

# CorrDocs



## Challenges Facing the Juvenile Justice System

Robert E. Morris, MD

After several decades of bad news about the juvenile justice system, statistics began to show a few positive trends in the late 1990s, but many challenges still remain.

Youth murders and sexual assaults from 1975 to 2005 declined 55% and 81% respectively. Despite an overall decrease in crimes, young men in adult correctional facilities increased twofold from 1990 to 2005. Now all states can transfer teenagers to adult court where they face adult sentences, including life

Despite strong evidence that adolescents are subject to immature decision making, new laws hold teens accountable for crimes as though they were functioning as adults.

without parole, such that in 2000 an estimated 2,225 youth received sentences of life without parole. Often youth in adult prisons are in isolation and lack appropriate education, exercise and diets. The staff used to dealing with adult inmates may be ill equipped to manage youngsters whose develop-

mental stage and behavior differs from adults.

Recent research in neurodevelopmental science utilizing functional magnetic resonance imaging demonstrates that adolescents' decision-making behavior is influenced by the limbic system and amygdale (the impulsive/aggression areas of the brain). By the mid-third decade,

these processes migrate to the prefrontal cortex where executive decision processes occur. As the brain develops during the adolescent period, it is plastic and subject to experiential influences including psychological trauma. Despite this strong evidence that adolescents are subject to immature decision making, new laws hold teens accountable for crimes as though they were functioning as adults.

During the same time frame, legislatures have moved to criminalize teenage sexual behavior with the premise that teen females require extra protection because they are immature and incapable of making an informed decision to engage in sexual activity. This interesting dichotomy results in treating boy's behavior as adult while treating girls as young children. Neither approach is consistent with our understanding of adolescent behavior and developmental stages.

Despite the reductions in juvenile crime, gang involvement and offending remains a significant challenge. Gangs are found in all areas of the country—rural, suburban and urban. However, most research involves urban gangs, therefore giving the impression that it is only a city problem. The causes are similar to delinquent behavior, with most gang members engaging in delinquency before joining the gang and escalating their criminal behavior after entering a gang. Programs with a single focus such as police suppression of gangs have little long-term effect on gang violence.

Since traditional services have proved

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## Letter from the Editor

Dear Colleagues,

In this issue of *CorrDocs*, you may notice a new concept—a themed issue. This one focuses on juvenile issues. We have introduced some clinical pieces as well. Future issues are planned focusing on mental health (Summer) and infectious disease (Fall, to coordinate with our annual meeting, October 19, 2008, Chicago, IL.) If there are other areas that you would like to see us focus on, we invite you to submit your ideas to [editor@corrdocs.org](mailto:editor@corrdocs.org).

You may also note some articles that express the opinions of the authors on issues such as research in corrections and physician involvement in policy issues affecting improvement of correctional systems. In some ways, Michelle Staples-Horne's President's Message describing

the UMass Conference on Academic Research and Scott Allen's article on the need for physician involvement in improving institutions are a lead into Robbie Morris's article on the Juvenile Justice system, and the need for objective evaluation of the efficacy of programs for the rehabilitation of youthful offenders. If you would like to voice your opinion and stimulate debate on these issues, we invite your comments to the same address.

We sadly announce that Scott Savage no longer can contribute his regular column. We are actively looking for a replacement. If anyone wishes to take this on or would like to nominate someone who might, please let us know.

Lynn Sander, MD  
Editor

## Board Report: January - March

Rebecca A. Lubelczyk, MD, CCHP, FSCP

### Membership

Good news! More of you already have renewed for 2008 than all of last year! And welcome to our 17 new members.

Since January, the member listserver has been up and running. Members interested in subscribing to the listserver should contact us at [scp@corrdocs.org](mailto:scp@corrdocs.org) with their preferred email address. To send a message to the listserver, address your email to [scplist@speakeasy.net](mailto:scplist@speakeasy.net).

### Education

Thanks to the volunteer efforts of SCP members Tom Lundquist and Mike Puerini, SCP will host a half-day seminar in conjunction with NCCHC and the Updates Conference in San Antonio on Saturday, May 17, 1:30 p.m. to 5 p.m. Register with NCCHC at [www.ncchc.org](http://www.ncchc.org).

To bring SCP's outstanding education programs to members who are unable to attend our conferences and seminars, we are looking into providing the presentations via the Web with audio and PowerPoint presentations.

### Policy and Practice Steering

In January, the board heard from committee member Joe Goldenson about the recent development of a position statement on custody restraints. Dr. Goldenson expressed the view of some members that SCP should not publish a position statement on use of restraints so as not to appear to condone the practice. The board felt this was indeed true, yet was concerned that we would appear to be condoning a practice that we know exists by *not* having a statement on it. The board ultimately voted to publish a statement, but will include further language to clearly document the concerns expressed in this discussion. The committee is working out the last few revisions of the statement; a final version is expected soon.

*JAMA* recently published an article on lethal injection. Board members Don Kern, Michelle Staples-Horne and Lynn Sander, on behalf of the entire board, submitted a response to *JAMA*'s editor expressing our position on the physician's

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### Article Submissions

*CorrDocs*' purpose is to communicate the thoughts and ideas of correctional physicians, as well as to report on news that impacts their practice. We welcome all submissions. Articles should be approximately 750 words in length and submitted electronically, preferably in Word.

### Letters to the Editor

Did an article, opinion, or statement in *CorrDocs* inspire you, impact your work, sound too good to be true? Express your opinions in a letter to the editor. The editor relies on your feedback to continually improve the quality of information in *CorrDocs*.

### Direct All Submissions to:

Lynn Sander, Editor  
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As President of the Society of Correctional Physicians, I recently attended the Academic and Health Policy Conference on Correctional Health in Boston hosted by



the University of Massachusetts Medical School. This conference followed last year's inaugural conference that brought together 275 researchers, policymakers and clinicians representing 20 states and 19 academic institutions to discuss academic research opportunities within correctional settings. Topics included women offenders, mental health, substance abuse, infectious disease, chronic illness, sexual violence, re-entry, academic and peer review sessions.

