)	Simple classroom-based protocol, using teams, teaching cognitive self-control, attention to task and reduces peer negative or accidental attention thorough group rewards.	Near instant reduction in disruptive behavior. Major reduction in ADHD and conduct problems plus substance abuse and drug use.	Cost saving are thousands of dollars per child exposed, plus major governmental savings. Also, there is a 25% increase in time for instruction.
Class-wide peer tutoring [102-112]	Children (or youth) in the classroom tutor each other in a set way on teams, with publicly posted scores, with group rewards. The tutoring focuses on basic info for mastery	Large increase in standardized achievement, reduced placement in special education and better social competence including reduced racism, etc.	Saves thousands of dollars per classroom for special education, and increases academic success.
Response slates [113-118]	Children (or youth) use slates or response cards to indicate correct answers instead of by quizzes or hand raising.	Reduction in ADHD symptoms, increase in achievement.	Practically free.
Praise Notes by Peers and Adults [119-121]	Peers or adults write praise notes to peers for positive behavior, which are publicly posted for all to see or hear.	Large improvements in social competence and reductions in illness behaviors plus fighting or aggression or victimization	The effects are many times that of most packaged "best practices" aimed at safe & drug free schools, yet a fraction of the cost.
Organized, structured recess [122-131]	Staff organize cooperative and/or structured games at recess, with positive reinforcement for reduced aggression and inhibition of negative behavior.	Large changes in social competence, improved academic achievement, reduced bullying.	Much less extensive and sustainable than other alternatives

Middle School

The following are illustrative low-cost strategies that improve outcomes of middle-school students who are at risk for serious problem behaviors. These are a a few examples of the research findings.

Low-Cost Strategy	How It Works	Scientifically Proven Benefits	Cost Savings
Daily positive "caught you being good" at school	Every staff in schools are given five or so coupons per week to give out for positive behavior. Winners noted on PA system, and positive rewards associated.	Multiple investigations showing positive effects on reduced disruptive behavior	Vandalism decreased, office referrals and suspensions decreased.
Increased square footage of student work displayed on the walls plus increased frequency of student roles in the building [132, 133]	These procedures increase perceived rewards for prosocial behaviors among all students.	Reduced vandalism, delinquency and increased achievement.	More effective than curriculum interventions; low resource cost; pays for self.

High School

The following are illustrative low-cost strategies that improve outcomes of high-school who are at risk for serious problem behaviors. These are a a few examples of the research findings.

Low-Cost Strategy	How It Works	Scientifically Proven Benefits	Cost Savings
Motivational interviewing [134-136]	In about 60 minutes, wise adult coaches a young person to find authentic values and goals, and reduce use of tobacco, alcohol and other drugs. Can be used in high-risk circumstances.	Major reductions in use of tobacco, alcohol and other drugs.	The reductions in drug use represent life saving gains
Student work displays and student roles in school [132, 133, 137]	Student work displayed on walls of school, and most students have meaningful roles in school building.	Significant increase in academic achievement, and major reductions in delinquency.	Reductions vandalism, increase in achievement, and reductions in vandalism for modest cost.

Adults

The following are illustrative low-cost strategies that improve outcomes of adults who are at risk for serious problem behaviors. These are a a few examples of the research findings.

Low-Cost Strategy	How It Works	Scientifically Proven Benefits	Cost Savings
Prize bowl for sobriety [138-142], or during pregnancy for reduced	Adults earn incentives for being sober and completing substance abuse programs.	Dramatic reduction in cocaine, alcohol, marijuana and other	Major cost savings per therapist effort

tobacco, alcohol or drug use [1].		drug use; major reductions of tobacco use during pregnancy.	
Omega 3 supplementation for bipolar disorder, aggression or borderline personality disorder [143-145].	Omega 3 acts as mood stabilizer in randomized control studies to address various behavioral and mental disorders.	Major reduction in aggression and mental illnesses diagnoses	For a modest cost per person, trouble disorders reduced.

Social Marketing for Saving Kansas Kids and Families

Social Marketing makes use of the "Five Ps of Marketing." The modern approach to marketing revolves around five Ps: product, performance, price, place, and promotion.[1] To save Kansas Kids and Families, it is necessary to undertake a strong "social marketing" campaign to make sure that people know the solutions, not just the pain of Billy's.

Product: Commercial marketers make sure that their product is appealing to consumers and has a catchy name that is easy to remember. The PeaceBuilder (e.g., Embry et al., 1996) violence prevention program is an example, and Wisconsin Wins is an example for tobacco control (Embry et al., in press).

Performance: Commercial marketers make clear what the customer must do to achieve the advertised result and what the benefits are from the product. "Awareness" is not performance, which must be measurable and reportable. Performance promise benefits such as "learn more", "have less stress", "saves time", or "feel better." Performance is not the pain (e.g., crime), but relief (e.g., safety).

Place: The product, activity or benefit can be easily accessible to virtually all potential consumers or targets, unlike most awareness or negative campaigns. All you have to do to get to gain the "benefit" is visit a local school, merchant, ask your doctor, or perhaps call a toll-free number.

Price: Price is how much it costs in time, effort, energy, money, etc. Price can be expressed in clear ways, such as "takes only a few minutes a day."

Promotion: Commercial markers use promotion and advertising to familiarize consumers with the product and persuade them to buy it or try it. This enables the full power of advertising and marketing to operate for community-based prevention. Testimonials are typically among the most effective promotion.

There are some other issues to consider about the social marketing, which may not be transparent. First, they invite huge possibilities for sponsorships from the private sector using marketing and advertising revenue rather than charitable gift giving. From my own personal experience in this country and overseas, I have been able to recruit major sponsorships from multi-national corporations to do this kind of focused, positive, and population-based prevention. Second, the entire nature of procedures that are positive and really meat the five "P's" invite partnerships. Third, promotions that are observable and measurable using very simple procedures

[1] Traditional papers on social marketing list only four, and this paper adds another based on prior experience in the field.

will work MUCH better than abstractions. Fourth, promotions that can be come "social norms" are far more likely to become sustainable.

Social norms are about daily behaviors, routines, and rituals rather than attitudes. When confronted with prevention in the past, most "social marketing" efforts have focused on the general issue or the "don't" behaviors (e.g., don't do domestic violence or child abuse). Offering a menu of 30 prevention programs for schools or stakeholders to choose from, like the prevention fair, cannot alter the community norms, because there are no common daily behaviors, routines, rituals, or language that share any stimulus properties that would cue rule-governed behaviors that make up the core of "community norms." Community norms require some kind of identity or unifying concept. Good social marketing campaigns promote a product or products and a brand identity, because the branding identify "leads" people to other products based on the performance and benefits from the first success.

Recommendations for Action by Kansas Legislature

The following recommendations are to be discussed.

Adopt Spreadsheet for Planning the Impact of Prevention & Treatment Across Kansas Budget Categories

1. The Legislature needs to ask, "how will options reduce the burden of costs across budgetary silos and improve fiscal and multiple outcomes?" Advances in scientific understanding makes it possible to compute and plan for impact of prevention or treatment effects across "silo" budgets of the state, using a notion program accounting for outcomes—much like a profit and loss estimate used by business. The illustration below shows what might happen if all elementary school teachers in Kansas were taught and incentivized to use the very simple best practice, the Good Behavior Game (originally invented by a 4th grade teacher and others at the University of Kansas in 1967). The table shown next is an illustration of what might be done.
2. Ask for the "true costs" of syndemics across budget categories for the state—e.g., mental health, substance abuse, domestic violence, similar to what has been done recently in Oklahoma.

