



POLICY STATEMENT

Health Care for Youth in the Juvenile Justice System

COMMITTEE ON ADOLESCENCE

KEY WORDS

juvenile justice, correctional health care, juvenile detention, mental health, substance abuse, reproductive health, financing of health care

ABBREVIATIONS

SES—socioeconomic status

TBI—traumatic brain injury

TB—tuberculosis

SYRP—Survey of Youth in Residential Placement

NCCCHC—National Commission on Correctional Health Care

STI—sexually transmitted infection

CDC—Centers for Disease Control and Prevention

This document is copyrighted and is property of the American Academy of Pediatrics and its Board of Directors. All authors have filed conflict of interest statements with the American Academy of Pediatrics. Any conflicts have been resolved through a process approved by the Board of Directors. The American Academy of Pediatrics has neither solicited nor accepted any commercial involvement in the development of the content of this publication.

www.pediatrics.org/cgi/doi/10.1542/peds.2011-1757

doi:10.1542/peds.2011-1757

All policy statements from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2011 by the American Academy of Pediatrics

abstract

FREE

Youth in the juvenile correctional system are a high-risk population who, in many cases, have unmet physical, developmental, and mental health needs. Multiple studies have found that some of these health issues occur at higher rates than in the general adolescent population. Although some youth in the juvenile justice system have interfaced with health care providers in their community on a regular basis, others have had inconsistent or nonexistent care. The health needs of these youth are commonly identified when they are admitted to a juvenile custodial facility. Pediatricians and other health care providers play an important role in the care of these youth, and continuity between the community and the correctional facility is crucial. This policy statement provides an overview of the health needs of youth in the juvenile correctional system, including existing resources and standards for care, financing of health care within correctional facilities, and evidence-based interventions. Recommendations are provided for the provision of health care services to youth in the juvenile correctional system as well as specific areas for advocacy efforts. *Pediatrics* 2011; 128:1219–1235

INTRODUCTION

Youth in the juvenile correctional system are a high-risk population^{1–3} who, in many cases, have unmet physical, developmental, and mental health needs. Multiple studies have found that some of these health issues occur at higher rates than in the general adolescent population.^{3,4–6} Although some youth in the juvenile justice system have interfaced with health care providers in their community on a regular basis, others have had inconsistent or nonexistent care. The health needs of these youth are commonly identified when they are admitted to a juvenile custodial facility. On-site correctional health care providers must not only try to identify these health issues but also determine if there has been active medical management in the community. Pediatricians and other health care providers play an important role in the care of these youth, and continuity between the community and the correctional facility is crucial.

EPIDEMIOLOGY OF JUVENILE ARRESTS

In 2008, 11 million juveniles younger than 18 years were arrested.⁷ Two-thirds of those arrested were referred to juvenile court, and 10% were referred to the adult criminal court system. One-third of all juveniles arrested were female. Gender differences exist in patterns of arrest-related charges such that adolescent girls are more likely to have runaway and prostitution/vice offenses, whereas boys have a

higher proportion of arrests in all other categories (eg, violent and property crimes). Girls are also more likely than adolescent boys to fight with family members and become involved in domestic disturbances.⁸ Racial differences were seen in juvenile arrest patterns. Although black youth only represent 16% of the 10- to 17-year-old population in the United States, they represented 52% of the Violent Crime Index arrests and 33% of the Property Crime Index arrests (see Table 1). The greatest racial disparities were seen with some of the most serious crimes—murder, robbery, and assault.⁹

Reasons for these racial disparities are complex and involve social context as well as individual characteristics and are not well understood. When comparing minority youth to white youth, differing opinions exist about the relative contributions of several factors including possible differential involvement in various offenses and inequalities in the treatment of minority youth compared with white youth once within the juvenile justice system.¹⁰ Youth arrests and delinquent behavior have been related to lower socioeco-

omic status (SES), family disruption (marital separation, divorce), living in households with only 1 biological parent, less residential stability (length of time living in 1 location), poorer neighborhood collective efficacy (capacity of residents to achieve social control over the environment), and educational failure.^{11–13} Overall, poverty is likely to be the underlying factor that most influences trends in juvenile crime.¹³

SES plays a significant role for black and Hispanic youth, because they are more likely to live in poverty than their white counterparts.¹³ Educational failure is correlated with unemployment/underemployment. Studies have found that employment can prevent or reduce delinquent behavior. Lower educational attainment is most likely to affect black and Hispanic youth, who have higher dropout rates than their white counterparts.¹³ Family structure influences youth socialization and the capability to control the youth's behavior.¹² Family structure, itself, is not the cause of a youth's behavior. Rather it is linked to other factors, as illustrated by the correlation between single-parent households and increased probability of living in poverty.¹³ Black youth are most likely to be living in a single-parent household, and Hispanic youth are less likely than white youth to be living with both parents.¹⁵

Not all juvenile arrests result in a custodial placement in either a short-term detention facility (usually ≤ 3 months) awaiting adjudication or a longer-term postadjudication residential facility. Custody rates are higher for male adolescents than female adolescents. Girls are more likely to be held for technical violations, such as violating the terms of probation, or status offenses, such as running away, rather than more serious illegal activities⁹ (see Table 1). Data on custody rates are similar to data on arrest rates,

which demonstrate disproportionate contact of minority youth with law enforcement. Although minority youth represent only 39% of the US juvenile population, they represented 65% of the national juvenile custody population in 2006.⁹ These data become particularly relevant when considering unmet mental and physical health needs, because poorer health status is related to lower SES, and lower SES is more likely to be found among minority youth (see "Sociodemographic Factors and Health Status").

In 2006, the median time in custodial placement was 65 days, including both short-term and long-term facilities. Eighty percent of postadjudicated youth were in the facility for at least 30 days, and 57% were in the facility for at least 90 days. Twelve percent were still in placement at 1 year.⁹ A significant number of youth are incarcerated for a period of time that would permit health care providers to diagnose, assess, and treat them for identified health problems.

SOCIODEMOGRAPHIC FACTORS AND HEALTH STATUS

The categories of health needs of youth in the correctional system are similar to those of their peers in the community. They include dermatologic, respiratory, dental, gastrointestinal, genitourinary, and metabolic problems as well as developmental and mental health issues. Other categories are influenced, in part, by the youth's engagement in high-risk behaviors such as violence, substance abuse, and sexual activity, which may be more prevalent than those of their peers in the general population.^{5,14} Some health issues result from living in impoverished and abusive environments (eg, traumatic brain injury [TBI], lead exposure, positive tuberculosis [TB] test results, and poor dental care). Others are acquired health problems (eg, hy-

TABLE 1 Definitions of Crimes, Offenses, and Violations

Violent Crime Index
Murder and nonnegligent manslaughter
Forcible rape
Robbery
Aggravated assault
Property Crime Index
Burglary
Larceny-theft
Motor vehicle theft
Arson
Status offense: an offense that is illegal for a minor but would not be criminal if committed by an adult
Runaway
Truancy
Curfew violation
Underage drinking
Technical violation: violation of a court order
Probation violation
Curfew violation

pertension, diabetes) that are neglected or remain undiagnosed.¹⁵ In some instances, youth have had inadequate health care, because they have been runaways or living in inconsistent living situations that do not allow for continuity of care.

Underlying the poorer health status of youth in the juvenile justice system is SES. Just as lower SES is correlated with juvenile delinquency, lower SES—specifically, income inequality—has been shown to correlate with teen births, overweight, and mental health problems.¹⁶ Minority youth, including black and Hispanic youth, who are overrepresented in the juvenile justice system in the United States, are more likely to live in lower-SES environments and have been found to have overall poorer health care than their white counterparts. Studies have shown significant disparities between white and minority youth aged 0 through 17 years in insurance coverage, lack of a usual source of care, use of the emergency department, and not receiving adequate mental health care, dental care, or prescription medications.¹⁷ Factors other than SES may also be important. A recent review of the literature confirmed racial/ethnic disparities in adolescent health care. However, the results also suggested that some disparities are not totally understood and seem to be independent of SES.¹⁸

EXTENT OF MEDICAL PROBLEMS

Few studies have provided a broad national perspective on the health needs of youth in the juvenile correctional system in the United States. The most recently published information is from the Survey of Youth in Residential Placement (SYRP).³ The findings in this report are based on interviews with a nationally representative sample of 7073 youth in custody during the spring of 2003. The information was

obtained by using audio computer-assisted self-interview methodology and included youth at both short-term detention and longer-term residential treatment facilities. The survey revealed high rates of mental health and substance abuse problems as well as traumatic experiences with documented rates that exceeded those of the general adolescent population. More than two-thirds of youth in this survey reported a health care need, including injury, problems with vision or hearing, dental needs, or “other illness.”

Although more than 20 years old, another study with a national scope was conducted in 1991 by the National Commission on Correctional Health Care (NCCHC).⁵ The study included 1801 youth from 39 short-term or long-term correctional facilities in the United States. These youth had higher rates of substance abuse, trauma, unprotected sexual activity, history of sexually transmitted infections (STIs), suicidal ideation, and reported violence than those in a general high school population.

In the following sections, the data regarding general physical health issues are reviewed, and mental health and substance use/abuse diagnoses are addressed.

