Suicide Risk at Juvenile Probation Intake

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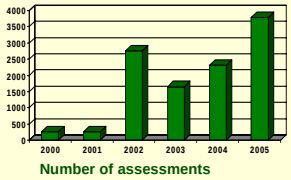
The Center provides

- Guidance regarding best practices for psychiatric assessment and referral to juvenile justice agencies
- Help incorporating sound assessments into practice, efficiently and safely



Number of assessments

- To date we have provided consultation in 54 settings, in 18 states
- By the end of 2005, we will have helped in assessment of 11,000+ youths

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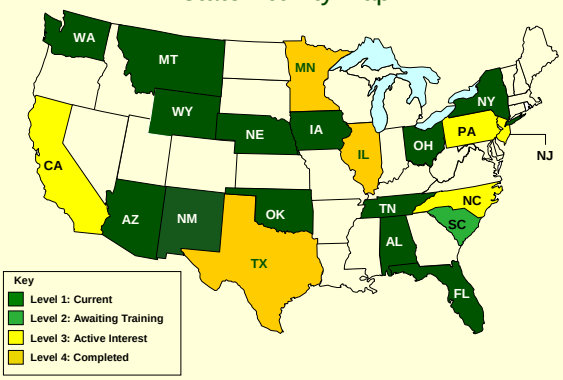
State Activity Map



Why is there a need to provide guidance?

- Justice administrators request help
- Public scrutiny
- Clinical assessment models not applicable
- When we began, the estimated rates of disorder varied widely

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Clinical assessment models not fully applicable to juvenile justice settings

	Clinical	Justice
How is a "Case" identified?	Someone refers (self/parent/school)	Status of all youth must be assessed
Who provides assessments or treatment recommendations?	Trained/licensed clinicians	Often non-clinical court/probation staff
Unique Obstacles		Self-incrimination High risk Costs associated w both false + and -; usually agency must fund services

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When we began, defining the problem was complicated by early studies' reporting of wildly varying rates of disorder

	MECA (%) Community, 1996	Otto, 1992 (%) Juvenile Justice
Mood Disorder	6.2	2-78
Anxiety Disorder	13.0	6-41
Substance Use Disorder	2.0	25-50
Attention Deficit Hyperactivity Disorder	10.3	0-46
Conduct Disorder		50-90

With better methods, consistency within settings, higher rates in secure placements, and elevated rates of internalizing disorders

	TX Initial Intake (79.8% male) (n=991) [a]	OK Detention (83.0% male) (n=772) [b]	IL & NJ Corrections (all males) (n=292) [c]	OK Corrections (all males) (n=188) [b]
	%	%	%	%
Any disorder	45.7	61.4	68.5	64.9
Anxiety Disorder	19.8	25.6	19.5	26.1
Mood Disorder	7.4	11.1	9.6	18.1
Disruptive Disorder	20.0	24.5	32.5	39.9
Substance Use Disorder	25.4	39.1	50.3	44.7
Recent suicide attempt (4 wks)	2.9	3.9	3.1	2.7
Lifetime suicide attempt	13.2	16.9	12.3	14.9

[a] Wasserman, et al. (2005). Gender Differences in Psychiatric Disorders at Juvenile Probation Intake. American Journal of Public Health., Vol. 95(1).
[b] McReynolds and Wasserman. (in review). Psychiatric disorder and suicide risk across points in juvenile justice case processing in OK.
[c] Wasserman, et al. (2002). The Voice DISC-IV with Incarcerated Male Youths: prevalence of disorder., Vol. 41(3): p.314-321.

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How have we addressed these three other problems?

