



# NewStart™

**The Mission of NewStart** is to provide a comprehensive network of treatment, education, and referral services for persons with alcohol or other substance use disorders, and others affected by the patient's substance use.

**MERITER**

VOLUME XXV FALL 2004

**DIRECTORY OF SERVICES**

**Addiction Medicine Consultation and Evaluation Services (AMCES)**

202 S. Park Street  
Madison, Wisconsin 53715  
(Ph) 608-267-6291  
(Fax) 608-267-6687

- Addiction Medicine Consultation and Evaluation
- Information and Referral
- Chemical Dependency Assessment
- Emergency Services
- Medical Inpatient Detoxification
- Nursing Evaluation
- Referral Services

**Outpatient Services and Adolescent Program**

1015 Gammon Lane  
Madison, Wisconsin 53719  
(Ph) 608-271-4144  
(Fax) 608-271-3457

- Assessment and Referral Service
- Adolescent Intensive Outpatient Program
- Adult Intensive Outpatient Program
  - Adult Day Treatment
  - Individual, Group, and Family Counseling for Chemical Dependency and for Family Members
- Chemical Awareness Programs

**Inpatient Services**

Unit 1 East  
202 S. Park Street  
Madison, Wisconsin 53715  
(Ph) 608-267-5330  
(Fax) 608-267-5334

- Adult Inpatient Rehabilitation Services

**IN THIS ISSUE...**

Directory of Services .....1  
NewStart's Scope of Treatment .....1  
September is Recovery Month! .....1  
Alcohol Screening Event Gets NewStart Touch.....2  
NewStart and Meriter Complete JCAHO Accreditation Survey .....2  
WisSAM Elects New Officers.....2  
Staff Profile.....2-3  
Passages .....3  
Fall Substance Abuse Conference .....3  
Advocacy Training for Physicians .....3  
Welcome New Employees .....3  
Marijuana: Health Effects.....4-5  
Guest Article:  
Carbohydrate Deficient Transferrin .....6-7  
Medical Director Active in Medical Organizations.....7  
NewStart Physicians Attend ASAM Medical-Scientific Conference .....7  
NewStart Adolescent Services Updated .....7  
ASAM 50<sup>th</sup> Anniversary Gala .....8

**NEWSTART'S SCOPE OF TREATMENT**

NewStart is the sole remaining hospital-based treatment program for alcohol and drug use disorders in South-Central Wisconsin. NewStart continues to offer a full continuum of services including outpatient, intensive outpatient, and full-day treatment; detoxification; and inpatient rehabilitation services. NewStart remains one of the few local providers which accepts fee-for-service Medical Assistance patients. NewStart counseling staff are all certified to provide addiction treatment services through the Wisconsin Certification Board, and all are Masters-prepared. In our current two-physician model of care, 24-hour coverage is available for emergency room and hospital consults and inpatient coverage while allowing for consistent availability of physician services in our outpatient clinic every week.

**SEPTEMBER IS RECOVERY MONTH!**

Recovery from alcohol and other drug dependencies happens every day, to thousands of persons nationwide. Long-lasting recovery is enjoyed by millions. While alcoholism and drug addiction can be progressive and even fatal illnesses (almost 150,000 premature deaths per year in the USA, excluding nicotine-dependence deaths), recovery happens—and this is noted and celebrated each year by the federal Center for Substance Abuse Treatment (<http://recoverymonth.gov>).

Wisconsin also recognizes Recovery Month. A major event each year is the Rally for Recovery on the grounds of the State Capitol, sponsored by the Wisconsin Association for Alcohol and Other Drug Abuse (WAAODA), the leading advocacy organization in our state for AODA issues. The third annual event is scheduled for 11:00 to 1:00 on Saturday, September 18. This year's event will not focus on legislative advocacy as in the past: it will simply be a celebration of the recoveries of thousands of Wisconsin citizens. Music and food will be provided. Recovering persons need to 'put a face on recovery' for the many people who don't understand that addiction can happen to anyone, in any community, in any family, and that being diagnosed with alcohol or other drug addiction is not a 'death sentence', but instead often leads, through recovery, to not only restoration of health but an enriched level of functioning and serenity for individuals and their loved ones. Recovering persons are encouraged to join the state effort of WAAODA called Alliance for Recovery Advocates (AFRA) and the national effort, "Faces and Voices of Recovery (FAVOR)." More information is available through [www.waaoda.org](http://www.waaoda.org) and [www.facesandvoicesofrecovery.org](http://www.facesandvoicesofrecovery.org).