Attendance was even higher this year and additional topics were added to include ethics and juvenile corrections. According to Dr. Warren Ferguson, Course Director, the conference provided a unique opportunity to network and reflect on the potential to study and

acquire new knowledge of best practices in a field where a highly complex constellation of medical, mental and substance use problems is the norm rather than the exception.

The marriage between correctional medicine and academic research is not one without challenges. Dr. B. Jaye Anno, in her keynote presentation, eloquently reflected on the history which created our taboos and reluctance to delve into this area. Many horror stories exist in our past of medical abuse relating to "research." Certainly correctional populations must be protected, but not necessarily permanently excluded from academic research opportunities from which they can receive benefit.

We, as correctional physicians, must be hyper-vigilant with regard to protecting our patients' well-being. We must work closely with academic institutions in the design and implementation of these academic research models. First, there should be no risk to our patients. Secondly, there should be a benefit to the inmate-patient and to the greater population. Every detail of the project must be

evaluated "to do no harm" to our patients.

In our correctional world of secondary gain, we must not be perceived as pimping out our inmate-patients for the types of "research" projects that occurred in the past. It is critical that we dispel these perceptions by proposing and participating in legitimate academic research projects that demonstrate evidence-based medicine and best practices that can withstand inmate and public scrutiny.

As I evaluate academic research proposals presented to me for consideration for use in the juvenile correctional agency for which I am responsible, I consider my own children. After careful consideration of the scientific and security implications to the patient and the institution, if I would be willing to have them participate, then I have met an ethical standard beyond reproach. In summary, I believe we have a responsibility to both the safety of our patients and the advancement of knowledge based on academic research which will enable us to provide evidence-based practice in correctional medicine.

Michelle Staples-Horne, MD  
President

## News Briefs

### On the Hill

There are several bills before Congress that could have a significant impact on our field.

S 2278 — Community and Healthcare-Associated Infections Reduction Act of 2007

HR 3992 — Mentally Ill Offender Treatment and Crime Reduction Reauthorization and Improvement Act of 2007

HR 3971 — Death in Custody Reporting Act of 2007

Also, the National Association of Counties and others have made some progress with a draft bill to extend Medicaid coverage to preadjudicated jail detainees. More recently, Congress passed the Second Chance Act. Among other things, the legislation will provide states and counties with resources to design and

implement collaborative efforts between the criminal justice and mental health systems.

### In the Press

An article appeared in the *St. Louis Post Dispatch* (January 12, 2008) about a nurse with a criminal past and still under probation being used to assist in the execution of a federal prisoner in Indiana several years ago.

The article also talks about a correctional physician with dyslexia who was used in executions. "In federal court in Kansas City in 2006, the doctor who developed Missouri's procedure—and supervised 54 executions—testified anonymously that he was dyslexic, had problems with numbers and knowingly varied doses of the lethal drugs by as much as half." The full article is available

on the *Post Dispatch* Web site at [www.stltoday.com](http://www.stltoday.com).

### Pew Report

More than 1 in 100 American adults are in prison or jail, the Pew Charitable Trust's Public Safety Performance Project recently reported. Pew said the numbers behind bars climbed last year by about 25,000 overall, "saddling cash-strapped states with soaring costs they can ill afford and failing to have a clear impact either on recidivism or overall crime." States spent more than \$44 billion on corrections last year, an increase of 127% in 2 decades adjusted for 2007 dollars. Over the same period, adjusted spending on higher education rose 21%. The full report can be read and downloaded from [http://www.pewcenteronthestates.org/initiatives\\_detail.aspx?initiativeID=31336](http://www.pewcenteronthestates.org/initiatives_detail.aspx?initiativeID=31336).



# Pediatric Chest Pain: Decoding Vital Signs in Context

Scott Savage, DO, FACEP, FSCP, CCHP

Chest pain in adults that do not look obviously toxic is always a serious concern, but the goal is relatively simple: rule out acute coronary syndrome and pulmonary embolism. Find and treat the underlying cause, which is often gastroesophageal reflux disease. But what about children? In fact, what about children who are incarcerated?



They are different. Here, decoding the vital signs in context is essential. For example, a runaway 16 y/o F with chest pain had the following vital signs: P: 94, R: 18; BP: 112/64; T: 99.2; O2 Sat: 91% upon arrival to a facility where she complained of pain about six hours into a transfer trip. The physician rightly sent her to the emergency department by ambulance. Why? Look closely at the vital signs. The Oxygen saturation is only 91% despite the patient being relatively both tachycardic and tachypneic. She was found to have a pulmonary embolism, and was successfully treated. As a refresher, Table 1 shows normal pediatric vital signs:

Table 1: Pediatric Vital Sign Normal Ranges			
Age Group	Respirations	Pulse	Systolic Blood Pressure
5 - 8 yr	14-20	90-100	90-100
8 - 12 yr	12-20	80-100	100-110
>12 yr	12-20	60-90	100-120

**REMEMBER**

- The patient's normal range should always be taken into consideration.
- Heart rate, BP & respiratory rate are expected to increase during times of fever or stress.
- In a clinically decompensating child, the blood pressure will be the last to change. Just because your pediatric patient's BP is normal, don't assume that your patient is stable.
- Bradycardia in children is an ominous sign, usually a result of hypoxia. Act quickly, as this child is extremely critical.

So, the first rule is to decode the vital signs in context, and ask if the child appears safe. Once that is completed, a history is taken to try to determine the pain pattern. The system I teach is:

OPQRSTU: Onset, Place, Quality, Radiation, Severity, Timing, and Underlying factors. It is simple, easy to remember, and gives significant information. The goal is to try to classify the pain as pleuritic, musculoskeletal, or visceral. Pleuritic is generalized, sharp, and related to respiration; musculoskeletal is focal, dull, and related to movement; and visceral is dull, generalized, and may be related to eating. Obviously, the lines are not always clear cut, but looking for visceral and pleuritic components of pain can help avoid missing a serious diagnosis.