We use research as the ***bridge*** between identifying a problem and identifying a solution

- Studies on prevalence of disorder and other characteristics: essential for planning
- Studies on developing and evaluating assessment/referral practices and procedures
- Developing and evaluating instruments that respond to the needs of the field

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Our work on mental health assessment and referral procedures and practices

- Practices and best practices
  - Mental Health Practices Survey
  - Consensus Conference
- Case identification
  - Alabama Pre-Disposition Study: *having sound instruments increases POs' likelihood of recommending MH services to court (42 vs. 20%)*
- Developing and evaluating setting-specific algorithms for screening, assessment and referral

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Our work on training materials and instrument development…

- Developing protocols to improve juvenile probations/MH linkage
- Developing distance learning materials for JJ staff on MH and suicide assessment and management
- Testing the safety and efficiency of the screening, assessment, and referral process
- Developing instruments that meet the needs of the field

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SUSI-Y: mental health Service Use and Satisfaction Interview for Youth

- Automated self-report instrument measuring service use and satisfaction, 10-20 min
- Rationale: need for quick and reliable assessment on service use (prior and current) among youth in justice settings
  - Lack charts/other agency information
  - Continuity of care
- Grant to Larkin McReynolds from the Columbia Center for Youth Violence Research & Prevention
- Being piloted in Iowa State Training School for Boys (n=300), validated against MH charts, youth self-report on DISC.

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VISA: Voiced Index of Self-Injurious Actions

- Automated self-report instrument measuring self-injurious behaviors, past year
- 15-20 minutes
- 5th grade reading level
- Different from other self-injury scales
  - automated and voiced; utilizes branching structure
  - inquires about intensity and frequency of specific behaviors
- To be piloted in JJ residential facility for girls in Nebraska (start date 2-1-05, N=120)
- To be validated against clinical interview

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Suicide risk at juvenile justice intake

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Identification and management of suicide risk in secure care

- Self- and agency report agree that 2-3% of incarcerated youth will attempt suicide every 4 weeks, relative to an estimated *yearly* rate of 9.0% in the general adolescent population
- There are consistent recommendations (e.g., Council of Juvenile Correctional Administrators, 2002; Wasserman, Jensen, Ko, Trupin, & Cocozza, 2003) for standards for assessing suicide risk and monitoring safety for juveniles in confinement.

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These recommendations and procedures do not apply to most juvenile justice youths

- Most juveniles with justice contact are not confined, but managed in their communities
- Nationwide, only 16% of cases petitioned (9% of those arrested) result in secure placement, with the remainder returned to their communities

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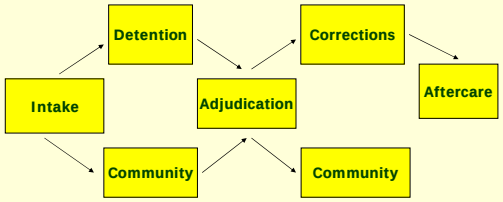
Steps in juvenile justice case processing



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Little is known of suicide risk among justice youths who are managed in the community

- Risk is likely to also be elevated relative to the general population of adolescents
- Risk of suicide among adolescents involved with either the juvenile justice or child welfare systems was 5 times as high as those in the general adolescent population (Farand, Chagnon, Renaud, & Rivard, 2004)
- Recent examination of all youth suicides (<18 yrs) in Utah showed that **80%** had been in contact with the juvenile justice system in the 12 months prior to death (Gray et al, 2002)

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Elevated risks for suicidal behavior

- Risks for suicidal behavior, identified from general population studies, are elevated in justice youth
  - History of aggressive or antisocial behavior
  - Access to weapons
  - Co-occurring mood and substance use disorders
  - Increased school difficulties
  - Youth's not living with parents
  - Stress of arrest/ incarceration may increase family conflict, and thereby increase attempt risk

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Research question

- To determine the degree to which risks identified from general population studies persist in their ability to differentiate attempters and non-attempters, we examine associations between several risks and self-reported suicide attempts in a large sample of youths at juvenile justice intake