## ALCOHOL SCREENING EVENT GETS NEWSTART TOUCH

Anyone who passed through Meriter Hospital's Atrium on April 8 had an excellent chance to learn more about alcohol and its effect on health, thanks to NewStart's participation in National Alcohol Screening Day activities.

NewStart manager Michael Gerst and other counselors were present throughout the day, providing information about alcohol and health, and offering free screenings to those who approached and requested one. Screening included the Alcohol Use Disorders Identification Tool, the same questionnaire used by the World Health Organization ([http://whqlibdoc.who.int/hq/2001/WHO\\_MSD\\_MSB\\_01.6a.pdf](http://whqlibdoc.who.int/hq/2001/WHO_MSD_MSB_01.6a.pdf)), and one easily used in any primary care medical setting.

Additionally, NewStart Medical Director Michael Miller, M.D., was featured speaker at a noon community education talk on "Alcohol and the Workplace" in Meriter's Community Health Education Center.

Alcohol Screening Day ([www.nationalalcoholcreeningday.org/alcohol.asp](http://www.nationalalcoholcreeningday.org/alcohol.asp)) is a program of screening for mental health, and conducted in collaboration with the National Institute on Alcohol Abuse and Alcoholism and the Substance Abuse and Mental Health Services Administration of the U.S. Department of Health and Human Services.

Meriter, Madison's community hospital, is dedicated to improving the health of our community, and participates in several screening events such as this every year. For a list of activities at Meriter's Community Health and Education Center, contact (608) 267-5900, or go to our Web site at [www.meriter.com](http://www.meriter.com) and click on the tab that reads "Register Online for Classes & Events."

## NEWSTART AND MERITER COMPLETE JCAHO ACCREDITATION SURVEY

The Joint Commission on Accreditation of Healthcare Organizations has accredited Meriter Hospital and all its services, including the NewStart Program, for another three years. A survey team from JCAHO visited Meriter for a full week in May, 2004, with a special surveyor spending a day with NewStart alone. This will be our last scheduled triennial on-site survey.

Our next survey will occur in approximately three years, but will be unannounced, which means that we must maintain continuous readiness at all times. In addition, organizations must complete and submit to the Joint Commission a Periodic Performance Review (PPR) and plan of action and identify appropriate measures of success at the 18-month point in the accreditation cycle. The hospital participates in a conference call with Joint Commission staff to discuss plans to address standards identified as being not in compliance.

Only recently did the federal government change from a 'certification' to an 'accreditation' process for licensing methadone facilities. In May, a separate one-day JCAHO survey for NewStart's 'Opioid Treatment Program' was conducted and NewStart received a three-year accreditation certificate for this small service.

Meriter/NewStart does not offer methadone maintenance services; Madison Health Services (608-242-0220), a for-profit free-standing clinic, is the only licensed provider of methadone maintenance treatment in the Dane County area. However, Meriter does maintain a license which allows it to use methadone as the treatment agent for selected in-patient cases of opioid detoxification. Several times a year, there is a case in which use of first-line opioid detox agents, such as clonidine or buprenorphine, is not feasible; in those cases, Meriter physicians have the ability to prescribe methadone for detox purposes—for inpatients only.

## WISSAM ELECTS NEW OFFICERS

The Wisconsin Society of Addiction Medicine (WisSAM), the state chapter of ASAM, held an organizational meeting in Delafield on August 12. President Lance Longo, M.D. ended his term by hosting an enthusiastic meeting. The new president of WisSAM is Michael Bohn, M.D., of Aurora Behavioral Health in Milwaukee. Elected Vice President is Randy Brown, M.D., of the UW Department of Family Medicine in Madison, and a NewStart Panel physician. Re-elected as other officers are Dean Whiteway, M.D. of Gunderson-Lutheran in LaCrosse, as Secretary, and Randy Kieser, M.D., of Madison Health Services and MetaStar, as Treasurer. Dr. Whiteway will continue as WisSAM Delegate to the Wisconsin Medical Society. Dr. Brown was named

chair of the new Membership Committee of WisSAM. Dr. Mike Miller, WisSAM's founding president, was named chair of the new Public Policy Committee of WisSAM.