In children who are incarcerated, there are some concerns that are not present for either adults or for children in the standard population. For example, the higher rates of substance abuse lead to concern for pneumothorax (huffers), bacterial endocarditis (IV drug abuse), and prolonged QT syndrome (psychotropic use and abuse).

So what are the serious diagnoses in incarcerated children? Here, the mnemonic "P4 HIM" is useful. The "P4" is for pulmonary embolism, pneumonia, pneumothorax, and prolonged QT. The "HIM" is hypertrophic cardiomyopathy, infective endocarditis, and Marfan's syndrome.

Here are some tips for looking for these

diagnoses:

1. Pneumonia: Don't forget to look for TB. Also, if the patient declines rapidly, consider MRSA pneumonia. When it causes pneumonia, MRSA is often an aggressive disease frequently leading to death.
2. Pneumothorax: Don't rely on the pulse ox. The tachypnea of the patient can be subtle, but sufficient to make up for the tidal volume loss.
3. Prolonged QT: Remember, it must be corrected by heart rate, so look for the QTc. Then all you need remember is that "42 is bad for you"; a QTc greater than 0.42 is worrisome. Also, remember that arrhythmias that develop due to psychotropic drug overdose generally do not respond to standard ACLS drugs.
4. Infective Endocarditis: Although a history of IV drug abuse and fever are classic, remember that 85% of patients will have a heart murmur. Make sure you listen for one in an incarcerated patient who complains of chest pain, as the history of drug abuse may not be forthcoming.

## References

Marx J; Adams J; Rosen P, et al: *Emergency Medicine, 6th Ed.* (3 Vols). NY: Mosby, 2007

Tintinalli J; Gabor K; Stapczynski S: *Emergency Medicine: a comprehensive study guide, 6th Ed.* NY: McGraw-Hill, 2003

*Dr. Savage is an SCP Fellow and Clinical Assistant Professor of Emergency Medicine, Wright State University School of Medicine, and former Assistant Medical Director of both the Ohio and Michigan Departments of Corrections. Readers may contact Dr. Savage at sirscottssavage@hotmail.com.*

## Membership Application

Your name should be submitted exactly as you want it to appear on all official correspondence. Please print or type.

First Name			Middle Initial			Last Name					
Educational Degrees						Organizational Title					
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Business Address											
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Preferred mailing to <input type="checkbox"/> Business <input type="checkbox"/> Home											
Preferred listing for published directory <input type="checkbox"/> Business <input type="checkbox"/> Home <input type="checkbox"/> Do not wish to be listed											
Setting for the majority of your correctional health work <input type="checkbox"/> County or city jail <input type="checkbox"/> Dept of health <input type="checkbox"/> Federal prison <input type="checkbox"/> Federal - INS <input type="checkbox"/> Juvenile facility <input type="checkbox"/> State DOC <input type="checkbox"/> University <input type="checkbox"/> Other											
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How did you hear about SCP? <input type="checkbox"/> Co-worker/Employer <input type="checkbox"/> NCCHC <input type="checkbox"/> ACHSA <input type="checkbox"/> CorrDocs <input type="checkbox"/> SCP Web site <input type="checkbox"/> Other											
Other											
Gender <input type="checkbox"/> Male <input type="checkbox"/> Female											

## Eligibility

Qualifications of Members: Applicants shall be doctors of medicine or osteopathy who are licensed to practice medicine by an appropriate board of licensure, and who are engaged or interested in the practice, teaching or research in some relevant aspect of correctional medicine.

Provide a list of current, active medical licenses, including number, state, and expiration date.

Provide a list of all other certifications or licensure.

Have you ever lost your license?  Yes  No

If yes, explain.

I hereby certify that my Society of Correctional Physicians application as submitted is true and correct.

Signature

Date

## Payment Information

All memberships are renewable on January 1. Applications received before June 30 will be applied to the current year's membership. Applications received after June 30 will be effective through the end of the next calendar year.

Enclosed is a check for \$100 (payable to the Society of Correctional Physicians).

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## Board Update

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role in lethal injection. (The content of the letter appeared in the last issue of *CorrDocs*.)

### Finances

We got some sobering news in March from the financial report. Due to the scarcity of grants and sponsorships, preliminary audit reports indicate that SCP ended in the red for FY 2007, despite having lower expenses. SCP members are seeking other sources of revenue including federal grants, as well as advertising in *CorrDocs* and on our Web site. The

board plans to discuss finances at the annual membership meeting in Chicago on October 19. All members are encouraged to attend.

### Specialty Recognition

SCP received a final response from ABIM which stated they were not able to pursue specialty recognition for correctional medicine at this time, though the door was not shut. The committee on specialty recognition will proceed with an application to the AAFP for specialty recognition. We are also reviewing the

application to get representation to the AMA House of Delegates.

### Increased Visibility

Thanks to volunteer efforts, the SCP booth was on display during the Prevention Conference in February and the UMass Conference in March. Next, we'll be at the Updates Conference in May. We are looking for volunteers to man the booth at the ACA conference in August. If you can help, please let us know!

# Female Juvenile Offenders: Are You Up to the Challenge?

Michelle Staples-Horne, MD, MPH, CCHP

The provision of health care to female adolescents in an incarcerated environment presents a challenge to health care providers, as well as to administration and security staff. Why is it so difficult to provide services to this population? There are many reasons. I will try to address a few that I feel significantly impact our service delivery.

Females in general have a higher utilization of medical care while in the community. The greater prevalence of chronic diseases, including mental health diagnoses and the provision of prenatal care and delivery, also tend to accelerate utilization and expenditures for female juvenile facilities. Greater health care expenses should always be anticipated in providing health services to females in a juvenile facility as compared to males.

Medicaid exclusions for the provision of health care to incarcerated youth, as well as most incarcerated youth being uninsured, can create a financial burden on facilities and correctional agencies in the provision of quality health care. Despite financial constraints, the community standard of care must be maintained, if not exceeded, in this medically underserved population that has a constitutional right to health care while incarcerated.