GENERAL PHYSICAL HEALTH ISSUES

In addition to the SYRP and NCCHC studies, 3 other studies that involved either a single facility or a region have provided important information. Two studies similarly found that approximately half of youth in these facilities had an identified medical problem. The first study, the results of which were published in 1980, included youth admitted during an 11-year period to a secure detention facility in New York¹⁵; the second study, the results of which were published in 2000, included youth

from 15 detention and longer-term facilities in the Maryland Juvenile Justice System.¹⁹ The third study involved youth admitted to a detention center in Alabama in the mid-1990s and found that although most youth (76.9%) denied preexisting conditions or complaints at the time of admission, 10.6% had a medical condition that required medical follow-up after release.²⁰

There are a few specific health concerns that require particular attention in this population.

Dental

The preponderance of dental needs was documented in a 30-year-old study in a detention center in New York, in which almost all of the youth (90%) required dental care.¹⁵ A more recent study of youth in a juvenile detention center in Dallas County, Texas, conducted between 1999 and 2003,²¹ found that among a random sampling of 419 dental screenings of 12- to 17-year-olds, half of them had untreated decay and fewer than one-fifth had preventive sealants. High-urgency dental problems defined as infection, tooth or jaw fracture, pulpitis, or severe periodontal disease with bleeding were found in 6.2% of the subjects. Moderate-urgency conditions, including cavitated asymptomatic decay or moderate gingivitis were found in 13.1%. One of the challenges noted by the authors was the inability to provide comprehensive treatment plans except in the case of long-term detainees.

Injury

Traumatic injuries are commonly identified in this population.^{3,5,15,19,20,22} These injuries are caused by multiple etiologies that range from accidental to deliberate. The Maryland study¹⁹ found that almost one-fifth of the youth experienced an injury including burns, head trauma, and musculoskeletal

injury, and that 12% of these youth had not had previous treatment. As demonstrated in the NCCHC study, interpersonal violence is an important cause of injury in this population.⁵ Approximately 70% of the surveyed youth had been involved in at least 1 fight during the previous year, and one-quarter of them had experienced an injury that required medical attention. Three-quarters of youth in the NCCHC study reported fights that involved a weapon. There was a relationship between substance use and physical fights, use of weapons, and gang membership.

More details are described in the report of a study from a secure residential facility in North Carolina that examined the types of traumatic injuries experienced by 10- to 17-year-old youth.²² More than half of the youth had an injury that required medical attention. One-third of the injuries were related to sports, 20% related to fights, 13% self-inflicted, 9% related to suicide attempts, 8% vocational, 3% related to horseplay, and 11% attributed to "other." The most common traumatic injury was musculoskeletal (one-third). One-quarter of the injuries were significant enough to necessitate referral for further evaluation to an outside facility.

A previous history of TBI is particularly significant in this population, because it can affect mental health and behavioral issues. Studies of detained adolescents have found high rates of TBI. Compared with youth without TBI, those with a positive history were more likely to have a psychiatric diagnosis, report earlier onset of criminal behavior and substance use, have more lifetime substance use problems, have more previous-year criminal acts, report lifetime suicidality, and demonstrate impulsivity or fearlessness in the year preceding incarceration.^{23,24}

Tuberculosis

Residents of correctional facilities have among the highest rates of TB infection and are housed in an environment with an increased risk of exposure. For those reasons, it is recommended that adolescents in correctional facilities be screened annually for TB. A positive Mantoux skin test result is considered to be 10 mm or greater, which is a lower threshold than that for an adolescent without additional risk factors.²⁵

Reproductive Health

Sexual Activity/Contraception

The 1991 NCCHC study⁵ remains one of the best nationally representative samples evaluating sexual activity and contraceptive use among incarcerated youth. The study used a survey method based on the Centers for Disease Control and Prevention (CDC)'s Youth Risk Behavior Surveillance System, which allowed for comparison with a general high school population. Incarcerated youth reported higher rates of sexual activity and were more likely to report 4 or more lifetime sexual partners. Incarcerated youth also had much lower self-reported use of contraception or condoms at their most recent sexual intercourse.

STIs/HIV

Data from the CDC's 2009 Sexually Transmitted Disease Surveillance Report²⁶ demonstrated that youth in the juvenile detention system have among the highest rates of STIs (Table 2). Similar data were collected in another study that represented 12 juvenile correction facilities in 5 jurisdictions between 1996 and 1999.²⁷ Because of unprotected sex with multiple partners, prostitution, or injection drug use, youth in correctional facilities are also at increased risk of HIV and hepatitis C virus infection. In addition, they are at risk of hepatitis B virus infection when

TABLE 2 STI Rates Among Incarcerated Adolescents Aged 12 to 18 Years, 2009²⁶

Disease	Overall Positivity, %	
	Female	Male
Chlamydia	14.8	6.6
Gonorrhea	3.9	1.0

Chlamydia data are from 83 juvenile detention facilities for women and 123 facilities for men. Gonorrhea data are from 71 juvenile detention facilities for women and 118 facilities for men.

the vaccination series is incomplete. High rates of STIs, alcohol and drug use, and lack of consistent condom use also contribute to increased risk of HIV infection.²⁸⁻³⁴

Although the risk of STIs/HIV infection is high in incarcerated youth, many facilities fail to screen for either STIs or HIV. A study that used 2004 data from the Juvenile Residential Facility Census³⁵ found that only 18.5% of the facilities offered STI testing for all adolescents on admission and that 8.3% of the facilities did not even have STI testing available. Some facilities only provided STI testing services when requested by the youth or deemed medically necessary, which is especially problematic, because STIs are commonly asymptomatic. Even fewer facilities tested all youth for HIV or hepatitis C virus infection, and these tests were much less likely to be available.³⁵ One of the challenges associated with HIV testing by traditional methods is that it involves a blood draw and use of an outside laboratory. Youth may refuse phlebotomy and can be released from a short-term detention setting before obtaining the results. Currently available rapid HIV tests provide the option of a less invasive oral test and can provide results within 20 minutes while the youth waits. Providing opt-out HIV testing is recommended by the CDC as a part of routine health care, even in correctional facilities.³⁶

Pregnancy/Fatherhood

The SYRP found that 14% of incarcerated youth have children; males (15%) were more likely to have fathered a child compared with 9% of females who reported having a child.³⁷ This rate is much higher than that of the general population of 12- to 20-year-olds, in which 2% of males and 6% of females have children. In addition, 12% of incarcerated youth were expecting a child. Overall, one-fifth of youth were currently a parent or expecting a child.³⁷

These recent national data confirm previous reports in which incarcerated teenagers report higher pregnancy rates than those in the general adolescent population; more than one-third of the females report ever having been pregnant.^{38,39} An analysis of data from the 2004 Juvenile Facilities Census⁴⁰ revealed that at least 2.1% of girls are pregnant while in juvenile justice residential facilities at any particular point in time. One study found that one-quarter of males had fathered a pregnancy, and 40% of those fathers reported responsibility for more than 1 pregnancy.⁴¹ The 2004 Juvenile Facilities Census⁴⁰ found that only 15% to 17% of facilities test all girls for pregnancy on admission. Although a small proportion (4.5%–6.6%) fail to even provide pregnancy tests, the remainder of the facilities test only when it is medically necessary or requested by the adolescent.

For youth who are pregnant while incarcerated, there are additional challenges. As found in the 2004 Juvenile Facilities Census, almost one-quarter of the facilities do not offer access to obstetric services.⁴⁰ Similarly, another study that involved 430 short-term and long-term facilities from 41 states⁴² found that prenatal services were lacking in one-third of them, and 60% reported at least 1 obstetric complication. Pregnancy among incarcerated

teenagers is complicated by other existing problems including substance abuse, posttraumatic stress disorder, previous sexual abuse, and additional considerations regarding postdelivery options.⁴³ In addition to altered activity schedules and changes in menu options related to the higher caloric requirements of pregnancy, postpartum depression and other psychological problems require particular attention. Because most juvenile justice facilities do not have arrangements for infant residency or visitation, the adolescent and her family may be expected to make a plan for foster care placement.

MENTAL HEALTH

Overview

The available literature indicates that the prevalence of psychiatric and substance abuse disorders among youth in correctional facilities exceeds that of the general adolescent population.^{3,44,45} In a review of the worldwide literature from the 1960s through the 1990s, Roberts et al⁴⁶ determined that the mean prevalence of psychiatric disorders in the general adolescent population was 16.5% (range: 6.2%–41.3%). In comparison, prevalence rates in the juvenile justice population range from 50% to 100% when disruptive behavior disorders are included.⁴⁷

Inclusion of disruptive behavior disorders, such as conduct disorder, in the psychiatric disorder prevalence estimates is controversial, because most teenagers would not be incarcerated unless they came to the attention of authorities because of significant disruptive behaviors. To some extent, engaging in disruptive behavior is part of normal adolescent development. Multiple studies have found that most adolescents in the general population participate in behaviors that would be considered delinquent.⁴⁸ These behaviors, which include imitation of antisocial models/styles and social rein-

forcement, are usually transient. Most of the adolescent offenders (85%) known to the criminal justice system stop offending by the age of 28 years. Furthermore, severe, persistent antisocial behavior over time is only found in approximately 5% of males.⁴⁸

The wide range in the prevalence of mental health disorders among youth in the juvenile justice system is indicative, in part, of the limitations of the studies in the literature. These limitations include the use of non-standardized measures and different diagnostic tools; noncomparable sociodemographic variables; data that are not generalizable because they are specific to an individual facility, state, or other locale; variation in the timing of the evaluation from the detention setting to after adjudication; and bias when samples only include youth referred for psychiatric evaluation.^{45,47,49,50} It is also important to consider the fact that for some youth, when mental health resources in the community are not sufficient, the juvenile justice system may be the placement of last resort by default.⁵¹

Prevalence of Psychiatric and Substance Use Disorders

Until the SYRP report, the 1991 NCCHC study was the only published study that included a national sampling of multiple juvenile custodial sites in the United States. In the NCCHC study, all of the mental health and substance use behaviors were self-reported through a modified version of the CDC's Youth Risk Behavior Surveillance instrument. The data from that survey are summarized in Table 3. The more recent SYRP study³ found that at least half of youth reported problems with anxiety, anger, and loneliness, and approximately one-fifth had a previous suicide attempt. In addition, only 56% of the general population of 12- through 20-year-olds report a lifetime use of alcohol,

TABLE 3 Mental Health and Substance Use Data From the 1991 NCCHC Study⁵

Category	Male (n = 1574), %	Female (n = 219), %	Total Sample (N = 1801), % ^a
Suicidal ideation previous year	19	40	—
Suicidal plan previous year	17	37	—
Suicide attempt previous year	13	35	—
Tried smoking	—	—	87
Smoked whole cigarette by age 12 y	—	—	51
Alcohol use, >20 d lifetime	49	55	—
Cocaine use	30	42	—
Marijuana use, >40 times	—	—	40
Injected drugs	10	20	—
Use of other illegal drugs ^b	13	26	—

^a Not all youth indicated gender on the survey.