## STAFF PROFILE: KATHRYN CURIO, RN, MSN, AMCES NURSE

I applied for graduate school in community mental health-psychiatric nursing in my early twenties, hoping to figure myself out. Well, THAT hasn't happened, but I've had some interesting experiences and hopefully have done some good because of that decision. I've been a staff nurse and a head nurse, an administrator, an assistant professor and a sexual assault nurse examiner; I've worked at PACT (a psychiatric patient community service provider which wraps its services around the client, thus allowing them to remain in the community), and in forensics (patients found not guilty of a felony because of mental illness or defect) at Mendota. I found academia "meeting mad and conference crazy" (Viktor Frankel). And inpatient forensic psychiatry I found to be like anaesthesiology: periods of boredom interspersed with terror.

Throughout my career I've worked with the addicted: dually diagnosed patients on the VA psych unit, in PACT, in forensics. I studied at the Summer School of Alcoholic Studies at Rutgers University. And now I am with New Start. Essential to my work with our patients, I think, is that I've had years of honing communication skills, experimenting with what does and does not work for me, playing with different techniques. In this work I have to connect quickly in the emergency room or on Meriter's nursing units, and I've found "mirroring," a neurolinguistic approach, helpful. For example, a detox patient is angry because they're not allowed off the medical floor for a cigarette. After stating what the limit is, I will reflect back the feeling (anger) in the patient's voice tone (loud) in the same speed (fast), perhaps using their own words. "You're mad because you're not allowed off the unit for a cigarette!" They may still leave AMA, but they will feel understood and that will make it easier for them to return to be treated for their illness when they are ready.

Attitude too is crucial in helping a patient. I do not see myself as separate, different from the patient. Our challenges

may be different, but we are all in this cosmic dance together. Martha Rogers, a nursing theoretician, describes each of us as a bundle of energy interacting with each others' bundles of energy—very Buddhist in that she views us all as interconnected. Newton and Descartes may see us each as individual machines, but some scientists are now studying our interconnectedness and creating new knowledge: nonlocality in quantum physics, electromagnetic cell communication, biophoton emission in the human body, biological effects of the laying on of hands, menstrual synchronization.

In nonwork time, I wife and I mother; I sail in the summer. I write (I had my first essay published in a literary journal in Spring, 2004); I volunteer (I was named Wisconsin NAMI [National Alliance for the Mentally Ill] Volunteer of the Year this past spring); I exercise, knit, cook, and I walk my Rottweiler at the dog park; I read and I study. And daily I pray to be worthy of my work, my life.

## PASSAGES

Two of NewStart's finest and longest-serving counselors, familiar to many of you, have begun the AARP phase of their lives.

**Steve Hansen** joined NewStart in 1984. After a career in business, his personal recovery led him into the counseling field, and he received a master's degree, worked at the former DePaul-Madison, then joined the staff of our then-brand-new NewStart Residential Center on Raymond Road. Steve helped hundreds of persons into recovery at the CBRF where he was one of the core staff including his colleagues David Back, Kim Rice, and Pat Sweeney. He moved with the CBRF staff to the inpatient/day treatment unit at Meriter Capitol's 2-West in 1996, and then went into semi-retirement in 2001, doing outpatient assessments, individual counseling, and coverage duty in our intensive outpatient programs. Steve's commitment to recovery was unflagging (and still is!), and his perspective as a recovering person himself was invaluable to his co-workers and his patients alike.

**Bonnie Allen** also pursued counseling as a second career. She received her Masters of Social Work from U.W. Madison in 1987, beginning at NewStart as an intern. She and her colleague at that time, Sherri Martin, served as the inpatient counselors

for NewStart's former Medical Management Unit at Meriter Capitol's 5-West for five years, and her last position at NewStart was back at the eventual successor to that service, our Adult Inpatient Program and Dual Diagnosis Program on the new adult psychiatry unit at Meriter-Park's 1-East. In between, Bonnie has touched the lives of countless patients and families, serving persons of all ages: as an inpatient counselor at the CBRF following Pat Sweeney, as a core member of the NewStart Adolescent Program doing individual and family intakes and counseling plus the Intensive Outpatient Program, and as an individual counselor at our Gammon Lane clinic (among the client groups she enjoyed were senior citizens). Bonnie will remain an on-call NewStart counselor.