In most cases, girls were victims of physical and sexual abuse before they became offenders. Internalization of feelings associated with this abuse may present as self-harm through prostitution, substance abuse, eating disorders, self-mutilation or other self-harm behaviors. Other internalizing disorders may manifest themselves as depression and/or anxiety

disorders. Some will even lash out violently at the perpetrator or others as a result of the abuse with aggression, conduct disorder, oppositional or defiant behavior, resulting in their entry into our system. Girls are three times as likely to have been sexually abused as boys. In some detention facilities, the incidence of girls who have been abused is close to 90%. Most are victims of family members or close family friends who are perceived as trusted adults. This explains why they often mistrust even the medical staff and do not easily disclose pertinent history. Additionally, girls are even more likely to have been physically abused. A considerable body of literature has firmly established the relationship of adolescents' reports of physical and sexual

*Continued on page 14*



## Family Practice and Internal Medicine Physicians (Full-time)

Come live and work in the warm and sunny states of the Southern US! STG International has an urgent need for Family Practice and Internal Medicine Physicians. We are currently recruiting highly-qualified physicians to support the Division of Immigration Health Services (DIHS). These services will be providing health care and public health services that support immigration law enforcement. The physician will be responsible for the provision of direct medical care, mental health care, and infirmatory domiciliary (in-patient) care to alien detainees in a clinic setting. Positions are available in **Southern California, Arizona, Texas, Georgia, and Louisiana** providing mission-critical support within a detention environment.

Providers should be board certified (or board eligible) with minimal required experience, must have an active state license from any of the 50 US states, Guam or Puerto Rico or be willing to obtain a current license within the state in which they will be working, and be able to complete and pass a federal security clearance. Exceptional compensation provided! This is an excellent opportunity to work on the frontline of preventive medicine, ensuring and protecting the health of our nation. **Ask about our referral bonus of \$2,000 to you, for any physician that's hired.**

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# A Day in the Life

Kelly O'Brien, MD, FACP, CCHP

"Pride goeth before a fall." Somebody important and wise said this. I've always believed, with a hint of smugness (ok, more than a hint if we're being honest here), that there is no such thing as a poor historian, only poor history takers. I probably heard this from someone that I considered important and wise so it sounded good to repeat it. If you do all of those med school things (open ended questions, say nothing for one minute, murmur "Ummm..." in a non-judgmental, reassuring way) you get the information you need.

This is occasionally challenged in a way that's good for those of us with too much smugness. Mr. Keys had a new seizure while a guest of the county at our local jail. He was taken to the ED, where brain imaging was normal (and importantly proved the presence of a frontal lobe, a question I had later.) An EEG, was also normal except for the accompanying telemetry strip showing frequent multifocal PVCs. Now I was seeing him to determine our next step. He was close to 70 and had that global look seen in the homeless elderly, where you can't quite determine racial background. There was a south-of-the-border sing-song nasal accent that challenged Speedy Gonzales for Most Stereotypical.

Mr. Keys- your brain tracing was good, but your heart tracing wasn't quite normal.

*Eee. My stomach hurts. They was supposed to do surgery but they din't. I was good 'til they sent me here.*

Have you ever had heart trouble?

*Eee, no. They said a heart attack but I didn't have no trouble.*

Tell me about that. [Really- how open ended can you get?]

*I was walkin' down the road in New Mexico when, eee, I got pressure and couldn't breafe too good, like a Cheby on me. Then I woke up in the hospital and they did some stuff.* [Hand motions from groin to chest that may represent a catheterization.]

Then what did they do?

*Put me on a bus for Arizona.* [Do the

other 49 states know of this option?]

Did you take any medicine?

*Eee, no.*

They said it was a heart attack, but they didn't recommend any medicine?

*Eee, I threw those pills away. I didn't need them. What was they for? I was back home.*

When did this happen?

*Eee, I don't know.*

Was it last year? [Time to get more directed, try to narrow it down.]

*Eee, no, I was here last year. But they didn't do the surgery on my stomach they was supposed to. They sent me here instead.*

Was it five years ago?

*Eee, maybe.* [Clearly, this is going to take a while. I decide to test a new hypothesis.]

Mr. Keys, where are we now?

*Why you ask that? Don' chu know? We at County, on Smith Road. Is ten am, Tuesday. I got lonch in 20 minutes and*

*court in 3 days.* [OK, that's not it.]

Mr. Keys, we're going to do a study on your heart, and see if these abnormal heart beats caused your seizure.

*Eee, I don't got no trouble with my heart.* [A hint of annoyance at my density. Haven't I been listening?]

And yet, you had a heart attack.

*Yeah, but I din't take no pills.* [More annoyance. Clearly they know more in Arizona than I do here about heart trouble.] *An' I still need that surgery on my stomach.*

I feel kind of bad scheduling myocardial imaging without elaborating further, though it seems an explanation may actually muddy the water a bit. If he doesn't initially agree, I'll offer to throw in that surgery.

*Dr. O'Brien is an SCP member and physician with Denver Health and Hospital. You may contact her at kelly.obrien@dhha.org.*

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Now is the time to reserve space in the 2008 issues of CorrDocs. Take advantage of multiple frequency discounts — the more you advertise, the more you save! CorrDocs is distributed four times a year (quarterly) to over 2,500 correctional physicians and medical directors from across the country. It is also distributed at the most important correctional health care conferences in the nation.

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Artwork due	July 25	October 29

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# Legal and Legislative Updates Legal Issues Surrounding the Treatment of Incarcerated Juveniles

Deana Johnson, JD

With all of the challenges facing medical and mental health providers caring for incarcerated individuals, even more complex issues arise when the patient is a juvenile. In certain respects, the courts have recognized this fact; while in others, state legislation has made it more cumbersome to try and provide superior care.