Table 2: Example Program Accounting for Outcome Across Budget "Silos"

Program Accounting for Outcome of: Good Behavior Game Prevention Effort
Developed by PAXIS Institute © 2003

	Current Prevalence As Percent	Current Prevalence as Frequency	Mean Cost Per Child Per Problem Until Age 21
Special Ed.	15.00%	150,000	$5,000
Delinquency	9.00%	90,000	$12,000
Violence	5.00%	50,000	$18,000
Tobacco	25.00%	250,000	$500
Alcohol	30.00%	300,000	$7,500
Other Drug	9.00%	90,000	$8,000
Medicaid	15.00%	150,000	$19,368
Total Cost of Effort:		$8,500,000	

Census Size of Target Population:	1,000,000	(Total target population, e.g., all K-12 students)
of Census Population Reached With Dose:	10.00%	(Dose refers to sufficient fidelity and time to produce change)
Estimated Number Reached With Dose:	100,000	(Calculated as % of the total target census population)

Prevention Effect Sizes:

ES Sped	ES Delinq.	ES Violence	ES Tobacco	ES Alcohol	ES Drugs	Medicaid
0.3	0.4	0.5	0.1	0.1	0.1	0.25

Predicted Prevention Numbers by Problem:

4,500	3,600	2,500	2,500	3,000	900	3,750

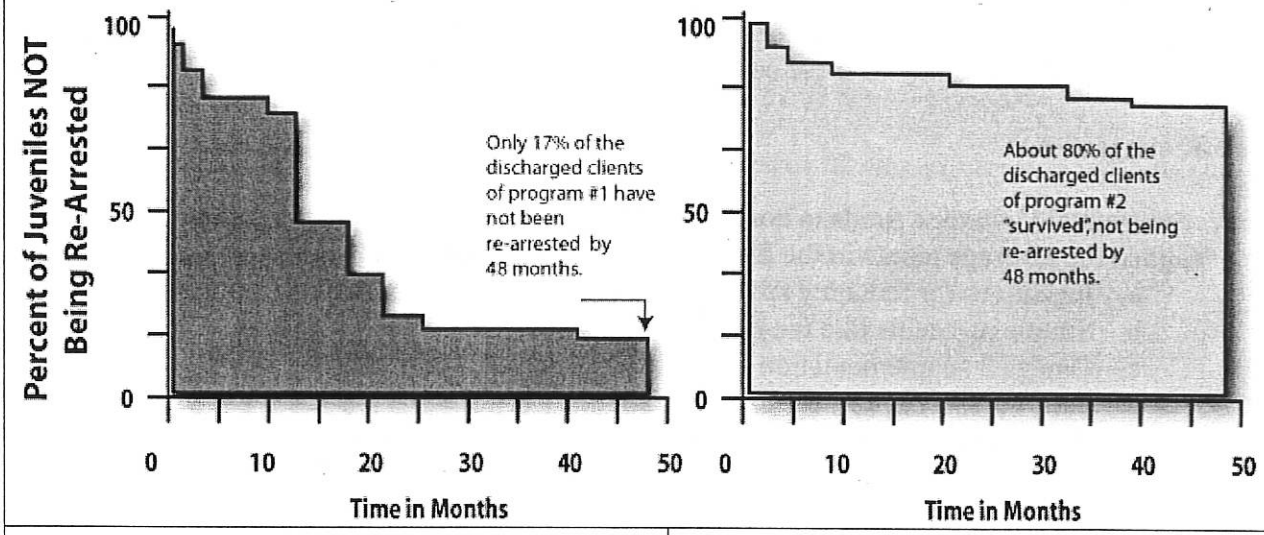
Sum of all all instances of prevent multi-problem (unspecified overlap): 20,750

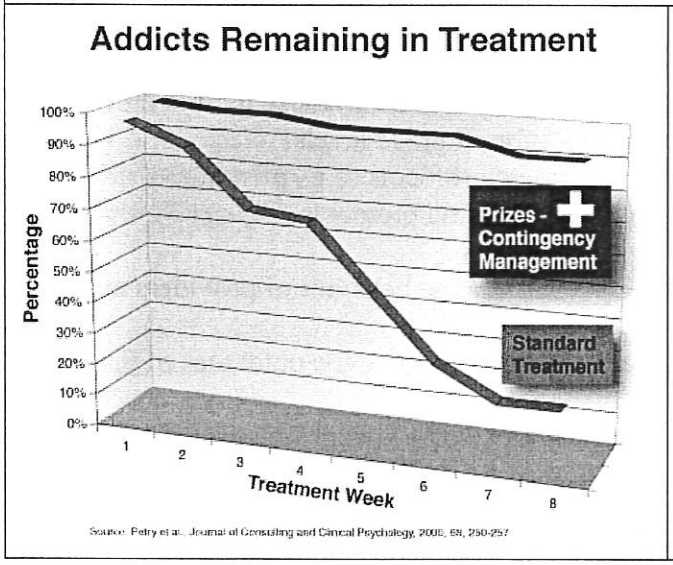
	Program Outcome Areas:	Predicted Prevalence Rate:	Net Change:	Predicted Gross Savings 10 Years
	Special Ed.	14.55%	-0.45%	$22,500,000
	Delinquency	8.64%	-0.36%	$43,200,000
	Violence	4.75%	-0.25%	$125,000,000
	Tobacco	24.75%	-0.25%	$1,250,000
	Alcohol	29.70%	-0.30%	$22,500,000
	Other Drug	8.91%	-0.09%	$7,200,000
	Medicaid	12.93%	-2.08%	$17,431,200
	Total Gross Savings (time 50% discount):			$110,825,000
	Less Cost (Times 100% hidden costs):			($17,000,000)
10%	Less Adverse Consequences Sums:			($11,082,500)
	Net Fiscal Gain:			**$82,742,500**
ıte of Return (needs to be higher than 100%):				**652% Gain**

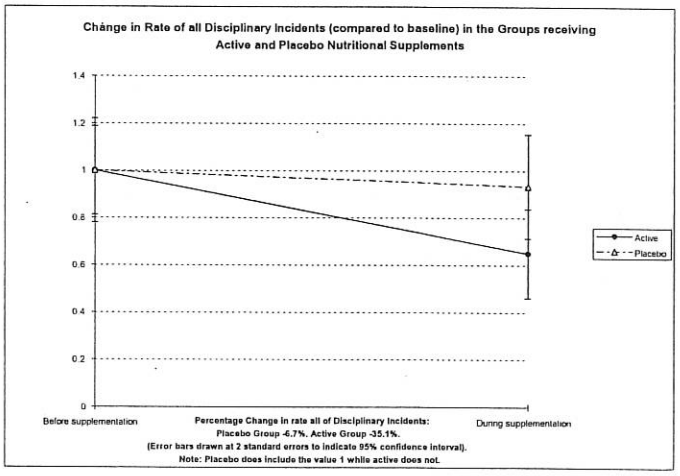
Authorize Incentive Payments for Outcome for Syndemics

1. Contract and payment for specific results and evidence-based services that produce measurable changes in substance abuse, mental health, cognition, behavior and other important outcomes related to rehabilitation. A commonly used model of monitoring outcomes, "survival analysis" shows results across time (months, weeks, etc.).

Figure 5: Example Program Type Data-Dashboard







Undertake Funding to Reduce the Burden of Billy's

1. Leaky roof analogy. Kansas has a seriously leaky roof, rather like I had about 10 years ago when a business downturn and personal difficulties collided. I have a flat roof on my

house in Arizona, arguably a bad design. The roof was starting to leak, and causing damage to my house. If I did not fix the roof, my whole house and investment would be seriously damaged. The trouble was, my personal finances were not in good shape, and may business was even worse at the time. The only solution I had was to use some of my retirement money to protect my major investment, my home. The state of Kansas has a similar problem with all our Billy's. If we don't do something, they will break the bank. We cannot wait for the federal government (what states often do) to pay for this. We are going to have to find some serious cash to fix the leaky roof to save our future.