^b Other illegal drugs used 10 or more times in lifetime: lysergic acid diethylamide (LSD), phencyclidine (PCP), ecstasy, hallucinogenic mushrooms, speed, ice, heroin, and pills without prescription.

compared with 74% of youth in custody, and only 40% of the general population has used any illegal drug compared with 85% of youth in custody. Details from the SYRP are summarized in Table 4.

Although the NCCHC and SYRP reports have provided information on youth from multiple sites across the United States, these 2 studies are limited by only providing information based on youth self-report rather than from diagnostic evaluation tools. Between 2002 and 2006, the results of several studies that were designed to eliminate some of the previous study-design problems were published. The authors of these reports, Teplin et al,⁵⁰ Wasserman et al,^{52,53} and Shufelt and Coccozza,⁴⁹ used randomly selected youth; the Diagnostic Interview Schedule for Children (DISC) as a standardized screening and assessment instrument; and included more ethnically/

racially diverse samples. These studies yielded a smaller prevalence range of 45.7% to 70.4% for having either a psychiatric and/or substance use disorder (see Tables 5 and 6). The studies by Teplin et al⁵⁰ and Shufelt and Coccozza,⁴⁹ specifically, were able to show that the high rates of psychiatric illness were not just a reflection of disruptive behavior disorders. Both studies found similar results: 60.9% (Teplin et al) and 66.3% (Shufelt and Coccozza) had either a psychiatric or substance use disorder when conduct disorder was not included among the diagnoses. When Shufelt and Coccozza removed substance abuse disorders from the analysis, 45.5% of the youth still had a mental health diagnosis. In general, substance abuse is concerning, because youth who start using and abusing drugs during early adolescence are more likely to have serious delinquency and longer deviant careers, antisocial personality disorders later in life, and more risk behaviors. Overall substance abuse is associated with poor academic performance and more psychiatric disorders.⁵⁴

Multiple studies worldwide have found that youth with psychiatric diagnoses can have more than 1 psychiatric diagnosis (comorbidity) or co-occurring psychiatric and substance abuse disorders.^{39,49,50,55–61} The study by Shufelt and Coccozza⁴⁹ found that 79% of those

with a psychiatric diagnosis had 2 or more diagnoses. In another study with youth in the juvenile justice system, McClelland et al⁶² found that approximately half of the youth had multiple substance use disorders; 80% of those with an alcohol use disorder also abused other drugs, and half of those with a drug disorder also abused alcohol. Co-occurring psychiatric and substance use disorders were found in the Shufelt and Coccozza study, in which 60.8% of those with a psychiatric diagnosis also had a substance use disorder. In that study, co-occurring substance use and psychiatric disorders were more common when there was a history of disruptive behaviors or symptoms suggestive of mood disorders. Because co-occurring major psychiatric and substance use disorders are common and develop in a close time frame, more dual-diagnosis treatment programs are needed to simultaneously address both issues.

Racial/Ethnic Differences

Racial/ethnic differences in the diagnosis of mental health disorders have been found in multiple studies. The well-designed study by Teplin et al⁵⁰ found that incarcerated black youth have the lowest rate of mental health diagnoses, non-Hispanic white youth have the highest rate, and the rate for Hispanic youth falls between that of these 2 groups. However, as discussed in the literature, interpreting rates of mental health diagnoses and then evaluating racial/ethnic disparity within the juvenile justice system may be problematic. Concern has been raised that minority youth may be more likely to have their behavior interpreted as criminal rather than in need of mental health service.⁴⁷ In addition, minority youth may be more reluctant to admit to experiences with mental illness, or they or their families may have a cultural bias against seeking care.^{63,64}

TABLE 4 Lifetime Substance Use Data From the SYRP³

Substance	% of Youth in Custody
Alcohol	74
Marijuana or hashish	84
Cocaine or crack	30
Ecstasy	26
Acid or lysergic acid diethylamide (LSD)	19
Inhalants	19
Heroin	7

TABLE 5 Design of Selected Studies That Evaluated Psychiatric and Substance Use Diagnoses in Youth in the Juvenile Justice System^{49,50,52,53}

Author	Year Conducted	Location	No. of Subjects
Teplin et al ⁵⁰	1995–1998	Cook County Juvenile Detention Center	1829
Wasserman et al ⁵³	1998	Texas: probation intake in 8 counties	991
Wasserman et al ⁵²	2001	New Jersey and Illinois secure placement	292
Shufelt and Coccozza ⁴⁹	2006	Louisiana, Texas, and Washington: 29 programs and facilities	>1400

Gender Differences

Gender differences are also evident. Females are more likely than males to have any psychiatric diagnosis and, specifically, to have higher rates of mood and anxiety disorders (Table 6). With respect to substance use disorders, in general, males and females have similar rates, but the study by Teplin et al⁵⁰ found that females are more likely than males to use substances other than alcohol and marijuana. Although both genders experience sexual (10%–24%) and physical (11%–58%) abuse,⁶ all forms of abuse, including emotional abuse, are more common in girls. As such, posttraumatic stress disorder is also more commonly diagnosed in females. Long-term outcomes for delinquent adolescent females reveal greater persis-

tence of emotional problems and worse outcomes complicated by relationship and parenting issues, drug problems, and suicidality.⁶⁵

Suicide

Suicide and suicidality have been a long-standing concern for juveniles in confinement. The 1991 NCCHC report and the 2003 SYRP both revealed high rates of suicidal ideation among incarcerated youth. In addition, 2 nationally representative studies explored suicidality in more detail. One study, the results of which were published in 2006,⁶⁶ found that suicide was the leading cause of death in juvenile justice facilities in the United States between 2000 and 2002. A second report, published in 2009⁶⁷ and entitled “Characteristics of Juvenile Suicide in Confine-

ment,” described the results of a retrospective evaluation of all identifiable juvenile deaths in confinement from 1995 to 1999. For the deaths related to suicide, the mechanism was hanging in all but 1 case. There were several important findings in this report. Sixty percent of the suicides occurred between 3 PM and midnight, which included a time frame in which youth were most likely to be around other people. Suicides were also most common during waking hours for those confined to their rooms. In addition, the potential for suicidality among these youth should have been recognized by staff, because 70% had been assessed by a mental health professional—half of them within the previous 6 days. Two-thirds of them had a diagnosis of depression, and half were taking a psychotropic medication. Seventy percent of the youth had a history of suicidal ideation, and almost half had had a previous suicide attempt. Precipitating factors were identified more than half of the time and included fear of transfer or placement, recent death of a family member, failure in the program, recent suicide in the facility, and parental failure or threats not to visit.

Recent studies^{6,68} found that facilities with suicide-prevention training and suicide risk screening shortly after admission to the facility had a lower suicide rate. This is an area for improvement, because the 2009 study^{6,67} found that only one-fifth of the facilities had the 7 key components deemed necessary for suicide prevention. These components include written protocols, intake screening, suicide-prevention training, safe housing, observation, mortality review, and cardiopulmonary resuscitation certification. The report also discussed the need to further evaluate room confinement, including the role of isolation in suicidal behavior.

TABLE 6 Estimated Rates of Mental Health Disorders in Incarcerated Youth From Studies Conducted Between 1995 and 2006^{49,50,52,53}

Disorder	Rate Males %	Rate Females %
Any mental health disorder	45–69	50–81
Any mood disorder	6–19	13–29
Major depressive	5–13	11–22
Any anxiety disorder ^a	17–26	29–56
Generalized anxiety	2–7	3–7
Panic disorder	0.3–5	2–3
Obsessive compulsive	5–8	6–11
Separation anxiety disorder ^b	13–25	19–33
Any disruptive behavior ^c	20–45	20–51
ADHD	1–17	0.5–21
Oppositional-defiant	3–15	11–18
Conduct disorder	18–38	17–41
Any substance abuse	26–51	22–55

All subcategories under the “any” headings are from refs 50, 52, and 53. ADHD indicates attention-deficit/hyperactivity disorder.

^a Only Teplin et al⁵⁰ (2002) included “separation anxiety” in the data for the “any anxiety” category.