In the context of liability for medical decisions, the courts utilize the same framework for claims arising under 42 U.S.C. § 1983 involving juveniles as they do for claims involving adults. However, in interpreting what amounts to deliberate indifference to a serious medical or mental health need, the courts recently have recognized that caring for juveniles in an incarceration setting creates challenges over and above those found when providing similar care to adults.

In a recent district court case, the parents of an incarcerated juvenile who committed suicide by hanging sued the warden as well as numerous medical and mental health providers. The claim was complex and involved allegations of failure to re-prescribe medication that the juvenile had voluntarily discontinued more than a month before, recognize the juvenile's sudden decomposition in mental state and monitor. The District Court applied the same test utilized in Section 1983 deliberate indifference cases, but repeatedly recognized during its analysis that the treatment of this juvenile posed a complex series of challenges for the medical staff. For instance, they were unable to access his prior treatment records due to state law. Thus, they had to take the patient's word for matters such as the effectiveness of prior medication and reasons for discontinuation.

Since the Court recognized the critical need to evaluate the case on an individual basis, the right result was reached and the federal claims were dismissed. The medical malpractice claims were left to go forward in the state court system. Examples of some of the factors that the court considered are: housing assignment needs based on the juvenile's small build

and immature interaction with peers; dangers of restarting medications for a juvenile of this age and size; and the patient's unwillingness to trust providers given his history.

While this is just one selected case from one district court, a review of cases decided in the past five years reveals a trend in the federal courts' recognition of challenges faced by medical providers attempting to do the best for their incarcerated juvenile patients. It is worth noting that one repeated concern of judges is continuation of treatment after the juvenile is released from the correctional setting and placed back in the free world either under control of parents or foster care/guardians.

[T]he courts recently have recognized that caring for juveniles in an incarceration setting creates challenges over and above those found when providing similar care to adults.

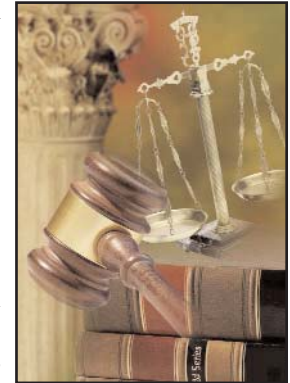
Although the courts are giving due deference to individual decisions of medical providers in treating juveniles, the proliferation of state statutes governing minors can easily create roadblocks to even the most careful medical provider. The most well-intentioned legislator's attempt to dictate the lives of some of society's most vulnerable citizens creates legal hurdles that providers must face when treating juveniles under the care and custody of a correction's department. Thus, it has become increasingly important that providers be intimately familiar with the ever-changing and ever-increas-

ing legislation governing juveniles in the state in which they practice.

For instance, does your state dictate special considerations for juvenile medical and mental health records? How much, if any, ability is a juvenile given to elect between treatment options? If involuntary hospitalization becomes necessary, what are your state rules governing such a transfer for a juvenile, and what involvement, if any, are the parents to have?

On a more day-to-day administrative level, providers need to know what rules govern juvenile consent forms, the provider's ability to respond to questions from guardians about specific medical and/or mental issues, and a juvenile's ability to decline recommended treatment.

Each time the legislature enacts new laws, policies of your department need to be reviewed and updated by legal counsel. Only then can you be assured that the medically correct decision you make for your patient can also be defended should it be challenged in a court. Equally important, if you are more familiar with the various laws governing your interaction with juveniles, you will be able to explain them more clearly to your patients and steer them toward choosing the best treatment option.



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# Challenges Facing the Juvenile Justice System

*Continued from page 1*

ineffective in reaching gang members, a comprehensive community-wide approach may help to decrease gang activity. This includes mobilizing existing organizations, while modifying the agencies to better address gang problems. The use of outreach workers, while increasing access to schools and economic and social opportunities, can help.

At the local health care level, practitioners who encounter injured youths in emergency departments and clinics can ask about the etiology of the injury, gang affiliation, and whether the teen thought the injury would hurt. Using motivational interviewing techniques, the health care provider can explore the youth's interest in moving away from the gang. To successfully leave a gang, the person must believe they can leave. A beginning step involves spending less time with the gang by developing excuses for the lack of time to participate. Methods of copping out at times of high-risk activity can be developed, such as having a parent call and demand the youth return home. A pretend call can have the same effect.

Once a youth becomes involved with the juvenile justice system, the theoretical aim involves providing rehabilitation so that the youth can leave the system and become a contributing member of the community.

Rehabilitation theory addresses the six major risk factors for recidivism, also known as criminogenic needs. These are, in order of importance:

1. A history of antisocial behavior/low self-control.
2. Personal attitudes, values and beliefs supportive of crime.
3. Pro-criminal associates and isolation from anticriminal others.
4. Current dysfunctional family features.
5. Callous personality factors.
6. Substance abuse.

The principles of effective interventions involve:

1. Risk: Identify those who need treatment. (Avoid involving low-risk kids, as intense services to low-risk youth tend to make them worse.)

2. Need: Target the criminogenic needs listed above and ignore personal problems such as self-esteem.
3. Responsivity: Use styles and modes that match the learning styles of the offenders. Include behavioral and social learning processes, e.g., cognitive behavior therapy.
4. Professional Discretion/Override: Adhere to ethical guidelines and professional conduct, and allow professional override in certain circumstances.
5. Program Integrity: Professional training, staff supervision, evaluation of outcomes and fidelity to the model that has been shown to be effective.

Writing in *Pediatrics* (March 2002), Anthony J. Petrosino advocates for an increase in good evaluations of rehabilitation programs with rigorous design, even if that means few studies. There is evidence regarding some rehabilitation programs already available that should be evaluated to help guide new approaches to improving outcomes. In addition, it is important for researchers to know how research is used by policy makers in our legislative and administrative governmental branches. Petrosino suggests building bridges to policy makers. It is especially important for legislators to avoid decision making by murder, in which ill-considered laws are passed in response to a perceived crime.