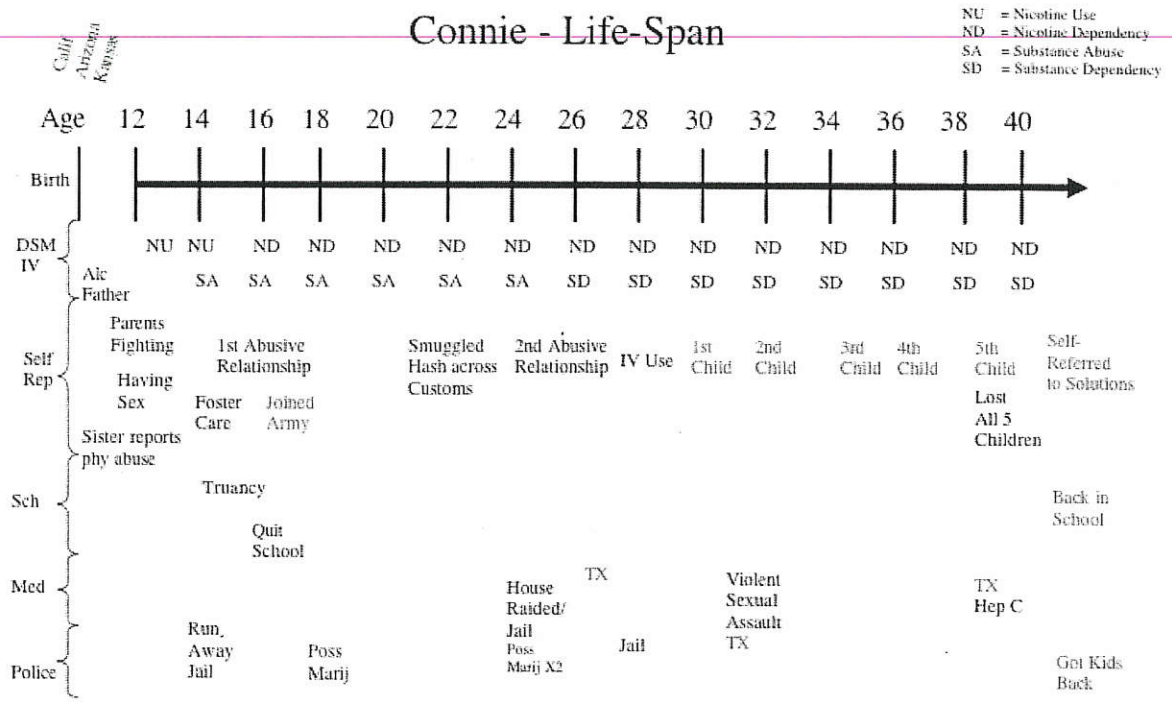
2. Retirement analogy. The costs of living today always seem more compelling than the future benefits of an easier life in our retirement. Prison, Medicaid and other costs are increasingly harming the state's future. Substantial evidence suggests that we can actually prevent and treat many of these costly problems now, assuring a better future.

Specific suggestions:

1. Substantially increase funds to conduct statewide low-cost prevention/treatment efforts aimed the leverage points in the lives of Billy. This includes such things as:
    a. Incentives for reducing smoking, drinking and using drugs during pregnancy.
    b. Simple protocols like the Brazelton and Kangaroo Care.
    c. Omega 3 supplementation for prisoners and mentally ill.
    d. Storybook campaign for emergent literacy
    e. Multi-level parenting efforts for whole state (e.g., Triple P—Positive Parenting Program), such as being undertaken by the State of Wyoming with the Wyoming Parenting Initiative.
    f. Elementary school efforts such as Good Behavior Game and Classwide Peer Tutoring (All Kansas inventions).
    g. Statewide effort to reinforce positive child and youth behavior (e.g., like the PeaceBuilders project in People Magazine) for all grade levels.
    h. Adoption and promotion of low-cost treatment protocols (e.g., prize bowl, node mapping, motivational interviewing, brief physician protocols, Omega 3), with incentives for using and outcome by practitioners.
2. Craft legislation that authorizes the use incentives to change behavior of providers and clients, including for the payment of outcomes.
3. Authorize the creation of a public-private partnership to improve the outcomes of Kansas kids and families.
4. Commission and adopt a comprehensive blueprint for saving Kansas kids and families.

Hope for Kansas Kids and Families

Real world examples exist for showing that it is possible to save Kansas kids and families, such as the case of Connie and her five children helped by Solutions.



References

1. Donatelle, R.J., et al., *Randomised controlled trial using social support and financial incentives for high risk pregnant smokers: significant other supporter (SOS) program.* Tobacco Control, 2000. **9**(Suppl 3): p. III67-9.
2. Kulier, R., et al., *Nutritional interventions for the prevention of maternal morbidity.* International Journal of Gynaecology & Obstetrics, 1998. **63**(3): p. 231-46.
3. Luke, B., *Nutrition during pregnancy.* Current Opinion in Obstetrics & Gynecology, 1994. **6**(5): p. 402-7.
4. Chiu, C.-C., et al., *"Omega-3 fatty acids for depression in pregnancy": Erratum.* American Journal of Psychiatry, 2003. **160**(4): p. 810.
5. Chiu, C.-C., et al., *Omega-3 fatty acids for depression in pregnancy.* American Journal of Psychiatry, 2003. **160**(2): p. 385.
6. Freeman, M.P., *Omega-3 fatty acids in psychiatry: A review.* Annals of Clinical Psychiatry, 2000. **12**(3): p. 159-165.

7. Hibbeln, J.R., *Seafood consumption, the DHA content of mothers' milk and prevalence rates of postpartum depression: a cross-national, ecological analysis.* Journal of Affective Disorders, 2002. **69**(1-3): p. 15-29.
8. Fugh-Berman, A. and F. Kronenberg, *Complementary and alternative medicine (CAM) in reproductive-age women: a review of randomized controlled trials.* Reproductive Toxicology, 2003. **17**(2): p. 137-52.
9. Malcolm, C.A., et al., *Scotopic electroretinogram in term infants born of mothers supplemented with docosahexaenoic acid during pregnancy.* Investigative Ophthalmology & Visual Science, 2003. **44**(8): p. 3685-91.
10. Dunstan, J.A., et al., *Maternal fish oil supplementation in pregnancy reduces interleukin-13 levels in cord blood of infants at high risk of atopy.[comment].* Clinical & Experimental Allergy, 2003. **33**(4): p. 442-8.
11. Villar, J., et al., *Nutritional interventions during pregnancy for the prevention or treatment of maternal morbidity and preterm delivery: an overview of randomized controlled trials.* Journal of Nutrition, 2003. **133**(5 Suppl 2): p. 1606S-1625S.
12. Williams, C., et al., *Stereoacuity at age 3.5 y in children born full-term is associated with prenatal and postnatal dietary factors: a report from a population-based cohort study.* American Journal of Clinical Nutrition, 2001. **73**(2): p. 316-22.
13. Champoux, M., et al., *Fatty acid formula supplementation and neuromotor development in rhesus monkey neonates.* Pediatric Research, 2002. **51**(3): p. 273-81.
14. Lapillonne, A. and S.E. Carlson, *Polyunsaturated fatty acids and infant growth.* Lipids, 2001. **36**(9): p. 901-11.
15. Auestad, N., et al., *Growth and development in term infants fed long-chain polyunsaturated fatty acids: a double-masked, randomized, parallel, prospective, multivariate study.* Pediatrics, 2001. **108**(2): p. 372-81.
16. O'Connor, D.L., et al., *Growth and development in preterm infants fed long-chain polyunsaturated fatty acids: a prospective, randomized controlled trial.* Pediatrics, 2001. **108**(2): p. 359-71.
17. Fernandez-Andrade, C., *[Renal markers and predictors, and renal and cardiovascular risk factors].* Nefrologia, 2002. **22**(Suppl 1): p. 2-29.
18. Berry, C., et al., *Fatty acid status of women of reproductive age.* European Journal of Clinical Nutrition, 2001. **55**(7): p. 518-24.
19. Closa Monasterolo, R., et al., *["Kangaroo method" in the care of premature infants admitted to a neonatal intensive care unit].* Anales Espanoles de Pediatria, 1998. **49**(5): p. 495-8.
20. Fischer, C.B., et al., *Cardiorespiratory stability of premature boys and girls during kangaroo care.* Early Human Development, 1998. **52**(2): p. 145-53.
21. Gale, G. and K.A. VandenBerg, *Kangaroo care.* Neonatal Network - Journal of Neonatal Nursing, 1998. **17**(5): p. 69-71.
22. Hill, P.D., J.C. Aldag, and R.T. Chatterton, Jr., *Breastfeeding experience and milk weight in lactating mothers pumping for preterm infants.* Birth, 1999. **26**(4): p. 233-8.
23. Hill, P.D., J.C. Aldag, and R.T. Chatterton, *Effects of pumping style on milk production in mothers of non-nursing preterm infants.* Journal of Human Lactation, 1999. **15**(3): p. 209-16.