The number of people who appreciatively remember Steve and Bonnie as no-nonsense counselors who would 'tell it like it is' while clearly respecting and having warm fondness for them and the challenges of their recoveries, is countless. Their colleagues and supervisors at NewStart will miss them as well, and look forward to their tales of retirement.

Also, NewStart Secretary Melissa Carpenter has moved on since our last Newsletter, taking a nice promotion within Meriter Hospital.

Passages for **Jennifer Schoff**: The BIG news is that Jen and her husband are 'expecting.' The OTHER news is that Jen, who has been a great member of the NewStart team, filling in in a variety of roles as a 0.0 FTE counselor in the adolescent and adult programs, has accepted a position as a permanent counselor on our staff. Her primary responsibilities will be on the Adult Inpatient Program on 1-East, filling the role of Bonnie Allen. Like Bonnie, Jen will job-share the 7-day-per-week counselor coverage on 1-East with counselor Peter Laubach.

## STATE CONFERENCE: OCTOBER 13-15

The Wisconsin Bureau of Substance Abuse Services (now the Bureau of Mental Health and Substance Abuse Services) will hold its 10th Annual Fall Conference this year at Kalahari Resort in Wisconsin Dells, October 13-15, 2004. This outstanding educational opportunity is recommended for any physician, nurse, social worker, psychologist, or counselor interested in learning

more about addiction treatment, and each year the Bureau reaches out to others (including educators, public health professionals, child welfare and criminal justice professionals, and others) through its annual conference.

## ADVOCACY TRAINING FOR PHYSICIANS

At this year's Bureau Conference, physicians from around the state interested in learning more about how to advocate for patients and for improved treatment, will get together for a 'primer' course to be facilitated by NewStart's Medical Director, Dr. Mike Miller, former Chair of the Public Policy Committee of ASAM and now chair of the new Public Policy Committee of WisSAM. The political process has significant influence on what does or does not happen in both public sector and private sector funding streams and delivery systems for addiction care. Parity for mental health and AODA benefits is but one legislative topic of importance to addiction professionals. The TIP (Treatment Instead of Prison) bill by Sen. Roessler and the medical marijuana bill to be introduced by Rep. Underheim are other examples of bills that could affect patients and families. Thursday evening, October 14 has been set for this meeting of the WisSAM Public Policy Committee.

## WELCOME NEW EMPLOYEES

**Jane Edwards** has accepted a position as Secretary at the NewStart Outpatient Clinic. She started September 16 and we welcome her to our staff on Gammon Lane.

**Jennifer Weiss** is a student at UW-Madison and she will be working with the support staff at the Gammon Lane this year as a work-study student. We are pleased to have her, and the support staff is looking forward to the help she will provide!

**Bobbie-Jo Nichols** "BJ" is a second-year student in the Masters of Science in Social Work program at the UW-Madison. She has accepted a field placement at NewStart as a Social Work Intern, and will be working with our Adolescent Intensive Outpatient Program.

**September is  
Recovery Month**

# Marijuana: Addiction and Other Issues

**Michael M. Miller, M.D.**

*This is the first in a series of articles by NewStart's Medical Director, the second of which will appear in the next issue of the NewStart Newsletter, and is entitled: "Marijuana: Health Effects." The final article will be entitled "Marijuana: Health Benefits?"*

Marijuana has an interesting history in the United States. Though used within minority groups (e.g., urban Blacks, including musicians, artists, and the general population) in the first half of the 20th Century, it wasn't until majority youth (White college students, then high schoolers, from suburban and even rural areas) began smoking 'pot' in the 1960's and after, that marijuana gained the attention of medical researchers, parents, government officials, and the media. By 1979, more than 60 percent of 12th-graders had tried marijuana at least once in their lives. From this peak, the percentage of 12th-graders who had ever used marijuana decreased for more than a decade, dropping to a low of 33 percent in 1992. However, by 1993, first-time marijuana use by 12th-graders was again on the upswing, reaching 50 percent by 1997. Marijuana is the America's most commonly used illegal drug—more than 1/3 of the U.S. population ages 12 and older have tried marijuana at least once. According to the 2001 Monitoring the Future Study, an annual survey of drug use among the nation's middle- and high-school students, 22 percent of 12th graders—kids who had not dropped out of school—were current users.