^b Separation anxiety disorder subcategory data are from Teplin et al⁵⁰ (2002) and Wasserman et al⁵³ (2005).

^c Teplin et al⁵⁰ (2002) did not include attention-deficit/hyperactivity disorder under the “any disruptive behavior” category; it was reported as a separate category.

Psychotropic Medications

National data are lacking on the use of psychotropic medications for youth in the juvenile justice system. However, as summarized by Desai et al,⁴⁴ 2 studies representing data from 2 states found that psychotropic medications were used for approximately half of the youth in detention facilities and more than two-thirds of youth in longer-term facilities. The fact that the majority of youth are prescribed these medications emphasizes the need for psychiatric services to appropriately diagnose and manage these youth. Mental health services are needed at the time of admission to a correctional facility for youth who are already on psychotropic medications and to evaluate youth who may need to initiate medications. In addition, subsequent evaluation is needed to decide whether ongoing use is needed during confinement. Attitudes of the parents and youth need to be considered when prescribing these medications, and continuity of care between community prescribing physicians and the juvenile justice facility is crucial.

The American Academy of Child and Adolescent Psychiatry has published a document that addresses mental health assessment and treatment for youth in the correctional system.⁶⁹ In this document, the authors recommend that psychotropic medication should only be used as part of an individually developed comprehensive treatment plan. Medication should augment other treatment interventions including individual, group, and family therapy along with behavioral interventions such as regular exercise, improved sleep hygiene, and staff/family support. The need for previously prescribed medications should be assessed on the basis of current symptoms and level of functioning. New medications should be used cautiously after review of potential risks

and benefits, adverse effects, and alternatives with both the youth and the parent/guardian when the youth is a minor.

SCREENING AND ASSESSMENT FOR MENTAL HEALTH AND SUBSTANCE ABUSE DISORDERS

Ideally, youth with mental health and substance abuse problems would be identified and treated in the community rather than being first identified and addressed within the juvenile justice system. One recent study found that improvement in mental health services could reduce involvement with the juvenile justice system, particularly among youth with the most serious offenses.⁷⁰ One author⁷¹ suggested that substance use screening before admission to detention might allow community diversion of some youth, optimize treatment choice, and minimize restrictive detention. However, optimal screening procedures have not been established, and many communities have limited availability of psychiatric and substance abuse services.

To better address the mental health needs of youth in the juvenile justice system, a panel of experts⁷² was convened to create guidelines and a road map for best practices in the juvenile justice setting. The recommendations included a (1) valid and reliable mental health screening within 24 hours of admission, (2) a more extensive assessment by a mental health professional as soon as possible to determine needs, (3) use of multiple sources of information (records, family, schools, etc), (4) rescreening before release and preparation for transition out of custody, and (5) regular repeat screenings while in custody. These recommendations are consistent with existing standards from the NCCHC.

One of the commonly used screening tools for mental health and substance

abuse specifically developed for the juvenile justice system is the Massachusetts Youth Screening Instrument—Second Version (MAYSI-2). This 52-item screening instrument takes 10 minutes to complete and is validated as a self-report response tool that requires no clinical expertise to administer, score, or interpret; is low cost and can be used by a range of ages, different ethnic groups, and both genders; and has good psychometric properties.⁷³ This tool can be completed by using audio computer-assisted technology for youth who have literacy problems. The MAYSI-2 is designed as a screening tool only, and staff trained in mental health should be available for further assessment. This tool should never take the place of well-trained staff who can recognize symptoms of mental health disorders and substance use withdrawal.

There is no standardized approach used in the juvenile justice system to screen for substance use/abuse. It is important to screen for the use or abuse of alcohol, tobacco, and the gamut of other drugs, including illicit, prescription, and nonproprietary substances. Possible methods include self-report, which is the least expensive method but requires youth to understand the questions and have accurate recall and honest disclosure. Bioassays with urine or hair are most commonly used by detention facilities and are easy to collect. However, although these tests provide objective data, urine is only sensitive for most drugs used in the previous 2 to 3 days. Hair analysis has significant problems including external contamination, which can lead to false-positive results and differences in binding for different drugs and with different types of hair.⁵⁴

Specific screening for substance use was addressed in a recent report from the Office of Juvenile Justice and Delin-

quency Prevention.¹⁵ Only 61% of juvenile facilities screened all youth for substance abuse, and 19% reported no screening. An additional 20% only screened youth identified by court or probation officers or facility staff. Other reasons to assess were if they had drug- or alcohol-related charges or by parent/youth request. Approximately one-third of the youth were screened on the day of admission, and another one-third were screened 1 to 7 days after admission. Three-quarters of the facilities that conducted screenings used staff-administered questions, and 55% used self-report by standardized instruments or checklist inventories. Overall, 73% of the facilities used urine-based drug screening; however, one-third of all facilities only tested a subset of admitted youth or only when use was suspected or a request was made by the court or probation officer.

ON-SITE PSYCHIATRIC AND SUBSTANCE ABUSE SERVICES

The decision to initiate or change medical treatment of psychiatric disorders in detention is challenging,⁷⁴ but acute symptoms may need to be treated with some urgency. Medications should be used to manage symptoms and minimize distress but not to manage behaviors alone. As discussed in the practice parameter from the American Academy of Child and Adolescent Psychiatry, it is ideal to determine the youth's legal disposition and placement before initiating or changing medication regimens.⁶⁹ Unlike in longer-term, postadjudication facilities, the length of stay in detention is usually too short for most counseling interventions to treat major psychiatric disorders. However, trained personnel can provide observational data, and short-term counseling interventions can provide support and facilitate the use of problem-solving strategies to prevent problem-escalating

interpersonal behaviors. A more extensive evaluation may also be required before making a disposition to residential or community-based mental health treatment. Family involvement is critical at that stage, because it is the key determinant of treatment engagement and success. Whenever the youth is returning to the community, an essential part of the disposition is to include identification of a behavioral health home and care plan.

In 2002,¹⁵ 53% of the facilities that reported mental health evaluation data had in-house mental health professionals who evaluated all admitted youth. Another one-third evaluated some youth. Facilities that provided mental health treatment on-site were more likely to also have a mental health professional evaluate all the youth. Larger facilities were more likely than smaller ones to screen all youth for suicide risk and to evaluate all youth for mental health needs. Privately operated facilities (62%) were more likely to evaluate all youth than were public facilities (41%).

Two-thirds of the facilities that reported substance abuse services provided them on-site; the majority (97%) of them provided drug education, and two-thirds provided individual or group therapy with a substance abuse treatment professional. However, it was also common (60%) for the counseling to be provided by someone not specifically trained in substance abuse treatment. Only 2 of 10 facilities had ongoing specialized treatment for substance abuse, and 1 in 10 had no substance abuse treatment services. Most facilities used in-house services, whereas only 20% relied on off-site services.¹⁵

HEALTH CARE STANDARDS: THE NCCHC

Standards for care of youth in a juvenile correctional facility have been

published by the NCCHC, which also serves as an accreditation organization.^{75,76} The latest version of the standards for youth was published in 2011.⁷⁶ These standards are used for facility accreditation but are valuable to help inform facilities about both the minimal and ideal health care for incarcerated youth. The currently published standards do not specifically distinguish between detention centers, which typically involve shorter lengths of stay, and longer-term postadjudication residential facilities. However, at a minimum, the standards state that all youth should be screened immediately on arrival at the intake facility by qualified health care professionals or health-trained staff to identify and meet *urgent health needs* and to screen for any potentially *contagious conditions* or dangerous behaviors such as *suicidal ideation*. The subsequent length of stay would determine further evaluation.

According to the standards, all youth must receive a *comprehensive health assessment within 7 days* of arrival with hands on assessment by a physician, physician assistant, or nurse practitioner. This assessment includes a complete medical, dental, and mental health history, review and update of immunizations, screening for TB, measurement of vital signs, physical examination, and genitourinary examination, including a gynecologic assessment, as indicated by gender, age, and risk factors. The need for laboratory and/or diagnostic tests for *communicable diseases*, including STIs, are determined by the responsible physician.

A *mental health screening* that provides a full assessment by qualified mental health professionals or mental health staff using a structured interview is to be conducted within 14 days of admission and includes past history, suicidal behavior, victimization,

exposure to traumatic events, substance use, violent behavior, cerebral trauma or seizures, and psychotropic medication. In addition, an oral health screening is to be performed by a dentist or health care professional trained by the dentist within 7 days of admission, and an oral examination is to be performed by a dentist within 60 days of admission.

Facilities are required to provide an opportunity for the adolescent to request health care on a daily basis, and all requests must be triaged within 24 hours. The facility must provide 24-hour emergency mental health and dental services. Discharge planning must include arrangements for follow-up or referrals to community providers and a supply of current medications to last until that follow-up can occur.

A recently published study³⁵ that assessed whether juvenile detention facilities follow the standards set out by the NCCHC found significant deficits when comparing reported practices to published standards. Data were analyzed from the Juvenile Residential Facilities Census (2000, 2004) and Census of Juveniles in Residential Placement (2003), which are conducted by the Office of Juvenile Justice and Delinquency Prevention of the US Department of Justice. Most juvenile correctional facilities are not accredited by the NCCHC, and in the absence of mandatory accreditation, it is not clear whether most facilities would fail to meet the standards or just choose not to be accredited. Data from 2004 showed that overall, fewer than half of the facilities were compliant with recommended health screening and assessments. Few detention facilities met even minimal levels of care, although better care was seen as the length of stay increased.