Ideally, juvenile delinquency should be prevented. Many programs have been proposed and tried, but only 8% have had repeated design and evaluation showing them to be effective. Rather, 90% of prevention programs have no evidence-based support, and 2% after evaluation were found to be useless.

Who should conduct prevention programs? The justice system's mission is control, risk assessment and monitoring plus punishment. Involvement with the justice system (e.g., police, courts) imposes a heavy stigma. On the other hand, health and human service organizations and education departments assist youth with their needs utilizing principles of human development. Service providers

tend to be mental health professionals, teachers and nurses with special training. Thus, it is most appropriate for the juvenile justice system to focus only on tertiary programs for youth already in the system.

In general, programs that begin early in a youth's life are most effective in preventing delinquency. David Olds' studies that provided prenatal and infancy home visits to low income unmarried mothers by trained nurses resulted in significantly few arrests, convictions and alcohol use by their teen children when followed years later. The use of lay visitors, although less expensive, does not result in similar effects. This demonstrates that only fidelity to the effective model results in the desired outcome.

Arthur Reynolds' 15-year follow-up of an intervention providing a half day of school, beginning at age 3 or 4 and continuing to age 9, amongst low income children born in 1990 showed a higher rate of high school completion, low juvenile arrests and lower arrests for violent crimes. The results were impressive, but less impressive than Dr. Olds' work, possibly because the intervention did not begin until later in the children's lives.

The emphasis recently moved from punitive treatment of offenders to a more rehabilitative model. However, this is still occurring haphazardly across the country. A nationally-coordinated program that is adequately funded to compare matched programs in various juvenile corrections settings could allow us to slowly improve delinquency programs. After comparison of 2 or 3 programs, the program with the best outcome could be modified further and compared to the original program to determine if the newer program is more effective. After a number of these comparisons, significant improvement in juvenile delinquency rehabilitation will emerge.

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# Guest in the House, or Co-owners?

Scott A. Allen, MD

It is often said that physicians working in correctional facilities have felt like guests in someone else's house.

Prisons and jails serve punitive and security missions primarily, and medical missions only secondarily. Accordingly, physicians have historically focused on the delivery of health care while remaining relatively silent about the nature of the institutions themselves. But in a country with a booming prison population, with increasing numbers of inmates with addiction, mental illness and chronic medical disease, that paradigm is ripe for rethinking.

In the United States the quality of health care for prisoners has improved over the past several decades with the professionalization of correctional medicine. In part, this stems from the 1976 Supreme Court decision (*Estelle v. Gamble*) that found that lack of adequate health care for prisoners is cruel and

unusual punishment. With that ruling, it became clear that medical care is both an integral and necessary component of a correctional facility and legally recognized as a fundamental component of a constitutionally sound prison or jail.

An often unrecognized consequence of that decision is that physicians share in the responsibility for the legitimacy and constitutionality of the institutions themselves. To some degree, physicians have some responsibility for any adverse health effects of the institution on their patients beyond the effects of direct medical services. Since a prison cannot constitutionally function without the support of physicians, physicians assume some ownership for the effects the institutions have on their patients.

Since the Supreme Court ruling, there has also been a dramatic change in the population behind bars in the U.S. Two trends have contributed to this surge: the so-called "war on drugs" and the de-institutionalization of the mentally ill. As a result, correctional institutions are frequently overburdened with individuals with two overlapping medical conditions: addiction and mental illness. The natural history of these conditions, if left untreated, often causes behaviors that result in incarceration. Thus, much of the dramatic increase in incarceration over the last three decades can be viewed as the failure of society to appropriately treat addiction and mental illness. In addition, persistent racial disparities in jails and prisons represent a failure of society to address institutional racism that profoundly harms communities of color and society as a whole.

This is not to say that the current correctional model should be replaced by a medical model. As many correctional health professionals are keenly aware, mental illness, addiction and other chronic illnesses are not excuses for criminal conduct. But physicians, both those working in correctional facilities and those working in the community, can no longer afford to be passive in the policy arena as the country continues to mount an

[P]hysicians have historically focused on the delivery of health care while remaining relatively silent about the nature of the institutions themselves.

unprecedented human subjects experiment based on a rather crude model of punishment and isolation. As a matter of medical professionalism, physicians will need to assert a leadership role in reform of a system that is increasingly at odds with the health and welfare of their patients.

Physicians have an often overlooked responsibility to lobby for change in institutions that may harm their patients. While correctional health professionals often remain overwhelmed by simply trying to meet the immediate medical and psychiatric needs of their patients, it is clear that the current system of mass incarceration is unsustainable. It is inefficient and costly to society, in both dollars and in human terms. Across the political spectrum there is growing unity in the call for significant reform; however, for optimal reform to succeed, physicians and other health professionals must assert their right and responsibility to have a leadership role in the political and policy driven process that will determine the future of jails and prisons in this country.

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## Armond Start Award of Excellence

Honoring one of our founding members who represented the highest of ideals in correctional medicine, this prestigious honor is awarded to SCP members who have demonstrated these same ideals:

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To nominate someone for this year's Armond Start award, please submit a letter of nomination describing the candidate and how he or she has met the above criteria. Send nominations to the SCP Nominations Committee, fax (773) 880-2424 or e-mail [scp@corrdocs.org](mailto:scp@corrdocs.org).

# Medication Rashes

Lisa Scatena, MD, FAAD

A 21-year-old woman is given amoxicillin for a sore throat. Four days later she returns with a diffuse, maculopapular eruption. Other than the sore throat, she feels well. Vital signs are stable.

(Figure 1)

Your diagnosis:

- A. Drug hypersensitivity eruption
- B. Morbilliform drug eruption
- C. Stevens-Johnson syndrome
- D. Toxic Epidermal necrolysis
- E. Viral exanthem

In two studies of over 39,000 medical inpatients performed by the Boston Collaborative Drug Surveillance Program, the overall cutaneous reaction rate to medications was 2.2%. In this study, penicillins, sulfonamides and blood products accounted for over 66% of all drug eruptions. Reaction rates for women were 35-50% higher than for men. Most reactions occurred within 1 week of starting the suspected drug.