Marijuana has always been a 'politicized' subject—as are all 'controlled substances' that are regulated by the government. It is common knowledge that marijuana is a plant that grows wild in many parts of the country, but to possess it or distribute is a crime. There is a current public debate about decriminalization of drugs, especially marijuana. A frequently-used argument in such debates is that marijuana is relatively harmless, so prohibition of its use is illogical. One thing which

distinguishes marijuana from other illegal drugs is that there are significant advocacy groups whose sole purpose is to legalize this substance: cocaine and heroin never had their version of NORML (the National Organization for the Reform of Marijuana Laws). Some of the appeal of such advocacy positions has come via their reaction to government scare tactics used to discourage marijuana use (in fact, the film 'Tell Your



Children' from 1938, later renamed 'Reefer Madness', was actually purchased by the founder of NORML and shown to college kids as a mockery of propagandized positions opposing marijuana smoking). Because marijuana use has been so widespread in the cohort of Americans who are now ages 35-55, and because it was the experience of the vast majority that one can smoke marijuana, even frequently, and not suffer long-lasting harm, it is counter-intuitive even for parents and civic leaders to believe that marijuana can be harmful.

Marijuana was originally placed in the same drug class as hallucinogens by medical researchers, since heavy use is able to produce some of the same effects as LSD and peyote. Researchers have been studying the behavioral effects of THC, the active chemical in marijuana, for decades, as well as the health effects on various organ systems of chronic smoking of marijuana.

More recently, pharmacologists have been studying potential health benefits of THC. With this has come a movement to legalize marijuana for use by 'patients' to relieve various medical conditions or symptoms.

Key issues about THC and marijuana are as follows:

1. There are indeed several documented health benefits to pharmaceutical THC, taken orally by patients, in capsule form, under a physician's prescription.
2. Smoked marijuana is not identical to THC, and health benefits from smoking marijuana leaf have not been demonstrated to date in clinical trials.
3. For any agent to be approved as a 'medicine', it must undergo review (e.g., by the Food and Drug Administration) to confirm that it is both safe and effective—and though it is fair to assume that since the active ingredient (THC) is effective in relieving some symptoms of illness, then the biological product that contains that ingredient (marijuana leaf) will also be effective, the issue of safety is of critical importance. How safe is it to smoke marijuana leaf? What toxicities can occur?
4. To what extent is marijuana truly 'addictive'? Does the syndrome of chemical dependency develop in some persons who smoke marijuana regularly? And would this occur in patients using marijuana leaf for 'treatment' of an approved medical condition or symptom?

'The Addiction Question' is one of the most intriguing issues. The majority of marijuana users do not develop addiction: they do not experience 'loss of control', they use when they choose to, in the amounts they choose to, getting the results—in general—that they intend to get. Parents of today certainly recall many acquaintances from college in the 1960's or '70's, or from high school in the 1980's or '90's, who smoked marijuana regularly, without long-term negative consequences. Similarly, the vast majority of alcohol users do not develop alcoholism: only 10 percent of regular drinkers develop 'loss of control' and other features of addiction. Even

regular cocaine use can proceed in a phase of a person's life and then fade away without life-long addiction taking hold of the user. But just because addiction doesn't occur to all users, or even most users, doesn't mean that addiction doesn't happen—to any user.

Addiction to marijuana has the same features as addiction to other substances: after a period of regular but controlled use, the person gradually develops an inability to consistently use within the limits that he or she has set for themselves. Use won't just result in 'fun' or 'getting high'; it will lead to problems, with job performance, school performance, interpersonal relationships, or even health. Others will comment that there is a change in the user—and the user will at first deny or rebut such concerns. Use will continue despite the problems caused by use. Larger and larger amounts of the substance are used, consuming money that could go to other purposes, and the person may spend more and more of the day or the week either using, or thinking about using, or conniving to get more supplies of the drug, or planning on how to connive. The substance use takes on a central place in the person's life, with other activities—including major life responsibilities—falling by the wayside. Despite the pleas of friends or family to examine one's behavior, or to change the behavior, substance use continues on, causing distress to others before the addict experiences the distress him/herself. This is the cycle of addiction, and it does happen to many pot smokers. Eventually, the person may seek help, or at least agree to a professional assessment at the behest of family, school or employer.