24. Kambarami, R.A., O. Chidede, and D.T. Kowo, *Kangaroo care versus incubator care in the management of well preterm infants--a pilot study.* Annals of Tropical Paediatrics, 1998. **18**(2): p. 81-6.
25. Kambarami, R.A., O. Chidede, and D.T. Kowo, *Kangaroo care for well low birth weight infants at Harare Central Hospital Maternity Unit--Zimbabwe.* Central African Journal of Medicine, 1999. **45**(3): p. 56-9.
26. Roller, C.G., K. Meyer, and G.C. Anderson, *Birth kangaroo (skin-to-skin) care and breastfeeding. An eclamptic woman's story.* MCN, American Journal of Maternal Child Nursing, 1999. **24**(6): p. 294-5.
27. Tornhage, C.J., et al., *Plasma somatostatin and cholecystokinin levels in preterm infants during kangaroo care with and without nasogastric tube-feeding.* Journal of Pediatric Endocrinology & Metabolism, 1998. **11**(5): p. 645-51.
28. Tornhage, C.J., et al., *First week kangaroo care in sick very preterm infants.* Acta Paediatrica, 1999. **88**(12): p. 1402-4.
29. Field, T., *Massage therapy for infants and children.* Journal of Developmental & Behavioral Pediatrics, 1995. **16**(2): p. 105.
30. Scafidi, F.A., T. Field, and S.M. Schanberg, *Factors that predict which preterm infants behefit most from massage therapy.* Journal of Developmental & Behavioral Pediatrics, 1993. **14**(3): p. 176.
31. Field, T. and M. Hernandez-Reif, *Sleep problems in infants decrease following massage therapy.* Early Child Development & Care, 2001. **168**: p. 95.
32. Field, T., *Massage therapy facilitates weight gain in preterm infants.* Current Directions in Psychological Science, 2001. **10**(2): p. 51.
33. Morrow, C.J., et al., *Differential effects of massage and heelstick procedures on transcutaneous oxygen tension in preterm neonates.* Infant Behavior & Development, 1991. **14**(4): p. 397.
34. Cullen, C., et al., *Father-infant interactions are enhanced by massage therapy.* Early Child Development & Care, 2000. **164**: p. 41.
35. Scafidi, F.A., et al., *Massage stimulates growth in preterm infants: A replication.* Infant Behavior & Development, 1990. **13**(2): p. 167.
36. Dieter, J.N.I., et al., *Stable Preterm Infants Gain More Weight and Sleep Less after Five Days of Massage Therapy.* Journal of Pediatric Psychology, 2003. **28**(6): p. 403.
37. Field, T., et al., *Massage therapy for infants of depressed mothers.* Infant Behavior & Development, 1996. **19**(1): p. 107.
38. Jones, N.A., T. Field, and M. Davalos, *Massage therapy attenuates right frontal EEG asymmetry in one-month-old infants of depressed mothers.* Infant Behavior & Development, 1998. **21**(3): p. 527.
39. Field, T.M., *Touch therapy effects on development.* International Journal of Behavioral Development, 1998. **22**(4): p. 779.
40. Field, T.M., et al., *Elder retired volunteers benefit from giving massage therapy to infants.* Journal of Applied Gerontology, 1998. **17**(2): p. 229.
41. Cigales, M., et al., *Massage enhances recovery from habituation in normal infants.* Infant Behavior & Development, 1997. **20**(1): p. 29.
42. Field, T.M., et al., *Massage with oil has more positive effects on normal infants.* Journal of Prenatal & Perinatal Psychology & Health, 1996. **11**(2): p. 75.

2-26

43. Ohgi, S., et al., *Comparison of kangaroo care and standard care: behavioral organization, development, and temperament in healthy, low-birth-weight infants through 1 year.* Journal of Perinatology, 2002. **22**(5): p. 374-9.
44. Diego, M.A., T. Field, and M. Hernandez-Reif, *BIS/BAS scores are correlated with frontal EEG asymmetry in intrusive and withdrawn depressed mothers.* Infant Mental Health Journal, 2001. **22**(6): p. 665.
45. Field, T., *Interventions in early infancy.* Infant Mental Health Journal, 1992. **13**(4): p. 329.
46. Field, T., et al., *Targeting adolescent mothers with depressive symptoms for early intervention.* Adolescence, 2000. **35**(138): p. 381.
47. Stone, W.L., R.D. Bendell, and T.M. Field, *The impact of socioeconomic status on teenage mothers and children who received early intervention.* Journal of Applied Developmental Psychology, 1988. **9**(4): p. 391.
48. Field, T., *Maternal depression effects on infants and early interventions.* Preventive Medicine: An International Journal Devoted to Practice & Theory, 1998. **27**(2): p. 200.
49. Field, T.M., et al., *Polydrug-using adolescent mothers and their infants receiving early intervention.* Adolescence, 1998. **33**(129): p. 117.
50. Field, T.M., et al., *Polydrug-using adolescent mothers and their infants receiving early intervention.* Adolescence, 1998. **33**(129): p. 117-43.
51. Hart, S., T. Field, and G. Nearing, *Depressed mothers' neonates improve following the MABI and a Brazelton demonstration.* Journal of Pediatric Psychology, 1998. **23**(6): p. 351-6.
52. Das Eiden, R. and A. Reifman, *Effects of Brazelton demonstrations on later parenting: A meta-analysis.* Journal of Pediatric Psychology, 1996. **21**(6): p. 857-868.
53. Das Eiden, R. and A. Reifman, *Effects of Brazelton demonstrations on later parenting: a meta-analysis.* Journal of Pediatric Psychology, 1996. **21**(6): p. 857-68.
54. Worobey, J., *A review of Brazelton-based interventions to enhance parentnfant interaction.* Journal of Reproductive & Infant Psychology, 1985. **3**(2): p. 64-73.
55. Widmayer, S.M. and T.M. Field, *Effects of Brazelton demonstrations for mothers on the development of preterm infants.* Pediatrics, 1981. **67**(5): p. 711-4.
56. Arnold, D.H., et al., *Accelerating language development through picture book reading: Replication and extension to a videotape training format.* Journal of Educational Psychology, 1994. **86**(2): p. 235.
57. Lonigan, C.J. and G.J. Whitehurst, *Relative efficacy of parent and teacher involvement in a shared-reading intervention for preschool children from low-income backgrounds.* Early Childhood Research Quarterly, 1998. **13**(2): p. 263.
58. Valdez-Menchaca, M.C. and G.J. Whitehurst, *Accelerating language development through picture book reading: A systematic extension to Mexican day care.* Developmental Psychology, 1992. **28**(6): p. 1106.
59. Wedel, J.W. and S.A. Fowler, *"Read me a story, Mom": A home-tutoring program to teach prereading skills to language-delayed children.* Behavior Modification, 1984. **8**(2): p. 245.
60. Whitehurst, G.J., et al., *A picture book reading intervention in day care and home for children from low-income families.* Developmental Psychology, 1994. **30**(5): p. 679.
61. Whitehurst, G.J., et al., *Outcomes of an emergent literacy intervention in Head Start.* Journal of Educational Psychology, 1994. **86**(4): p. 542.