CONTINUITY OF CARE

Continuity of care, both on entering the facility and when transitioning back to the community, is crucial for youth in the juvenile corrections system. However, continuity of care is a challenge. One study²⁰ found that fewer than half of families showed interest in care deemed important by the on-site medical staff, and a large proportion of families were not successfully contacted. These youth had nonideal medical care before admission; only half of the youth had care in the previous year, and only one-third of them were able to identify a source of regular medical care. The juvenile justice system may be the only place where these youth have received a recent comprehensive medical history or physical examination.¹⁵

As custodial placement comes to an end, transitions are difficult, particularly for youth who have experienced disruption and failure and who have limited internal resiliency and external support. Transitions of communities, residences, schools, programs, therapists, friends, and family members as well as adjustment to a less restrictive environment can be difficult. Continuity of care starts at the time of admission to the facility. If the youth already has a primary care provider, it is crucial for the medical staff to be able to contact that clinician to verify previous diagnoses and treatment. For cases in which the youth does not have a primary care provider, resources to establish primary care should be provided. Providing summaries of medical care for the primary care provider, appropriate subspecialist, or mental health specialist on discharge back to the community is also extremely important. In some cases, a chronic medical condition may be first diagnosed while the youth is in custody. Facilitating the transition to a provider who can ensure continuity is key, because it

is not uncommon for youth to return to the correctional facility with unmet chronic health needs. For some conditions, such as STIs or TB, public health facilities may be able to help with follow-up.⁷⁵

COMMUNITY-BASED INTERVENTIONS FOR INCARCERATED YOUTH

Traditional cognitive behavioral therapy (CBT) is helpful for both internalizing and externalizing behaviors, including anger management, depression, and posttraumatic stress disorder. However, it may not be the best choice for many delinquent youth. There are several promising interventions that have been shown to be effective in treating youth with mental health issues. In some cases, these interventions have been shown to reduce recidivism.⁷⁷ Programs that broadly address multiple domains, including the adolescents' family, school, peers, and community, are the most effective. These programs are intensive and highly structured and include social skill development, behavior management, attitude adjustment, and cognitive perceptions. Many of these programs are community-based interventions conducted in the youth's home environment and directly engage the family members. Examples include multisystemic therapy, functional family therapy, and wraparound therapy. In another program, multidimensional treatment foster care, youth are placed with families trained to provide a structured therapeutic environment as an alternative to incarceration. The biological family is taught the system with the goal of returning the youth home. Multisystemic therapy and functional family therapy have been found to be particularly effective for youth with co-occurring mental health and substance use disorders. Some of the challenges with implementing these

programs are the high initial up-front costs and the labor-intensive nature of the interventions.

When assessing interventions, it is also important to note that the Girls Study Group⁷⁸ found that interventions for boys may not directly translate to girls. Protective factors, such as caring adults, school success, school connectedness, and religiosity, may be less effective for girls who have experienced physical and sexual assault, neglect, and neighborhood disadvantage. More research is needed to understand the interaction between risk and protective factors in girls to best design successful intervention programs. Programs for girls need to address victimization, which is commonly found in these youth.

As evidenced by the interventions described above, the approach in the juvenile court system is generally *rehabilitative* rather than *punitive*. The Office of Juvenile Justice and Delinquency Prevention⁷⁹ advocates a comprehensive strategy that includes supporting the adolescent's family and engaging core institutions, such as schools, businesses, and religious organizations, in helping to develop mature and responsible youth. This strategy utilizes the principle that delinquency prevention is the most effective approach while recognizing that there is a need for graduated sanctions that protect the community. The best prevention involves targeting risk factors for delinquency, such as drugs and firearms in the community, family conflict, abuse and neglect, poor commitment to school, and negative peer influences, while focusing on protective factors such as a resilient individual temperament; close relationships with family, teachers, other adults, and peers; and promoting school success and avoidance of drugs and crime. Reentry plans need to address education, mentoring, prosocial

activities, and positive community involvement.

EDUCATIONAL NEEDS

As summarized in the recently published findings of the SYRP, educational difficulties and low commitment to academics are risk factors for delinquency.³ In this nationally representative survey, one-fifth of the youth reported that they were not enrolled in school at the time they entered custody. This rate is 4 times higher than that for the general population. In addition, 61% had been expelled or suspended, compared with 8% of the general population. Although only 28% of youth in the general population are functioning below grade level, 48% of those in custody reported being below the level expected for their age. Similarly, a higher percentage (25%) of youth in custody reported being held back in school, compared with 11% among peers in the general population. Although the majority (92%) of youth reported attending school while in custody, only half of these youth reported that the school program was of good quality, and most youth did not spend as many hours in school as did the general population.

Learning disabilities are also much more common among youth in custody; rates of 30% have been reported by youth in custody, which is 7 times higher than that of the general population. Despite the requirements of the federal Individuals With Disabilities Education Act, which states that youth in custody must be identified and given special education services, even in short-term facilities, only 46% reportedly receive these services. The SYRP report concluded that there is a need to obtain more information on how custodial facilities address educational needs, including an assessment of the curricula used, the provision of special educational services, and

whether individual educational needs are being met for each youth in custody.

JUVENILE TRANSFER LAWS/DEATH PENALTY

In the past decade, an increasing number of states have enacted laws that require that juvenile cases be transferred to adult courts for certain offenses.⁸⁰ A parallel increase has been seen in the number of juveniles incarcerated in adult facilities for certain felonies. When convicted in adult court, these juveniles commonly receive longer sentences than those sentenced in juvenile courts. Although these laws were enacted with the thought that they would be a deterrent for juvenile crimes, 6 studies, conducted in 5 different states, with approximately 500 to more than 5000 participants each, showed the opposite effect. Compared with youth retained in the juvenile court system, recidivism rates were higher for juveniles whose cases were transferred to adult criminal court. This was particularly true for violent offenders for whom transfer may actually be promoting rather than deterring further criminal involvement.

Juveniles in adult prisons report learning more about criminal behavior from adult inmates and having fear of victimization; these juveniles were least likely to say they would not reoffend. Juveniles incarcerated in adult prisons compared with juvenile facilities have an eightfold increase in suicide, fivefold increase in being sexually assaulted, and twofold increase in likelihood of being attacked with a weapon by other inmates or beaten by staff.⁸⁰ Adult facilities have much less emphasis on rehabilitation and family support than do juvenile facilities, and juveniles have expressed both resentment and a feeling of injustice when tried and punished in the adult system.

At the extreme, issues of whether to invoke the death penalty for adolescents have been debated in the past. In 2004, the American Academy of Pediatrics and the Society for Adolescent Health and Medicine issued a joint statement opposing the death penalty for juvenile offenders.⁸¹ In 2005, the Supreme Court ruled that it was unconstitutional to impose capital punishment of individuals who committed crimes as a juvenile.⁸² Age 18 was determined to be the age for death-penalty eligibility. This age was based on currently available scientific research that indicates that juveniles do not have the cognitive maturity or sense of responsibility found in adults. This was echoed in the most recent ruling by the Supreme Court in May 2010, in which life without the possibility of parole was not permitted for juveniles who committed nonhomicide crimes.⁸³

FINANCING

Financing of health care for incarcerated adolescents presents many challenges.^{84–86} All incarcerated persons are entitled to health care under the US Constitution (see *Estelle v Gamble*, 429 US 97); however, such a constitutional guarantee does not include access to federally funded health benefits programs such as Medicaid or the Children's Health Insurance Program (CHIP), and it does not apply to private health insurance plans. Section 1905 of the federal Social Security Act specifically prohibits federal money from being used for medical care of inmates in a federal institution and has been applied equally to adolescents.

There is also a federal prohibition on the use of Medicaid benefits for any month during which the individual is a resident of a public institution. Many states have terminated Medicaid benefits rather than suspend them to avoid improper use of federal funds. Because financing for medical care in

juvenile justice facilities then largely relies on state and local resources, the extent of medical care provided can be limited. When Medicaid benefits are terminated, there is also commonly a lag in reinstatement when the youth is released back into the community. This occurs even when screening for eligibility is offered before release and application assistance is provided. Although current law allows states to suspend rather than terminate benefits for incarcerated youth, many states do not follow this procedure for administrative or other reasons.^{84–86} Other states have passed legislation specifically to address this issue and require that Medicaid be suspended and not terminated for at least 6 months while in detention.⁸⁷ Ideally, continuation and utilization of active benefits while the youth is incarcerated or detained would ensure that correctional facilities can provide more comprehensive medical care. Continuation of active benefits would also facilitate continuity of care and may prevent some recidivism, especially for those with mental illnesses that require medication.^{84–86} In order for Medicaid benefits to remain active for youth in the juvenile justice system, federal law must be amended to ensure both continuation of benefits and funding for the federal government share of Medicaid. Advocacy is needed at both the federal and state levels to ensure provision of necessary medical services for these youth.

RECOMMENDATIONS

The current and predicted ongoing shortage of child and adolescent psychiatrists, the separation of mental health and drug and alcohol treatment services and personnel, the limited access to health care dollars for youth in detention, and the institutional variability in procedures and human and monetary resources will continue to provide a challenge to meet a reason-

able standard of health care for this population. The following recommendations are provided for caring for youth in the juvenile correctional system.

1. Delivery of Medical Care

Youth incarcerated in the juvenile corrections system should receive the same level and standards of medical and mental health care as nonincarcerated youth accessing care in their communities.