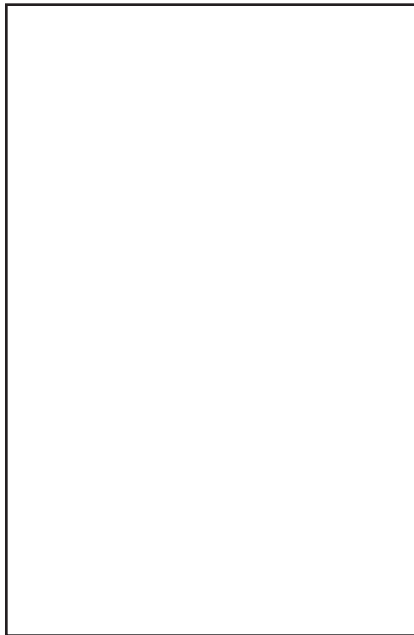


Figure 1: Morbilliform Eruption  
Itchy maculopapular rash began on trunk and dependent extremities. No mucosal involvement.

Most drug eruptions are morbilliform (maculopapular) rashes and typically clear within 2 weeks of stopping the offending agent. In rare instances, a sim-

Table 1

Withdraw likely offending medications early and seek further medical care if:

- Skin rash covers large amount of body
- Itch is absent; skin is painful
- Oral lesions
- Scleral injection
- Orthostasis, hemodynamically unstable

ple morbilliform eruption can progress into a life-threatening reaction such as a drug hypersensitivity syndrome or toxic epidermal necrolysis.

Several clinical features should alert the clinician to the presence of a more serious drug reaction including: confluent erythema, facial edema, skin pain, skin necrosis or blisters, mucous membrane erosions, fevers >40°C, lymphadenopathy, hypereosinophilia >1000/ $\mu$ L, lymphocytosis with atypical lymphocytes, and abnormal liver function tests. (Table 1)

### Morbilliform Eruption

Maculopapular rashes, as presented in our case, typically begin on the trunk in the first 7-10 days of starting the medication. As it progresses, it can change from red to brown and eventuate into a scaling or desquamating eruption. Biopsies of morbilliform drug eruptions do not help distinguish drug rashes from viral exanthems as they are histopathologically similar. If the offending medication cannot be discontinued, it is usually okay to treat through an uncomplicated morbilliform rash, while watching the patient closely for signs and symptoms of progression to a more serious rash. Classic medications responsible are penicillin, allopurinol, sulfonamides, anticonvulsants, diuretics, gold, NSAIDs and ampicillin given to a patient with mononucleosis. (Figure 1)

### Drug Related Eosinophilia and Systemic Symptoms (DRESS)

DRESS syndrome is estimated between 1 in 1,000 and 1 in 10,000 cases of patients treated with phenytoin, carbamazepine and phenobarbital and lamotrigine. These patients present with a severe exanthematous rash or exfoliative dermatitis 2-4 weeks after treatment begins with these medications. Multi-organ involvement distinguishes DRESS from more benign cutaneous drug eruptions. 30-50% of cases involve facial edema, fever, lymphadenopathy, hepatitis (51% of cases), interstitial nephritis, carditis, eosinophilia (>10%) and pleomorphic atypical lymphocytes. Prompt withdrawal of the offending agent and use of systemic corticosteroids are the mainstay of treatment. Because of the high rate of cross-reactivity between these aromatic anticonvulsants, the therapeutic benefit of this class of medications must be strongly reconsidered. (Figure 2)

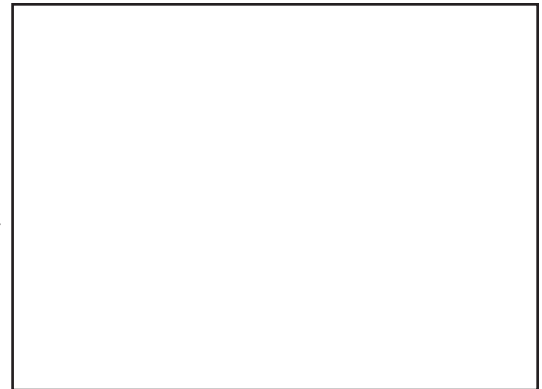


Figure 2: Hypersensitivity Reaction/DRESS  
Diffuse erythema with resultant desquamation.

### Stevens-Johnson Syndrome (SJS)

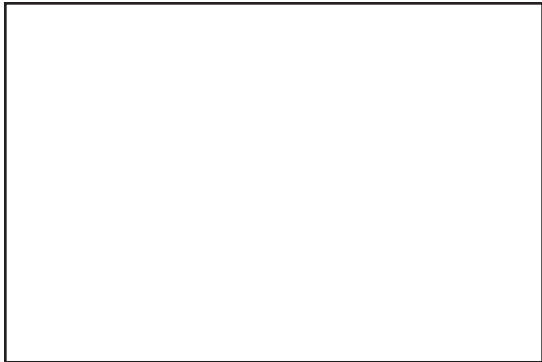
SJS is seen most commonly in 20-40 year olds given sulfonamides, phenytoin, allopurinol and NSAIDs. It is twice as common in men as it is in women. SJS and TEN (see below) are seen more commonly in patients with HIV/AIDS, HLA-B12 phenotypes, bone marrow transplant recipients and patients with underlying lupus. Five percent of cases can be fatal. A prodrome of fever and flu-like symptoms often precedes the eruption by 1-3

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## Medication Rashes

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days. Another early sign of involvement is extreme skin pain and burning. Small blisters atop dusky purpuric macules or atypical targetoid lesions occur within 1-3 weeks of initiation of drug treatment. Detachment of <10% of the skin's body surface area is often seen. The hallmark of SJS is involvement of greater than 2 mucosal surfaces including the mouth, nares, eyes, anorectal and genital areas.