62. Whitehurst, G.J. and C.J. Lonigan, *Child development and emergent literacy.* Child Development, 1998. **69**(3): p. 848.
63. Whitehurst, G.J., et al., *Outcomes of an emergent literacy intervention from Head Start through second grade.* Journal of Educational Psychology, 1999. **91**(2): p. 261.
64. Zevenbergen, A.A., G.J. Whitehurst, and J.A. Zevenbergen, *Effects of a shared-reading intervention on the inclusion of evaluative devices in narratives of children from low-income families.* Journal of Applied Developmental Psychology, 2003. **24**(1): p. 1.
65. Morgan, L. and H. Goldstein, *Teaching mothers of low socioeconomic status to use decontextualized language during storybook reading.* Journal of Early Intervention, 2004. **26**(4): p. 235.
66. Burke, R.V., B.R. Kuhn, and J.L. Peterson, *Brief Report: A "Storybook" Ending to Children's Bedtime Problems--The Use of a Rewarding Social Story to Reduce Bedtime Resistance and Frequent Night Waking.* Journal of Pediatric Psychology, 2004. **29**(5): p. 389.
67. Reissland, N., J. Shepherd, and E. Herrera, *The pitch of maternal voice: A comparison of mothers suffering from depressed mood and non-depressed mothers reading books to their infants.* Journal of Child Psychology & Psychiatry, 2003. **44**(2): p. 255.
68. Mikulas, W.L. and et al., *Behavioral bibliotherapy and games for treating fear of the dark.* Child & Family Behavior Therapy, 1985. **7**(3): p. 1.
69. Ducharme, J.M. and T.L. Drain, *Errorless Academic Compliance Training: Improving Generalized Cooperation With Parental Requests in Children With Autism.* Journal of the American Academy of Child & Adolescent Psychiatry, 2004. **43**(2): p. 163.
70. Ducharme, J.M. and A. Davidson, *Ameliorating the Effects of Violent Behavior in a Mother With Brain Injury: Intervention to Improve Parent-Child Cooperation.* Clinical Case Studies, 2004. **3**(2): p. 95.
71. Ducharme, J.M., et al., *Sequential evaluation of reinforced compliance and graduated request delivery for the treatment of noncompliance in children with developmental disabilities.* Journal of Autism & Developmental Disorders, 2003. **33**(5): p. 519.
72. Ducharme, J.M., *"Errorless" Rehabilitation: Strategies of Proactive Intervention for Individuals with Brain Injury and Their Children.* Journal of Head Trauma Rehabilitation, 2003. **18**(1): p. 88.
73. Ducharme, J.M., et al., *Errorless compliance training: Building a cooperative relationship between parents with brain injury and their oppositional children.* American Journal of Orthopsychiatry, 2002. **72**(4): p. 585.
74. Ducharme, J.M., A. Davidson, and N. Rushford, *Treatment of oppositional behavior in children of parents with brain injury and chronic pain.* Journal of Emotional & Behavioral Disorders, 2002. **10**(4): p. 241.
75. Ducharme, J.M., L. Atkinson, and L. Poulton, *Errorless complicance training with physically abusive mothers: A single-case approach.* Child Abuse & Neglect, 2001. **25**(6): p. 855.
76. Ducharme, J.M., L. Atkinson, and L. Poulton, *Success-based, noncoercive treatment of oppositional behavior in children from violent homes.* Journal of the American Academy of Child & Adolescent Psychiatry, 2000. **39**(8): p. 995.
77. Ducharme, J.M., *A conceptual model for treatment of externalizing behaviour in acquired brain injury.* Brain Injury, 1999. **13**(9): p. 645.

78. Ducharme, J.M. and D.E. Worling, *Behavioral momentum and stimulus fading in the acquisition and maintenance of child compliance in the home.* Journal of Applied Behavior Analysis, 1994. **27**(4): p. 639.
79. Ducharme, J.M., et al., *Errorless compliance to parental requests: II. Increasing clinical practicality through abbreviation of treatment parameters.* Behavior Therapy, 1994. **25**(3): p. 469.
80. Ducharme, J.M. and M. Popynick, *Errorless compliance to parental requests: Treatment effects and generalization.* Behavior Therapy, 1993. **24**(2): p. 209.
81. Sanders, M.R., W. Cann, and C. Markie-Dadds, *The triple P-positive parenting programme: A universal population-level approach to the prevention of child abuse.* Child Abuse Review, 2003. **12**(3): p. 155-171.
82. Sanders, M.R. and T. Glynn, *Training parents in behavioral self-management: An analysis of generalization and maintenance.* Journal of Applied Behavior Analysis, 1981. **14**(3): p. 223-237.
83. Sanders, M.R., K.M.T. Turner, and C. Markie-Dadds, *The development and dissemination of the Triple P-Positive Parenting Program: A multilevel, evidence-based system of parenting and family support.* Prevention Science, 2002. **3**(3): p. 173-189.
84. Endo, G.T., et al., *Reducing child tantrums through self-instructional parent training materials.* School Psychology International, 1991. **12**(1-2): p. 95.
85. Endo, G.T., et al., *Reducing child whining through self-instructional parent training materials.* Child & Family Behavior Therapy, 1991. **13**(3): p. 41.
86. Sloane, H.N., et al., *Reducing children's interrupting through self-instructional parent training materials.* Education & Treatment of Children, 1991. **14**(1): p. 38.
87. Sloane, H.N., et al., *Improving child compliance through self-instructional parent training materials.* Child & Family Behavior Therapy, 1990. **12**(4): p. 39.
88. Jones, R.N., H.N. Sloane, and J.M. Harris, *An inexpensive therapist^client communication device for use in parent training.* Child & Family Behavior Therapy, 1990. **12**(2): p. 65.
89. Sloane, H.N., et al., *Decreasing children's fighting through self-instructional parent training materials.* School Psychology International, 1990. **11**(1): p. 17.
90. Luxem, M. and E. Christophersen, *Behavioral toilet training in early childhood: Research, practice, and implications.* Journal of Developmental & Behavioral Pediatrics, 1994. **15**(5): p. 370.
91. Edwards, K.J. and E.R. Christophersen, *Treating common sleep problems of young children.* Journal of Developmental & Behavioral Pediatrics, 1994. **15**(3): p. 207.
92. Sosland, J.M. and E.R. Christophersen, *Does SleepTight work? A behavioral analysis of the effectiveness of SleepTight for the management of infant colic.* Journal of Applied Behavior Analysis, 1991. **24**(1): p. 161.
93. Rapoff, M.A., E.R. Christophersen, and K.E. Rapoff, *The management of common childhood bedtime problems by pediatric nurse practitioners.* Journal of Pediatric Psychology, 1982. **7**(2): p. 179.
94. Barnard, J.D., E.R. Christophersen, and M.M. Wolf, *Teaching children appropriate shopping behavior through parent training in the supermarket setting.* Journal of Applied Behavior Analysis, 1977. **10**(1): p. 49.