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Sampling Protocol

- In collaboration with the Texas Juvenile Probation Commission and probation facilities in 8 counties
  - Bexar, Cameron, Dallas, El Paso, Harris, Hidalgo, Tarrant, & Travis
- To reduce site burden and eliminate biases that might result from certain delinquent activities being more likely to occur on certain days of the week, each county was randomly assigned a day of the week to conduct self-administered computerized diagnostic interviews
- Inclusion Criteria
  - Formal referrals (those receiving more than minimal sanctions)
  - Oral English language skills $\geq$ 3rd grade level

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Participants

- Data collection window 24-28 weeks in early 2002
- 1244 youths approached (10-17 years)
- 77% completed the Voice DISC within a week of intake
- 991 DISC data files retrieved (79.7% of the approached)
- 200 girls (20.2% of sample)
- Participants did not differ from 253 non-participants in gender, age, ethnicity, age at first referral, residence with close relative, or whether current charge was a felony or a violent offense

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Voice DISC-IV

- Derives provisional diagnostic information, based on DSM-IV logic
  - Mood, Conduct, and Substance Use Disorder
    - Because suicide symptom removed from MDD algorithm, criteria reduced to 4 (referred to as MDD-A)
    - Recent (4w) and lifetime suicide attempts
- Youths hear questions over headphones while seeing them on computer monitor
- "Any disorder" increases likelihood (2.5x) of suicide attempt within 5 years (Shaffer et al., 1998)

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Advantages of the Voice DISC for juvenile justice settings

- Increased disclosure of suicide risk and substance use
- Requires little or no reading skill
  - -- Self administered format: youth hears questions over headphones and keys in responses on computer
- Minimal staff support requirements
- Rates identified comparable to systematic interviewer-based procedures
- Allows for ready aggregation of prevalence data across individuals

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Using the Voice DISC in a school setting

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TX Sample Demographics

	MALE	FEMALE	OVERALL
	n (%)	n (%)	n (%)
Hispanic/Latino	409 (51.7)	95 (47.5)	504 (50.9)
	Mean (sd)	Mean (sd)	Mean
Age (years)**	14.7 (1.4)	14.4 (1.4)	14.7 (1.4)
Last academic grade	8.3 (1.5)	8.2 (1.5)	8.3 (1.5)
Prior referrals*	1.6 (2.2)	1.3 (2.0)	1.5 (2.2)
Age at first referral	14.0 (1.4)	13.9 (1.4)	14.0 (1.4)
Current Offense	n (%)	n (%)	n (%)
Felony***	314 (39.7)	43 (21.5)	357 (36.0)
Violent[a]	179 (22.6)	45 (22.5)	224 (23.6)

* *p*<.05; ** *p*<.01; *** *p*<.001 *Boys older, more prior referrals, and current offense more likely to be a felony* [a] *Person- or weapon-related offense*

N=991 (791 male; 200 female)

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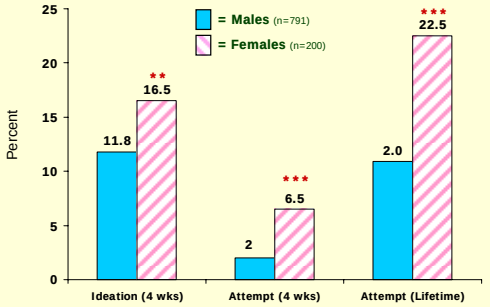
Females report higher rates of recent suicide attempt [a]



[a] Unadjusted for covariates; ** Girls higher (*p*<.01) ; *** Girls higher (*p*<.001)

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Statistical Methods

- From the pool of potential covariates, we selected those associated with recent or lifetime suicide attempt at p<.20 or better
- We retained age and ethnicity to be consistent with other studies
- We considered disorders net of demographic and offense characteristics
- The final model retained:
  - Age, ethnicity, gender, number of priors, violent current offense, MDD-A, SUD, CD