- a. *Health care services should be equivalent to those recommended by guidelines of the American Academy of Pediatrics (Bright Futures [see www.brightfutures.aap.org]).* Although the extent of health services provided during the period of incarceration may be mitigated by the length of stay in the facility, shorter-term facilities, at a minimum, should focus on the identification and treatment of immediate medical and psychiatric issues such as injury; infectious diseases (TB, scabies, lice); alcohol, tobacco, and other drug use/addiction, including withdrawal; psychiatric emergencies including suicidal ideation; and identification of chronic medical or mental health problems that require continuation of daily medications.
- b. *For youth incarcerated for more than 1 week or in longer-term facilities, recommended pediatric and adolescent comprehensive preventive services should be provided.* In addition to a comprehensive history and physical examination, youth should receive a dental screening and mental health screening for psychiatric illness and substance use/abuse. Assessments should focus on developmental and psychosocial issues. Immunizations should be provided as recommended by the American

Academy of Pediatrics and the Advisory Committee on Immunization Practices of the CDC. The Vaccines for Children (VFC) program is a resource from which eligible youth can access vaccines. Additional evaluation, including for neurologic, genetic, and developmental disorders, should be ordered by medical personnel as clinically indicated. Clinicians caring for incarcerated youth should have training and expertise in pediatrics or adolescent medicine.

c. *Evaluation should include screening for infectious diseases resulting from unprotected sexual activity.* In view of the high rate of risk-taking behaviors, STI screening should be included for the most common pathogens (*Neisseria gonorrhoeae*, *Chlamydia trachomatis*). The 2010 sexually transmitted disease (STD) treatment guidelines from the CDC recommend universal screening of all female adolescents for both *N gonorrhoeae* and *C trachomatis* at intake to juvenile detention facilities.⁸⁸ The 2010 STD guidelines also recommend screening sexually active young men for *C trachomatis* in clinical settings in which there is a high prevalence, such as in correctional facilities. Although not specifically recommended in the 2010 STD guidelines, periodic assessment of the local prevalence of *N gonorrhoeae* would be ideal with initiation of screening in male adolescents when prevalence rates indicate that screening would be cost-beneficial. Urine-based nucleic acid amplification testing provides a convenient, non-invasive option for screening. Depending on community prevalence, screening for syphilis should be included. HIV testing should be offered to all sexually active youth per current CDC recommendations.^{36,88}

Completion of the hepatitis B immunization series should be confirmed. Screening for hepatitis C with serologic testing should be considered for high-risk youth, including those who have a history of injection drug use, are HIV-positive, or have signs or symptoms of liver disease, per current CDC recommendations.⁸⁹ Juveniles with signs or symptoms of hepatitis should also be tested for serologic markers for acute infection with hepatitis A and hepatitis B. For most youth, the first Papanicolaou test is not indicated until 21 years of age. If clinically indicated per published guidelines, a pelvic examination should be performed for a Papanicolaou test (see pelvic examination and male reproductive health statements).^{90,91}

d. *Screening of pubertal girls should include pregnancy testing.* Because of the high rates of sexual activity, all pubertal girls should be screened for pregnancy. Nonjudgmental counseling regarding options should be provided for pregnant youth, and accessibility to prenatal services should be provided on-site or in the community. Prenatal vitamins, including iron and folate supplementation, should be provided to all pregnant girls at the time pregnancy is diagnosed and continued throughout the course of the pregnancy. For both female and male youth who are parents, parenting classes should be included in the educational offerings.

e. *On-site mental health and substance abuse professionals should be available to provide both evaluation and treatment services.* Mental health services can be provided by staff either hired by the facilities or through a contractual arrangement with an outside community provider. Services should include

psychiatric services to facilitate continuation of medications from the community mental health provider and ongoing evaluation and treatment. Psychiatrists should have training in child and adolescent psychiatry and preferably be board certified. Tobacco-, alcohol-, and drug-cessation programs should be available during the period of incarceration. Attention should be paid on an ongoing basis to the medical and mental health status of youth, because new issues can arise during their time in confinement. Correctional staff should receive training in suicide prevention, and specific attention should be paid to youth confined to their rooms in the housing unit. The practice parameter from the American Academy of Child and Adolescent Psychiatry provides specific recommendations on the provision of mental health services within the juvenile correctional system.⁶⁹

f. *Regular physical activity and nutritionally balanced meal plans appropriate for adolescents should be provided in all facilities.* Given the current national epidemic of obesity, attention to these aspects of a healthy lifestyle is even more critical.

g. *Pediatricians should encourage all correctional care facilities to adopt and comply with the NCCHC's "Standards for Health Services in Juvenile Detention and Confinement Facilities."*⁷⁶ Accreditation is encouraged as a means to reach desired levels of health care. Information regarding accreditation can be found at www.ncchc.org.

2. Developmentally Appropriate Confinement Facilities

Children and adolescents should be housed in facilities that are able to ad-

dress their specific developmental needs.

- a. Pediatricians, adolescent health care specialists, mental health professionals, and drug and alcohol treatment providers should be consulted about health care policies and procedures governing all correctional care facilities in which children and adolescents are incarcerated.
- b. Children and adolescents should be detained or incarcerated only in facilities with developmentally appropriate programs and staff trained to deal with their unique social, educational, recreational, and supervisory needs.
- c. If children and adolescents must be housed in adult facilities, they should have routine access to the same developmentally appropriate environment and be separated by sight and sound from the adult population.

3. Integration of Available Systems of Care

- a. *Coordination between juvenile justice system health care providers and community providers is essential.* Health care information elicited in the juvenile corrections setting should, at a minimum, be shared with the adolescent and, as appropriate (when not violating confidentiality), with the parent/legal guardian to allow for continuity of care and prevent unnecessary duplication of services. Pediatricians are a crucial link in the process of ensuring continuity of care between the community and the juvenile correctional system. Information should also be shared between the relevant community providers and correctional health care staff both on admission and at the time of release to ensure continuity of care. If the youth does not

have a medical home, correctional staff should make every effort to identify a medical home within the community for that youth. Pediatricians should also coordinate with probation officers who are frequently entrusted with ensuring appropriate follow-up once the youth reenters the community.

- b. *Electronic medical records available within the community should also be accessible by correctional health care staff.* Existing publicly accessed databases, such as state immunization data banks, should be used to document care provided in correctional facilities. With the evolving use of electronic medical records, consideration should be given to the need to share information between correctional institutions and community providers to ensure continuity of care.
- c. *All youth incarcerated in the juvenile corrections systems should maintain eligibility for their existing health insurance benefits. Uninsured youth should be able to be enrolled in Medicaid while incarcerated.* Both Medicaid and private insurance should be available for all youth without suspension or termination during incarceration and without a lag for reinstatement on reentry into the community. Youth without insurance coverage before incarceration should be automatically made eligible for Medicaid at the time of incarceration so that access to appropriate care may be facilitated. Advocacy is needed at both the federal and state levels to amend existing regulations and ensure the provision of necessary medical services for these youth.

4. Treatment and Intervention

- a. *Evidence-based mental health and substance abuse treatment interventions that have been shown to*

reduce recidivism should be adopted to improve long-term outcomes for incarcerated youth. Pediatricians should advocate for adequate funding for implementation of programs such as multisystemic therapy and functional family therapy with the recognition that an increased investment in the short-term will lead to cost savings in terms of improved long-term outcomes.

- b. *Resources should be invested in interventions that address the risk and protective factors involved with juvenile delinquency.* There should be emphasis on investing in interventions that address the related family and community factors associated with delinquency. Specific emphasis should be placed on factors that will improve SES such as educational achievement and employment, because these factors are highly correlated with both juvenile delinquency and overall health status.
- c. *More nationally representative data are needed on the health needs of youth in the juvenile justice system.* Funding is needed to collect nationally representative data on youth involved in the correctional system to better inform programming needs and desired outcomes and help guide the choice of appropriate cost-effective interventions.

5. Advocacy

Pediatricians should work with their AAP chapters, the juvenile justice sections of their state judiciary and bar associations, and state and local governmental officials.

- a. Pediatricians should advocate to ensure that the appropriate legislation and funding is available to provide for medical, educational, and behavioral health needs of juve-

niles while confined and on reentry into the community.

- b. Pediatricians should advocate for adequate health insurance for all medical and behavioral health services for youth both during and after incarceration to ensure that resources are available to provide adequate and continuous care.
- c. Pediatricians should support both efforts to decrease the number of youth incarcerated by advocating for interventional programs in the community that address risk and

protective factors and legislation that requires education of law enforcement officers about at-risk youth and teaches skills to manage interactions with these youth.