95. van Lier, P.A.C., et al., *Preventing Disruptive Behavior in Elementary Schoolchildren: Impact of a Universal Classroom-Based Intervention.* Journal of Consulting & Clinical Psychology, 2004. **72**(3): p. 467-478.
96. Embry, D.D., *The Good Behavior Game: a best practice candidate as a universal behavioral vaccine.* Clinical Child & Family Psychology Review, 2002. **5**(4): p. 273-97.
97. Storr, C.L., et al., *A randomized controlled trial of two primary school intervention strategies to prevent early onset tobacco smoking.* Drug & Alcohol Dependence, 2002. **66**(1): p. 51-60.
98. Eddy, J.M., L.D. Leve, and B.I. Fagot, *Coercive family processes: A replication and extension of Patterson's Coercion Model.* Aggressive Behavior, 2001. **27**(1): p. 14-25.
99. Ialongo, N., et al., *The distal impact of two first-grade preventive interventions on conduct problems and disorder in early adolescence.* Journal of Emotional & Behavioral Disorders, 2001. **9**(3): p. 146-160.
100. Pisecco, S., C. Huzinec, and D. Curtis, *The effect of child characteristics on teachers' acceptability of classroom-based behavioral strategies and psychostimulant medication for the treatment of ADHD.* Journal of Clinical Child Psychology, 2001. **30**(3): p. 413-21.
101. Kellam, S.G., et al., *Erratum: The effect of the level of aggression in the first grade classroom on the course and malleability of aggressive behavior into middle school.* Development & Psychopathology, 2000. **12**(1): p. 107.
102. Kamps, D.M., et al., *Classwide peer tutoring: An integration strategy to improve reading skills and promote peer interactions among students with autism and general education peers.* Journal of Applied Behavior Analysis, 1994. **27**(1): p. 49-61.
103. DuPaul, G.J., et al., *Peer tutoring for children with attention deficit hyperactivity disorder: Effects on classroom behavior and academic performance.* Journal of Applied Behavior Analysis, 1998. **31**(4): p. 579-592.
104. Greenwood, C.R., et al., *Achievement, placement, and services: Middle school benefits of Classwide Peer Tutoring used at the elementary school.* School Psychology Review, 1993. **22**(3): p. 497-516.
105. Greenwood, C.R., *Classwide peer tutoring: Longitudinal effects on the reading, language, and mathematics achievement of at-risk students.* Journal of Reading, Writing, & Learning Disabilities International, 1991. **7**(2): p. 105-123.
106. Mortweet, S.L., et al., *Classwide peer tutoring: Teaching students with mild mental retardation in inclusive classrooms.* Exceptional Children, 1999. **65**(4): p. 524-536.
107. Maheady, L., et al., *Training and implementation requirements associated with the use of a classwide peer tutoring system.* Education & Treatment of Children, 1991. **14**(3): p. 177-198.
108. Bell, K., et al., *Facilitating mainstreaming of students with behavioral disorders using classwide peer tutoring.* School Psychology Review, 1990. **19**(4): p. 564-573.
109. Chun, C.C. and S. Winter, *Classwide Peer Tutoring with or without reinforcement: Effects on academic responding, content coverage, achievement, intrinsic interest and reported project experiences.* Educational Psychology, 1999. **19**(2): p. 191-205.
110. Maheady, L., M.K. Sacca, and G.F. Harper, *Classwide peer tutoring with mildly handicapped high school students.* Exceptional Children, 1988. **55**(1): p. 52-59.
111. Allsopp, D.H., *Using classwide peer tutoring to teach beginning algebra problem-solving skills in heterogeneous classrooms.* Remedial & Special Education, 1997. **18**(6): p. 367-379.

112. Sideridis, G.D., et al., *Classwide peer tutoring: Effects on the spelling performance and social interactions of students with mild disabilities and their typical peers in an integrated instructional setting.* Journal of Behavioral Education, 1997. **7**(4): p. 435-462.
113. Gardner, R., W.L. Heward, and T.A. Grossi, *Effects of response cards on student participation and academic achievement: A systematic replication with inner-city students during whole-class science instruction.* Journal of Applied Behavior Analysis, 1994. **27**(1): p. 63-71.
114. Narayan, J.S., et al., *Using response cards to increase student participation in an elementary classroom.* Journal of Applied Behavior Analysis, 1990. **23**(4): p. 483-490.
115. Shabani, D.B. and J.E. Carr, *An Evaluation of Response Cards as an Adjunct to Standard Instruction in University Classrooms: A Systematic Replication and Extension.* North American Journal of Psychology, 2004. **6**(1): p. 85-100.
116. Armendariz, F. and J. Umbreit, *Using active responding to reduce disruptive behavior in a general education classroom.* Journal of Positive Behavior Interventions, 1999. **1**(3): p. 152-158.
117. Gardner, R., *Differential effects of hand raising and response cards on rate and acccuracy of active student response and academic achievement by at-risk and non-at-risk students during large group 5th grade science instruction.*, in *Dissertation Abstracts International*. 1990. p. 3837.
118. Heward, W.L., *Four validated instructional strategies.* Behavior & Social Issues, 1997. **7**(1): p. 43-51.
119. Hickey, K.A., S.C. Imber, and E.A. Ruggiero, *Modifying reading behavior of elementary special needs children: A cooperative resource-parent program.* Journal of Learning Disabilities, 1979. **12**(7): p. 444-449.
120. Skinner, C.H., T.H. Cashwell, and A.L. Skinner, *Increasing tootling: The effects of a peer-monitored group contingency program on students' reports of peers' prosocial behaviors.* Psychology in the Schools, 2000. **37**(3): p. 263-270.
121. Embry, D.D., et al., *PeaceBuilders: A theoretically driven, school-based model for early violence prevention.* American Journal of Preventive Medicine, 1996. **12**(5, Suppl): p. 91-100.
122. Coppens, N.M. and L.K. Gentry, *Video analysis of playground injury-risk situations.* Research in Nursing & Health, 1991. **14**(2): p. 129.
123. Gadow, K.D. and J. Sprafkin, *Effects of viewing high versus low aggression cartoons on emotionally disturbed children.* Journal of Pediatric Psychology, 1987. **12**(3): p. 413.
124. Leff, S.S., T. Costigan, and T.J. Power, *Using participatory research to develop a playground-based prevention program.* Journal of School Psychology, 2004. **42**(1): p. 3.
125. Lewis, T.J., et al., *Reducing problem behaviors on the playground: An investigation of the application of schoolwide positive behavior supports.* Psychology in the Schools, 2002. **39**(2): p. 181.
126. Pellegrini, A.D., *Elementary-school children's rough-and-tumble play and social competence.* Developmental Psychology, 1988. **24**(6): p. 802.
127. Pellegrini, A.D., *Kindergarten children's social-cognitive status as a predictor of first-grade success.* Early Childhood Research Quarterly, 1992. **7**(4): p. 565.
128. Pfiffner, L.J., et al., *A comparison of the effects of continuous and intermittent response cost and reprimands in the classroom.* Journal of Clinical Child Psychology, 1985. **14**(4): p. 348.

129. Saigh, P.A. and A.M. Umar, *The effects of a Good Behavior Game on the disruptive behavior of Sudanese elementary school students.* Journal of Applied Behavior Analysis, 1983. **16**(3): p. 339.
130. Schneider, B.H. and B.M. Bryne, *Individualizing social skills training for behavior-disordered children.* Journal of Consulting & Clinical Psychology, 1987. **55**(3): p. 444.
131. Todd, A., et al., *Teaching recess: Low-cost efforts producing effective results.* Journal of Positive Behavior Interventions, 2002. **4**(1): p. 46.
132. Rutter, M., *School influences on children's behavior and development: The 1979 Kenneth Blackfan lecture, Children's Hospital Medical Center, Boston.* Annual Progress in Child Psychiatry & Child Development, 1981: p. 170-197.
133. Rutter, M., *Family and school influences on behavioural development.* Journal of Child Psychology & Psychiatry, 1985. **26**(3): p. 349-368.
134. McCambridge, J. and J. Strang, *The efficacy of single-session motivational interviewing in reducing drug consumption and perceptions of drug-related risk and harm among young people: results from a multi-site cluster randomized trial.* Addiction, 2004. **99**(1): p. 39-52.
135. Monti, P.M., et al., *Brief intervention for harm reduction with alcohol-positive older adolescents in a hospital emergency department.* Journal of Consulting & Clinical Psychology, 1999. **67**(6): p. 989-994.
136. Colby, S.M., et al., *Brief motivational interviewing in a hospital setting for adolescent smoking: A preliminary study.* Journal of Consulting & Clinical Psychology, 1998. **66**(3): p. 574-578.
137. Rutter, M., *School effects on pupil progress: Research findings and policy implications.* Child Development, 1983. **54**(1): p. 1.
138. Petry, N.M. and F. Simcic, Jr., *Recent advances in the dissemination of contingency management techniques: Clinical and research perspectives.* Journal of Substance Abuse Treatment, 2002. **23**(2): p. 81-86.
139. Petry, N.M., B. Martin, and C. Finocche, *Contingency management in group treatment: A demonstration project in an HIV drop-in center.* Journal of Substance Abuse Treatment, 2001. **21**(2): p. 89-96.
140. Petry, N.M., J. Tedford, and B. Martin, *Reinforcing compliance with non-drug-related activities.* Journal of Substance Abuse Treatment, 2001. **20**(1): p. 33-44.
141. Petry, N.M., et al., *Give them prizes and they will come: Contingency management for treatment of alcohol dependence.* Journal of Consulting & Clinical Psychology, 2000. **68**(2): p. 250-257.
142. Petry, N.M., et al., *Prize reinforcement contingency management for treating cocaine users: How low can we go, and with whom?* Addiction, 2004. **99**(3): p. 349-360.
143. Zanarini, M.C. and F.R. Frankenburg, *Omega-3 fatty acid treatment of women with borderline personality disorder: A double-blind, placebo-controlled pilot study.* American Journal of Psychiatry, 2003. **160**(1): p. 167-169.
144. Stoll, A.L., et al., *Omega 3 fatty acids in bipolar disorder: A preliminary double-blind, placebo-controlled trial.* Archives of General Psychiatry, 1999. **56**(5): p. 407-412.
145. Gesch, C.B., et al., *Influence of supplementary vitamins, minerals and essential fatty acids on the antisocial behaviour of young adult prisoners. Randomised, placebo-controlled trial.* British Journal of Psychiatry, 2002. **181**: p. 22-8.