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Suicide and disorder

	Overall	No Recent Attempt	Recent Attempt
	N=991	n=962	n=29
	n (%)	n (%)	n (%)
Recent ideation	126 (12.7)	---	---
Recent attempt	29 (2.9)	---	---
Lifetime attempt	131 (13.2)	---	---
MDD*	61 (6.3)	50 (5.3)	11 (37.9)
MDD-A *	69 (7.0)	58 (6.0)	11 (37.9)
SUD *	252 (25.4)	236 (24.5)	16 (55.2)
CD *	172 (18.0)	162 (17.4)	10 (35.7)

**All significantly higher in recent attempters (p<.05)*

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Recent suicide attempts were significantly more common in girls, those with violent crimes, and those with more priors

	OR	Cum. R^2
Female ***	3.94	0.040
Age	0.89	0.040
Race		0.062
(African Amer vs White) *	0.26	
(Hispanic vs White) *	0.38	
# Prior Referrals ***	1.32	0.122
Violent Current Offense ***	2.75	0.147

* *p*<.05; ** *p*<.01; *** *p*<.001

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Adding psychopathology to the model does not alter contributions of demographic and offense characteristics, but adds substantially to the prediction of recent suicide attempt

	OR	Cum. R^2
Female ***	6.04	0.040
Age	0.81	0.040
Race		0.062
(African Amer vs White)	0.38	
(Hispanic vs White)	0.43	
# Prior Referrals**	1.23	0.122
Violent Current Offense*	2.53	0.147
MDD-A***	11.63	0.211
Any Substance Use Disorder*	2.76	0.233
MDD-A by Female *	0.15	0.251

* *p*<.05; ** *p*<.01; *** *p*<.001

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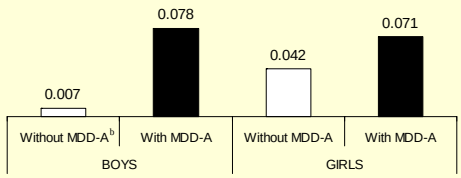
Figure 1. Predicted probability of reported recent suicide attempt [a]



[a] Adjusted for age, race, number of prior referrals, violent offense, and any substance use disorder;

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Summary of Results

- Factors associated with suicide attempts paralleled those identified from general population samples
- Significantly more common in girls, those with violent crimes, and those who also reported a mood or SUD
- Depressed boys' risk of recent attempt was as high as girls'
- Mood disorder was more strongly associated with recent attempt than was SUD
- 45% of recent attempters (but only 5% of non-attempters) were positive for 3+ risks (MDD, SUD, female, 3+ priors, violent offense)

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Limitations in previous studies of correlates of suicidal behavior in incarcerated youths

- Sanislow, Grillo, Fehon, Axelrod, & McGlashan, 2003
- Morris et al., 1995
- Penn, Esposito, Schaeffer, Fritz, & Spirito, 2003
- Rohde et al., 1997

- Only one examines the relative contributions of substance use and mood symptoms to suicidal behavior
- Studies do not consistently examine diagnosis (vs. symptom counts), despite stronger associations with suicide attempt
- Studies do not examine interactions between gender and other risks, or lack power to do so systematically

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Service delivery implications

- Great progress has been made in last 10-15 years in the identification and management of suicide risk for incarcerated youth
- Unfortunately, migration of these efforts into juvenile justice intake settings has been slow

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Our national MH practices in JJ survey (2002)

- In almost 16% of JJ settings, non-MH staff conduct the MH assessment
- 13% of MH staff have a bachelor's degree or lower
- In probation settings, fewer than half of respondents could identify someone responsible for assessing suicide risk
- Almost 30% of PO's felt it was inappropriate or only sometimes appropriate to assess suicide risk

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Justice contact is a marker for suicide risk (Hayes, 1999)

- In a population sample, youths reporting suicide attempt were 10+ times more likely to have prior police contact (Fergusson & Lynskey, 1995)
- In Utah, > 80% of adolescent suicides had justice system contact in the prior year (Gray et al, 2002)
- Beyond justice contact, disorder characteristics relate expectably to recent attempts
  - Justice agencies should systematically assess disorder, if they are to better identify and manage suicidal behavior

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