LEAD AUTHORS

Paula K. Braverman, MD
Pamela J. Murray, MD, MHP

COMMITTEE ON ADOLESCENCE, 2011–2012

Paula K. Braverman, MD, Chairperson
William P. Adelman, MD
Cora C. Breuner, MD, MPH
David A. Levine, MD
Arik V. Marcell, MD, MPH

Pamela J. Murray, MD, MHP
Rebecca F. O'Brien, MD

PAST COMMITTEE MEMBERS

Margaret J. Blythe, MD, Past Chairperson

LIAISONS

Loretta E. Gavin, PhD, MPH – *Centers for Disease Control and Prevention*
Rachel J. Miller, MD – *American College of Obstetricians and Gynecologists*
Jorge L. Pinzon, MD – *Canadian Paediatric Society*
Benjamin Shain, MD, PhD – *American Academy of Child and Adolescent Psychiatry*

STAFF

Karen Smith

REFERENCES

1. American Medical Association, Council on Scientific Affairs. Health status of detained and incarcerated youth. *JAMA*. 1990;263(7):987–991
2. Golzari M, Hunt SJ, Anoshiravani A. The health status of youth in juvenile detention facilities. *J Adolesc Health*. 2006;38(6):776–782
3. Sedlak AJ, McPherson KS. Youth's needs and services. *OJJDP Juvenile Justice Bulletin*. 2010;April:10–11. Available at: www.ncjrs.gov/pdffiles1/ojjdp/227728.pdf. Accessed November 3, 2010
4. Forrest CB, Tambor E, Riley AW, Ensminger ME, Starfield B. The health profile of incarcerated male youth. *Pediatrics*. 2000;105(1 pt 3):286–291
5. Morris RE, Harrison EA, Knox GW, Tromanhauser E, Marquis DK, Watts LL. Health risk behavioral survey from 39 juvenile correctional facilities in the United States. *J Adolesc Health*. 1995;17(6):334–344
6. US Department of Justice, Office of Juvenile Justice and Delinquency Prevention. *Juvenile Suicide in Confinement: A National Survey*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention; 2009. Available at: www.ncjrs.gov/pdffiles1/ojjdp/213691.pdf. Accessed November 3, 2010
7. US Department of Justice, Office of Juvenile Justice and Delinquency Prevention. *Juvenile Arrests 2008*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention; 2009. Available at: www.ncjrs.gov/pdffiles1/ojjdp/228479.pdf. Accessed November 3, 2010
8. Zahn MA, Brumbaugh S, Steffensmeier D, et al. Violence by teenage girls. In: US Department of Justice, Office of Juvenile Justice and Delinquency Prevention, ed. *Girls Study Group: Understanding and Responding to Girls' Delinquency. Violence by Teenage Girls: Trends and Context*. Washington, DC: US Department of Justice, Office of Juvenile Justice and Delinquency Prevention; 2008. Available at: www.ncjrs.gov/pdffiles1/ojjdp/218905.pdf. Accessed November 3, 2010
9. US Department of Justice, Office of Juvenile Justice and Delinquency Prevention. Home page. Available at: www.ojjdp.gov
10. Piquero AR. Disproportionate minority contact. *Future Child*. 2008;18(2):59–79
11. Kirk D. The neighborhood context of racial and ethnic disparities in arrest. *Demography*. 2008;45(1):55–77
12. Sampson RJ. The neighborhood context of well-being. *Perspect Biol Med*. 2003;46(3 suppl):S53–S64
13. Snyder HN, Sickmund M. *Juvenile Offenders and Victims: 2006 National Report*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention; 2006. Available at: www.ojjdp.gov/ojstatbb/nr2006/index.html. Accessed November 3, 2010
14. Litt IR, Cohen MI. Prisons, adolescents, and the right to quality medical care: the time is now. *Am J Public Health*. 1974;64(9):894–897
15. Hein K, Cohen MI, Litt IF, et al. Juvenile detention: another boundary issues for physicians. *Pediatrics*. 1980;66(2):239–245
16. Pickett KE, Wilkinson RG. Child well being and income inequality in rich societies: ecological cross sectional study. *BMJ*. 2009;339:b4320
17. Flores G, Tomany-Korman SC. Racial and ethnic disparities in medical and dental health, access to care, and use of services in US children [published correction appears in *Pediatrics*. 2009;124(3):999–1000]. *Pediatrics*. 2008;121(2). Available at: www.pediatrics.org/cgi/content/full/121/2/e286
18. Elster A, Jarosik J, VanGeest J, Fleming M. Racial and ethnic disparities in health care for adolescents: a systematic review of the literature. *Arch Pediatr Adolesc Med*. 2003;157(9):867–874
19. Shelton D. Health status of young offenders and their families. *J Nurs Scholarsh*. 2000;32(2):173–178
20. Feinstein RA, Lampkin A, Loris CD, Klerman LV, Maisiak R, Oh MK. Medical status of adolescents at time of admission to a juvenile detention center. *J Adolesc Health*. 1998;22(3):190–196
21. Bolin K, Jones D. Oral health needs of adolescents in a juvenile detention facility. *J Adolesc Health*. 2006;38(6):755–757
22. Woolf A, Funk SG. Epidemiology of trauma in a population of incarcerated youth. *Pediatrics*. 1985;75(3):463–468
23. Perron BE, Howard MO. Prevalence and correlates of traumatic brain injury among delinquent youth. *Crim Behav Ment Health*. 2008;18(4):243–255
24. Hux K, Bond V, Skinner S, Belau D, Sanger D. Parental report of consequences and consequences of traumatic brain injury among delinquent and non-delinquent youth. *Brain Inj*. 1998;12(8):667–681
25. American Academy of Pediatrics. *Red Book: 2009 Report of the Committee on Infectious Diseases*. Pickering LK, Baker CJ, Kimberlin DW, Long SS, eds. 28th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2009
26. Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2009*. Atlanta, GA: US Department of Health and Human Services; 2010
27. Mertz KJ, Voigt RA, Hutchins K, et al. Findings

- from STD screening of adolescents and adults entering correctional facilities: implications for STD control strategies. *Sex Transm Dis*. 2002;29(12):834–839
28. Centers for Disease Control and Prevention. Prevention and control of infections with hepatitis viruses in correctional settings [published correction appears in *MMWR Recomm Rep*. 2003;52(10):205–214]. *MMWR Recomm Rep*. 2003;52(RR-1):1–36
 29. Kim AA, McFarland W, Kellogg T, Katz MH. Sentinel surveillance for HIV infection and risk behavior among adolescents entering juvenile detention in San Francisco, CA: 1990–1995. *AIDS*. 1999;13(12):1597–1598
 30. Centers for Disease Control and Prevention. HIV/AIDS among youth. Available at: www.cdc.gov/hiv/resources/factsheets/youth.htm. Accessed November 3, 2010
 31. Harwell TS, Trino R, Rudy B, Yorkman S, Golub EL. Sexual activity, substance use, and HIV/STD knowledge among detained male adolescents with multiple versus first admissions. *Sex Transm Dis*. 1999;26(5):265–271
 32. Morris RE, Baker CJ, Valentine M, Pennisi AJ. Variations in HIV risk behaviors of incarcerated juveniles during a four-year period: 1989–1992. *J Adolesc Health*. 1998;23(1):39–48
 33. Elkington KS, Teplin LA, Mericle AA, Welty LJ, Romero EG, Abram KM. HIV/sexually transmitted infection risk behaviors in delinquent youth with psychiatric disorders: a longitudinal study. *J Am Acad Child Adolesc Psychiatry*. 2008;47(8):901–911
 34. Teplin LA, Mericle AA, McClelland GM, Abram KM. HIV and AIDS risk behaviors in juvenile detainees: implications for public health policy. *Am J Public Health*. 2003;93(6):906–912
 35. Gallagher CA, Dobrin A. Can juvenile justice detention facilities meet the call of the American Academy of Pediatrics and the National Commission on Correctional Health Care? A national analysis of current practices. *Pediatrics*. 2007;119(4). Available at: www.pediatrics.org/cgi/content/full/119/4/e991
 36. Branson BM, Handsfield HH, Lampe MA, et al; Centers for Disease Control and Prevention. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health-care settings. *MMWR Recomm Rep*. 2006;55(RR-14):1–17; quiz CE1–CE4
 37. Sedlak AJ, Bruce C. Youth's characteristics and backgrounds. *OJJDP Juvenile Justice Bulletin*. 2010. Available at: www.ncjrs.gov/pdffiles1/ojjdp/227730.pdf. Accessed May 9, 2011
 38. Williams RA, Hollis HM. Health beliefs and reported symptoms among a sample of incarcerated adolescent females. *J Adolesc Health*. 1999;24(1):21–27
 39. Lederman CS, Dakof GA, Larrea MA, Li H. Characteristics of adolescent females in juvenile detention. *Int J Law Psychiatry*. 2004;27(4):321–337
 40. Gallagher CA, Dobrin A, Douds AS. A national overview of reproductive health care services for girls in juvenile justice residential facilities. *Women's Health Issues*. 2007;17(4):217–226
 41. Nesmith JD, Klerman LV, Oh MK, Feinstein RA. Procreative experiences and orientations toward paternity held by incarcerated adolescent males. *J Adolesc Health*. 1997;20(3):198–203
 42. Breuner CC, Farrow JA. Pregnant teens in prison: prevalence, management, and consequences. *West J Med*. 1995;162(4):328–330
 43. Hufft AG. Supporting psychosocial adaptation for the pregnant adolescent in corrections. *MCN Am J Matern Child Nurs*. 2004;29(2):122–127
 44. Desai RA, Goulet JL, Robbins J, Chapman JF, Migdole SJ, Hoge MA. Mental health care in juvenile detention facilities: a review. *J Am Acad Psychiatry Law*. 2006;34(2):204–214
 45. Vermeiren R, Jaspers I, Moffitt T. Mental health problems in juvenile justice populations. *Child Adolesc Psychiatr Clin N Am*. 2006;15(2):333–351, vii–viii
 46. Roberts RE, Attkisson CC, Rosenblatt A. Prevalence of psychopathology among children and adolescents. *Am J Psychiatry*. 1998;155(6):715–725
 47. Boesky LM. *Juvenile Offenders With Mental Health Disorders*. Lanham, MD: American Correctional Association; 2002
 48. Moffitt TE. Adolescence-limited and life-course-persistent antisocial behavior: a developmental taxonomy. *Psychol Rev*. 1993;100(4):674–701
 49. Shufelt JL, Coccozza JJ. Youth with mental health disorders in the juvenile justice system: results from the multi-state prevalence study. *Research and Program Brief*. June 2006. Available at: www.ncmhjj.com/pdfs/publications/PrevalenceRPB.pdf. Accessed November 3, 2010
 50. Teplin LA, Abram KM, McClelland GM, Dulcan MK, Mericle AA. Psychiatric disorders in youth in juvenile detention. *Arch Gen Psychiatry*. 2002;59(12):1133–1143
 51. Martin A. Busted! *Child Adolesc Psychiatr Clin N Am*. 2006;15(1):xv–xvii
 52. Wasserman GA, McReynolds LS, Lucas CP, Fisher P, Santos L. The Voice DISC-IV with incarcerated male youth: prevalence of disorder. *J Am Acad Child Adolesc Psychiatry*. 2002;41(3):314–321
 53. Wasserman GA, McReynolds LS, Ko SJ, Katz LM, Carpenter JR. Gender differences in psychiatric disorders at juvenile probation intake. *Am J Public Health*. 2005;95(1):131–137
 54. McClelland GM, Teplin LA, Abram KM. Detection and prevalence of substance use among juvenile detainees. In: *Juvenile Justice Bulletin*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention; 2004
 55. Abram KM, Teplin LA, McClelland GM, Dulcan MK. Comorbid psychiatric disorders in youth in juvenile detention. *Arch Gen Psychiatry*. 2003;60(11):1097–1108
 56. Atkins DL, Pumariega AJ, Rogers K, et al. Mental health and incarcerated youth. I: prevalence and nature of psychopathology. *J Child Family Stud*. 1999;8(2):193–204
 57. Robertson AA, Dill PL, Husain J, Undesser C. Prevalence of mental illness and substance abuse disorders among incarcerated juvenile offenders in Mississippi. *Child Psychiatry Hum Dev*. 2004;35(1):55–74
 58. Vreugdenhil C, Doreleijers TA, Vermeiren R, Wouters LF, Van Den Brink W. Psychiatric disorders in a representative sample of boys in the Netherlands. *J Am Acad Child Adolesc Psychiatry*. 2004;43(1):97–104
 59. Dixon A, Howie P, Starling J. Psychopathology in female juvenile offenders. *J Child Psychol Psychiatry*. 2004;45(6):1150–1158
 60. Domalanta DD, Risser WL, Roberts RE, Risser JM. Prevalence of depression and other psychiatric disorders among incarcerated youth. *J Am Acad Child Adolesc Psychiatry*. 2003;42(4):477–484
 61. Ulzen TP, Hamilton H. The nature and characteristics of psychiatric comorbidity in incarcerated adolescents. *Can J Psychiatry*. 1998;43(1):57–63
 62. McClelland GM, Elkington KS, Teplin LA, Abram KM. Multiple substance use disorders in juvenile detainees. *J Am Acad Child Adolesc Psychiatry*. 2004;43(10):1215–1224
 63. Shelton D. Experiences of detained young offenders in need of mental health care. *J Nurs Scholarsh*. 2004;36(2):129–133
 64. Rawal P, Romansky J, Jenuwine M, Lyons JS. Racial differences in mental health needs and service utilization of youth in the juvenile justice system. *J Behav Health Serv Res*. 2004;31(3):242–254
 65. Loeber R, Stouthamer-Loeber M. Development of juvenile aggression and violence: some common misconceptions and controversies. *Am Psychol*. 1998;53(2):242–259