Supplemental Juvenile Justice Recommendations for Prevention, Intervention and Treatment

By Dennis D. Embry, Ph.D., PAXIS Institute, March 10, 2005

Policy Recommendations

1. Undertake an aggressive program of motivational enhancement (motivational interviewing plus reinforcement for change) in alternative schools, juvenile detention centers, juvenile drug programs, emergency room settings and other community settings. Rationale: this low cost procedure dramatically improves outcomes of high-risk youth. This can embrace both community volunteers and professionals.

2. Launch statewide effort to use low-cost or no-cost strategies scientifically documented to reduce delinquent behavior and improve engagement in positive social activities that also reduce association with deviant peers.

3. Fund statewide medication review and support team for difficult juvenile cases, because the dangers and opportunities of using multiple medications for very disturbed children.

4. Launch statewide multi-level parenting support program such as the Triple P (Positive Parenting Program) effort being promoted by CDC, Wyoming, some municipalities and in other countries. This is more cost efficient and effective.

5. Provide consistent, uniform fine for minors in possession or tobacco or alcohol, including response cost on drivers license.

6. Provide weekly phone support and outcome monitoring for children in foster care or adjudicated adolescents, which would include simple evidence based tools.

7. Consider creating Community Justice Boards with supportive services, across the state, which could be an expansion of the current Juvenile Corrections Advisory Boards.

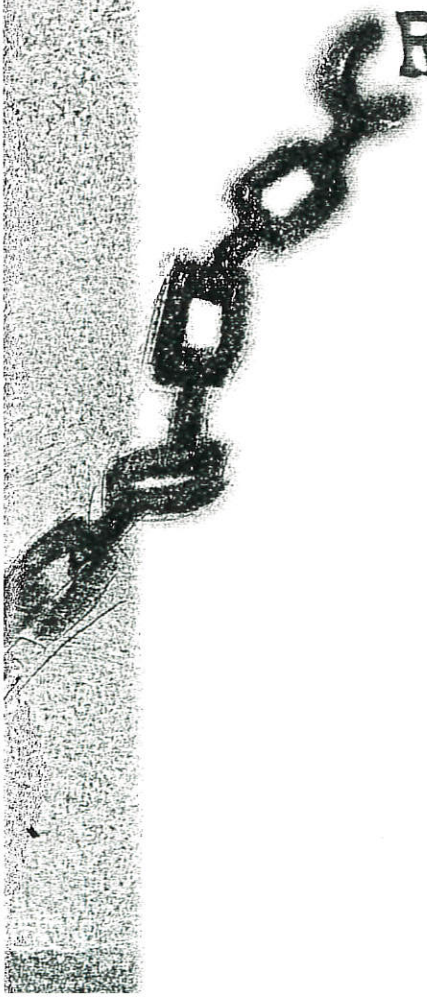
8. Provide community-based grants to implement low-cost prevention and intervention protocols like the Good Behavior Game.

9. Develop a longitudinal study of Kansas' children, which could be a rapid cohort type study.

10. Develop a data dashboard for child and youth outcomes on a monthly basis.

11. Launch an aggressive campaign to incentive women not to smoke, drink or use drugs during pregnancy.

12. Expand current effort to include mobile MST (multi-systemic therapy) type teams for very high-risk youth.



Reaching Mentally Ill Young Offenders

Financing constraints and policy boundaries aren't making it easy

BY STACEY BIGGINS AND MONICA E. OSS, EDITOR-IN-CHIEF

The state of mental health services provided in the juvenile justice system is problematic, mirroring the state of children's mental health treatment across the country. The Department of Justice's Bureau of Justice Statistics reported that there were a staggering 110,284 youths in the juvenile justice system in October 2000 and, according to the Coalition for Juvenile Justice (CJJ), only one-third of these youths who are in need of mental health services receive them. The problem of providing appropriate services for these children is twofold: Their mental health conditions often have not been adequately diagnosed and/or the appropriate treatment services are not available.

The demand for mental health services among children and adolescents is on the rise, but funding is declining because of a lack of parity in health benefit plans, planned SCHIP cutbacks, and increasing unemployment along with the rising number of uninsured adults. Because of the increased demand and decreased funding, an alarming number of children with behavioral health problems are being referred to the child welfare and juvenile justice systems to receive mental health benefits, according to the General Accounting Office. As a result, the

juvenile justice system is experiencing an increase in the number of children who need mental health services, but state and local systems are not equipped to handle it.

A Clear Need

Between 50 and 75% of incarcerated young offenders nationwide are estimated to have a diagnosable mental health disorder, and at least *half of these mentally ill youth also have a substance abuse problem*, according to CJJ; between 9 and 13% of incarcerated juveniles have serious emotional disturbances. And all of these numbers are seen as *low* by some experts. Cocozza and Skowyra reported that rates of mental disorders among youth in the juvenile justice system are substantially higher than those among youth in the general population, and that at least 80% of youth in the juvenile justice system meet DSM-IV criteria for mental illness.

The actual numbers are less important, though, than their implication—that the juvenile justice system needs to be prepared and equipped to handle this immense need for mental health treatment.