*Figure 3: Stevens-Johnson Syndrome*  
Usually begins with mucositis and painful rash. Patients are ill. No medications proven helpful for these patients. Withdrawal of offending agent and supportive care are mainstay of treatment. Morbidity associated with super-infections, scarring and strictures.

(Figure 3)

### Toxic Epidermal Necrolysis (TEN)

Unlike SJS, TEN presents with sloughing of large sheets of necrotic epidermis in >30% of the skin surface area. Most cases involve fever, leukopenia and some respiratory tract and gastrointestinal tract involvement. Scarring and strictures can result in significant morbidity follow-

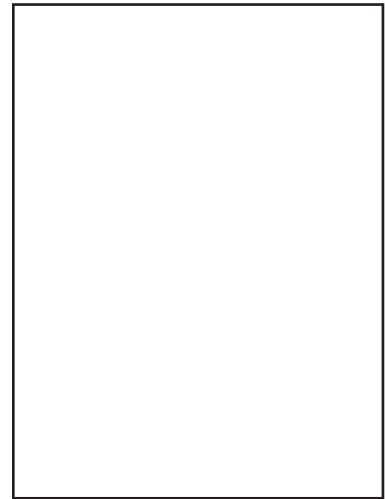
ing recovery. 30% of cases are fatal as a result of *S. aureus* and/or *Pseudomonas* sepsis.

Nomenclature becomes messy as many physicians view SJS and TEN on a continuum with TEN being more severe. Prompt recognition of the condition is crucial to ensure early withdrawal of the culprit medication and transfer to a burn ICU where the patient can receive appropriate and meticulous care. Most literature is AGAINST systemic corticosteroids as studies thus far have failed to demonstrate a reduction in mortality. IV-Ig has been used in the setting of SJS and TEN, but not uniformly helpful. (Figure 4)

*In our case, the amoxicillin was discontinued and the patient's morbilliform rash faded. A positive monospot test confirmed the diagnosis of EBV and symptomatic care was instituted.*

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*Figure 4: Toxic Epidermal Necrolysis*  
Sheets of necrotic epidermis sloughing off to reveal denuded skin. Typically >30% BSA detachment. Patients require management in Burn ICUs for meticulous skin care to prevent superinfections.

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# Female Juvenile Offenders

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abuse with multiple forms of subsequent mental illness.

A history of traumatic stress may lead to a definitive diagnosis of Post-Traumatic Stress Disorder (PTSD) or at least interfere with her ability to learn and function appropriately in society. We tend not to routinely screen girls for trauma including physical and sexual assault, illness and injury relating to abuse, or witnessing violence. These traumatic events can trigger behavioral health disorders. Female juvenile offenders are considerably more likely to have mental health conditions such as major depression and bipolar disorder. Often comorbidity exists with mental illness and substance abuse. It is difficult to know which disorder preceded the other and whether the substance use is for the purpose of self-medication. Failure to screen and identify these conditions for treatment may result in these problems becoming manifest or progressively intensifying during periods of incarceration. A female offender's history of victimization may make compliance with simple medical regimes an issue. Emotional lability may trigger somatic responses such as a herpes outbreak or gastrointestinal upset. They may demonstrate unacceptable behaviors toward medical staff even when presenting with a medical complaint. Sometimes these behaviors lead to the perception by staff that the offender is being manipulative or feigning illness. All staff should be trained to take all medical complaints seriously and respond appropriately.

Pregnancy represents an additional health issue, unique to female offenders, that adds to the challenge of health care while incarcerated. Adolescent pregnancies in general are high-risk, often requiring specialized obstetrical care. Often, young female offenders will present to the facility with limited or no prenatal care along with a multitude of high-risk behaviors including substance use, sexually transmitted infections and trauma histories. Management of these issues requires attention to adolescents' current needs (e.g., prenatal and postpartum care)

and future needs (e.g., avoiding repeat pregnancy, contraceptive information, development of parenting skills). These programs may be most effective if they address multiple aspects of the female adolescent's life, including potential motivations to purposefully conceive.

Providing health services to female juvenile offenders requires an interdisciplinary approach to staffing and program development. Of course, the inclusion of licensed health professionals is important in staffing a juvenile correctional facility, but correctional staff must also be well trained and receive educational programs relating to medical needs specific to the population served. Staffing patterns and ratios at female facilities should reflect the increased utilization of health services by female juvenile offenders. Medical staff should be aware of the health problems more likely to affect girls of color, who are disproportionately represented in the juvenile justice system. Cultural sensitivity on the part of medical, administrative and security staff is mandatory and should go beyond just creating cultural diversity through the staff hiring. It truly "takes a village" to serve female adolescent offenders.

The vast majority of female juvenile offenders have been underserved by their families, schools, and communities. Indeed, periods of incarceration may often comprise the only opportunity these adolescents have for the receipt of medical and dental care and preventive services. The detention and incarceration period also offers the opportunity to present disease prevention and health promotion messages to female offenders engaging in high-risk behaviors. Gender-specific prevention and treatment programs, tailored to the unique needs of female juvenile offenders, constitute an essential starting point for addressing these missed opportunities. Indeed, the Juvenile Justice and Delinquency Prevention Act specifies that programs should be established that meet the full range of health needs (e.g., mental health, substance abuse, physical and sexual assault) experienced by female

Despite the challenges observed, the opportunity exists, during the detention and incarceration period, to provide female offenders with effective programs.

offenders.

Despite the challenges observed, the opportunity exists, during the detention and incarceration period, to provide female offenders with effective programs including comprehensive health services, promoting physical and mental wellness, good nutrition, exercise, reproductive health, disease prevention, and stress management. Other health education programs should address smoking, alcohol and drug use, with resources for treatment programs available. Behavioral management programs are essential since most juvenile offenders have difficulties with anger management and nonviolent conflict resolution.

After all, these required increased resources are well spent on a female juvenile offender. They multiply exponentially in the potential benefit not only of the girl's individual health, but the opportunity to impact the lives of her children and break the family cycle of incarceration.

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