66. Gallagher CA, Dobrin A. Deaths in juvenile justice residential facilities. *J Adolesc Health*. 2006;38(6):662–668
67. Hayes LM. Characteristics of juvenile suicide in confinement. 2009. Accessed at: www.ncjrs.gov/pdffiles1/ojdp/214434.pdf. May 30, 2011
68. Gallagher CA, Dobrin A. Facility-level characteristics associated with serious suicide attempts and deaths from suicide in juvenile justice residential facilities. *Suicide Life Threat Behav*. 2006;36(3):363–375
69. Penn JV, Thomas CR. Practice parameter for the assessment and treatment of youth in juvenile detention and correctional facilities. *J Am Acad Child Adolesc Psychiatry*. 2005;44(10):1085–1098
70. Foster EM, Qaseem A, Connor T. Can better mental health services reduce the risk of juvenile justice system involvement? *Am J Public Health*. 2004;94(5):859–865
71. Chassin L. Juvenile justice and substance use. *Future Child*. 2008;18(2):165–185
72. Wasserman GA, Jensen PS, Ko SJ, et al. Mental health assessments in juvenile justice: report on the consensus conference. *J Am Acad Child Adolesc Psychiatry*. 2003;42(7):752–761
73. Grisso T, Barnum R, Fletcher KE, Cauffman E, Peuschold D. Massachusetts youth screening instrument for mental health needs of juvenile justice youth. *J Am Acad Child Adolesc Psychiatry*. 2001;40(5):541–548
74. Roush D. The importance of comprehensive skill-based programs in juvenile detention and corrections. In: Roberts AR, ed. *Juvenile Justice: Policies, Programs, and Services*. Chicago, IL: Nelson-Hall; 1998:165–193
75. Morris RE. The health of youth in the juvenile justice systems. *Adolesc Med*. 2001;12(3):471–483
76. National Commission on Correctional Health Care. *Standards for Health Services in Juvenile Detention and Confinement Facilities*. Chicago, IL: National Commission on Correctional Health Care; 2011
77. National Mental Health Association. *Mental Health Treatment for Youth in the Juvenile Justice System: A Compendium of Promising Practices*. Alexandria, VA: National Mental Health Association; 2004
78. Hawkins SR, Graham PW, Williams J, et al. *Girls Study Group: Understanding and Responding to Girls' Delinquency. Resilient Girls: Factors That Protect Against Delinquency*. 2009. Available at: http://girlsstudygroup.rti.org/docs/OJJDP_GSG_Resilience_Bulletin.pdf. Accessed December 12, 2010
79. US Department of Justice, Office of Juvenile Justice and Delinquency Prevention. *OJJDP Research: Making a Difference for Juveniles*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention; 1999. Available at: www.ncjrs.gov/pdffiles1/177602.pdf. Accessed November 3, 2010
80. US Department of Justice, Office of Juvenile Justice and Delinquency Prevention. Juvenile transfer laws: an effective deterrent to delinquency? *Juvenile Justice Bulletin*. August 2008. Available at: www.ncjrs.gov/pdffiles1/ojdp/220595.pdf. Accessed November 3, 2010
81. Morreale MC. Executing juvenile offenders: a fundamental failure of society. *J Adolesc Health*. 2004;35(4):341
82. *Roper v Simmons*, 543 US 551 (2005), 112 S.W. 3d 397, affirmed
83. *Graham v Florida*, 560 US No. 08-7412 (2009), Supreme Court of the United States, decided May 17, 2010. Available at: www.supremecourt.gov/opinions/09pdf/08-7412.pdf. Accessed October 26, 2010
84. Perez LM, Ro MJ, Treadwell HM. Vulnerable populations, prison, and federal and state Medicaid Policies: avoiding the loss of a right to care. *J Correct Health Care*. 2009; 15(2):142–149
85. Gupta RA, Kelleher KJ, Pajer K, Stevens J, Cuellar A. Delinquent youth in corrections: Medicaid and reentry into the community. *Pediatrics*. 2005;115(4):1077–1083
86. Evans Cuellar A, Kelleher KJ, Rolls JA, Pajer K. Medicaid insurance policy for youth involved in the criminal justice system. *Am J Public Health*. 2005;95(10):1707
87. Indiana House Bill 1536 (2009)
88. Workowski KA, Berman S; Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2010. *MMWR Recomm Rep*. 2010;59(RR-12):1–110
89. Centers for Disease Control and Prevention. Hepatitis C: FAQs for health professionals. Available at: www.cdc.gov/hepatitis/HCV/HCVfaq.htm#section3. Accessed December 12, 2010
90. Braverman PK, Breech L; American Academy of Pediatrics, Committee on Adolescence. Gynecologic examination for adolescents in the pediatric office setting. *Pediatrics*. 2010;126(3):583–590
91. Marcell AV, Wibbelsman C, Seigel WM. Male adolescent sexual and reproductive health care. *Pediatrics*. 2011;128(6). Available at: www.pediatrics.org/cgi/content/full/128/6/e1658

Health Care for Youth in the Juvenile Justice System
COMMITTEE ON ADOLESCENCE
Pediatrics originally published online November 28, 2011;

Updated Information & Services

including high resolution figures, can be found at:
<http://pediatrics.aappublications.org/content/early/2011/11/22/peds.2011-1757>

Permissions & Licensing

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
<http://www.aappublications.org/site/misc/Permissions.xhtml>

Reprints

Information about ordering reprints can be found online:
<http://www.aappublications.org/site/misc/reprints.xhtml>

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®



PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Health Care for Youth in the Juvenile Justice System COMMITTEE ON ADOLESCENCE

Pediatrics originally published online November 28, 2011;

The online version of this article, along with updated information and services, is
located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/early/2011/11/22/peds.2011-1757>

Pediatrics is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. Pediatrics is owned, published, and trademarked by the American Academy of Pediatrics, 345 Park Avenue, Itasca, Illinois, 60143. Copyright © 2011 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 1073-0397.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®