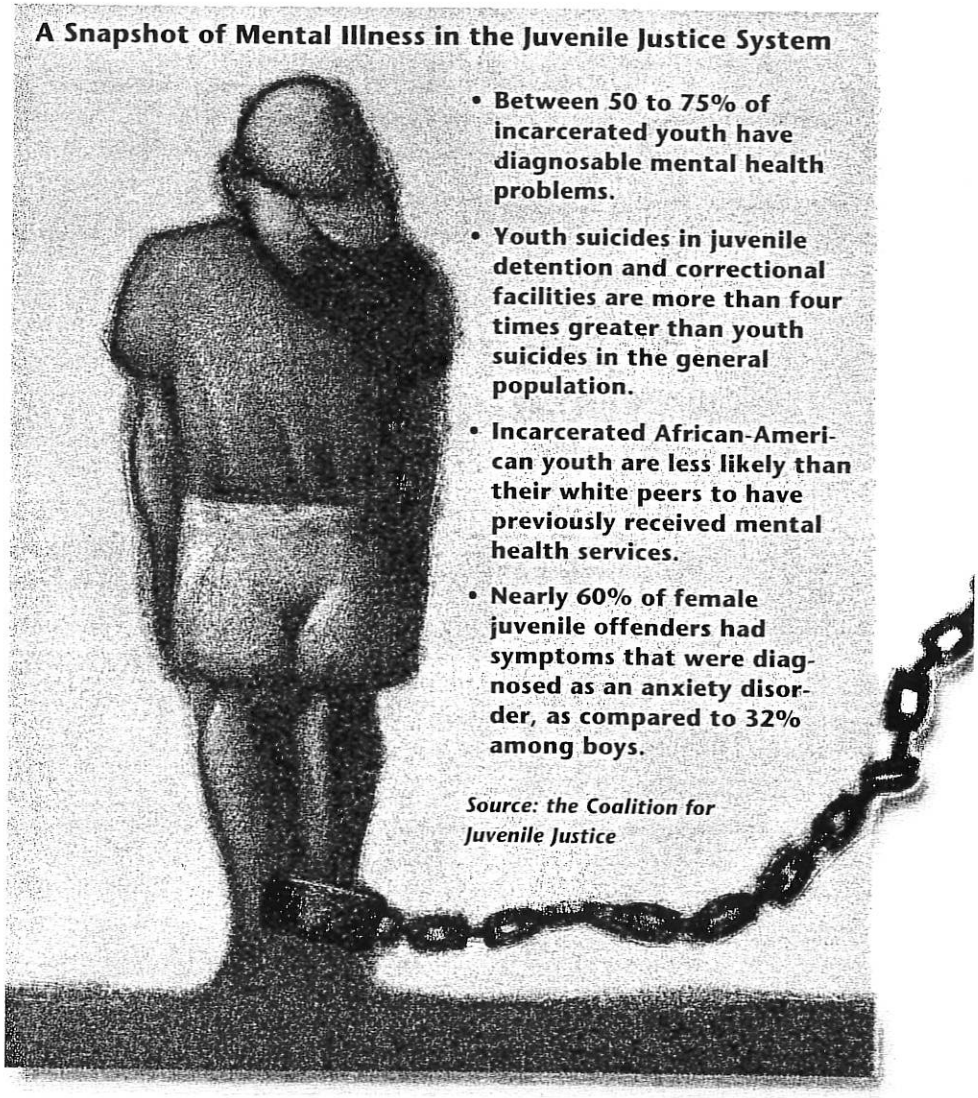
In terms of general juvenile justice spending, states funded 81% in 1998, the federal government funded 11%, and local funding accounted for 8%. Spending for delinquency prevention programs totaled $354 million in 1998, a 68% increase from the $211 million spent in 1994, according to the National Association of State Budget Officers' updated State Juvenile Justice Expenditures and Innovations survey. Delinquency prevention programs were defined as special programs for "at risk" youth, including programs for substance abuse, mental health, education, family services, or social services.

What's Available

In 1998, most mental health treatment services in juvenile justice programs provided psychotropic medications (81.8% of the 2,798 surveyed juvenile justice facilities). These same facilities also offered, to a lesser extent, mental health screenings (64.2%), mental health evaluations (73.8%), emergency care (80.7%), 24-hour emergency care (34.6%), separate residential treatment (37.1%), or mental health therapy (69.0%). Only 68.7% of the facilities employed a psychologist.

The diagnostic capabilities and services available are improving in many agencies. Many local municipalities are even finding creative ways to fund mental health treatment services before a child is placed in the juvenile justice system or before their offenses become violent or threatening.

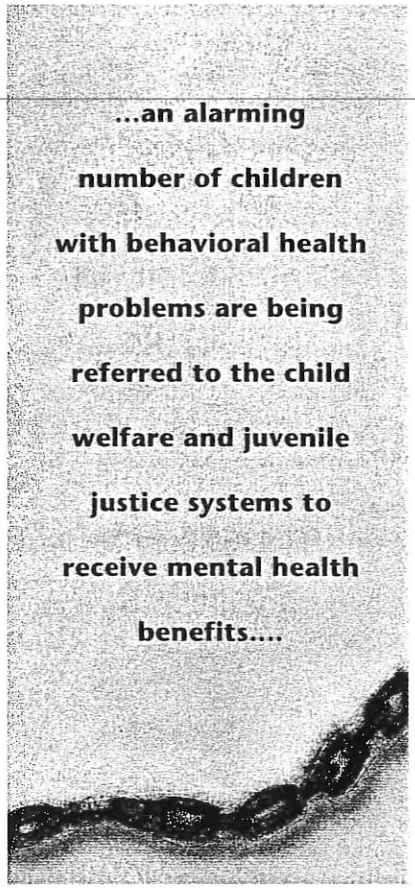
Wraparound Milwaukee is a good example of a program helping children to avoid or exit the juvenile justice and child welfare systems. The program offers a full-service approach to customize treatment for troubled children and their families. Wraparound Milwaukee pulls together Medicaid, child welfare, and federal grant funds to help keep children from being placed in residential treatment centers or to help the children who are already placed in these



centers to return to their families, foster homes, or other living arrangements in the community. Bruce Kamradt, MSW, director of the Children's Mental Health Services Division for Milwaukee County, reported in 2000 that since Wraparound Milwaukee was initiated in May 1996, the use of residential treatment had decreased 60%, inpatient psychiatric hospitalization had dropped by 80%, and the average overall cost of care per child had dropped from more than $5,000 per month to less than $3,300 per month. Kamradt explained that because the savings have been reinvested into serving more youths, the project serves 650 youths with the same fixed child welfare/juvenile justice monies that previously served 360 youths placed in residential treatment centers.

Complex Questions

The increased demand for mental health services within the juvenile justice system brings with it some complex policy and financing issues. The original goal of the juvenile justice system at its beginning in 1899 was to separate the underage offenders from the adults so they could receive the guidance and treatment they needed. It was less about punishment and more about empowering a court to, in essence, become the provisional parent. But in the 1980s, when the number of violent crimes by juveniles increased, the prevailing conservative ideology and extensive media coverage shifted public attitudes toward a more punishment-oriented approach to juvenile justice. A perfect example of this push for punishment was a 1999 report that found 10,000 delinquency cases were waived to the adult criminal justice system in 1996 alone.



With the push toward punishment in the juvenile justice system, what level of investment are we willing to make in mental health treatment services in that sector? What is the least restrictive type of services a juvenile offender needs to be rehabilitated, while still maintaining the safety of the community, offender, and offender's family? Where will we receive the necessary funding to contract for, develop, test, and employ the amount of treatment necessary? Would we get better juvenile justice services (both punishment and treatment) if the private sector ran our programs?

Answers to these questions may emerge from the debate (these days, at the state level) over primary responsibilities for healthcare delivery and the role of corrections in public policy. With the current economic issues facing individual states, and the country as a whole, that debate is likely to intensify. **BHM**

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Bibliography

Coalition for Juvenile Justice. Handle With Care: Serving the Mental Health Needs of Young Offenders. 2000 Annual Report. Washington, D.C.: Coalition for Juvenile Justice, 2000. Available at: www.juvjustice.org/publications/2000ar.html.

Cocozza JJ, Skowyra K. Youth with mental health disorders: Issues and emerging responses. Juvenile Justice 2000;7(1). Available at: www.ncjrs.org/html/ojjdp/jjjnl_2000_4/youth.html.

Harrison PM, Beck AJ. Prisoners in 2002. Bureau of Justice Statistics Bulletin. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, July 2003. Publication NCJ 200248. Available at: www.ojp.usdoj.gov/bjs/pub/pdf/p02.pdf.

Kamradt B. Wraparound Milwaukee: Aiding youth with mental health needs. Juvenile Justice 2000;7(1). Available at: www.ncjrs.org/html/ojjdp/jjjnl_2000_4/wrap.html.

National Association of State Budget Officers. State Juvenile Justice Expenditures and Innovations. Washington, D.C.: National Association of State Budget Officers, 1998. Available at: www.nasbo.org/Publications/information_briefs/juvenile_expend_1999.html.

Snyder HN, Sickmund M. Juvenile Offenders and Victims: 1999 National Report. Pittsburgh: National Center for Juvenile Justice, 1999. Available at: www.ncjrs.org/html/ojjdp/nationalreport99/toc.html.

U.S. Center for Mental Health Services. 1998 Inventory of Mental Health Services in Juvenile Justice Facilities. Rockville, Md.: U.S. Center for Mental Health Services, 2000.

U.S. General Accounting Office. Child Welfare and Juvenile Justice: Federal Agencies Could Play a Stronger Role in Helping States Reduce the Number of Children Placed Solely to Obtain Mental Health Services. Washington, D.C.: U.S. General Accounting Office, 2003. Publication GAO-03-397. Available at: www.gao.gov/cgi-bin/getrpt?GAO-03-397.

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