The fact is that for persons under age 18, the Number One substance use disorder for which persons seek the help of NewStart is a marijuana problem. Cannabis Abuse is just as common as Cannabis Dependence among patients in the NewStart Adolescent Program. 'Dependence' is a term equivalent to 'Addiction' in this context, and involves preoccupation, inability to consistently control the amounts used, and unsuccessful efforts to cut down or persistently eliminate use, as described in earlier paragraphs. 'Abuse', as defined by the DSM Criteria, involves recurrent use despite legal, occupational,

or academic problems (e.g., recurrent use after an arrest for impaired driving or a work suspension because of a positive urine drug test), or recurrent use after complaints from others (parents, school personnel) that they have observed an impairment of functioning associated with persistent marijuana use. This relatively less severe syndrome, 'cannabis abuse', certainly creates distress for loved ones (family) and interested parties (teachers, social workers, co-workers or supervisors), and by definition involves an observable downturn in the user's performance of some important life task. NewStart offers individual and group treatment for persons with Cannabis Abuse, including a Chemical Awareness Program for adolescents which has a health-education focus. But, when indicated, we also refer youth with a diagnosis of Cannabis Abuse into our Intensive Outpatient Program.



How do some users of marijuana develop impairment in their functioning? This will be the focus of the article in our next issue, entitled "Marijuana: Health Effects."

### **Tolerance and Withdrawal**

Two decades ago, addiction medicine doctors and counselors believed that the difference between the syndrome of 'substance abuse' and the syndrome of 'substance dependence' was whether or not tolerance and withdrawal were present.

Now it is known, as reflected in the DSM-IV criteria, that tolerance or withdrawal may occur in individuals with 'dependence' or 'addiction', but that the condition of addiction can exist without there being any sign or tolerance or withdrawal. Still, a common question of interest is, does marijuana produce 'physical dependence', that is, tolerance or withdrawal.

By the 21st Century, the answers to these questions are clear. Tolerance does develop to THC, and the neurochemical details of how this occurs, and to which cannabinoid receptors, is well known. Tolerance is due to cannabinoid receptors becoming less sensitive to THC's effects over time. Tolerance to marijuana is not due to changes in THC metabolism over time. Interestingly, there is some cross-tolerance between cannabinoids and opioids (see the future article on 'Health Benefits?'). Moreover, withdrawal definitely occurs in some users. The effects are generally the opposite of the effects of intoxication: anxiety and insomnia instead of relaxation, loss of appetite rather than hunger, excess salivation instead of dry mouth, decreased pulse, irritability, and even tremor. Much has been written on the relationship between anger and marijuana use. It is likely that in some individuals, THC decreases the experience and the expression of anger, and that after cessation of marijuana use, the person can not only be irritable, but can have an increase in mood swings and anger and even an increase in aggressive behavior.

### **A Final Comment**

Even though marijuana use has been common in many segments of the American population for two generations, and many adults and teenagers know marijuana users who have not developed addiction to even prolonged use, the potential for the development of addiction is almost certainly greater today than in the 1960's or 70's, because the marijuana of today is different. It's not just that it's much more expensive; it's that the THC content of today's 'pot' is several times higher than even strong 'weed' from the original Flower Power era. This makes it more rewarding, but also more likely to induce tolerance and true addiction.

## Guest Article:

# Carbohydrate Deficient Transferrin: an emerging tool to identify and treat individuals with alcohol use disorders

Pamela Bean, Ph.D., MBA

## What is CDT?

CDT stands for 'carbohydrate-deficient transferrin.' Transferrin is a glycoprotein that transports iron in the bloodstream to cells where it is needed. For reasons that are not yet fully understood, drinking in the range of four or five drinks a day for at least two weeks results in this glycoprotein losing its carbohydrate content: the transferrin is thus referred to as being 'carbohydrate-deficient.' If the person who has been drinking like this for two or more weeks stops drinking, CDT returns to within the normal range in three to four weeks. Interestingly, CDT has also shown a "sensitization effect." This refers to the fact that levels of CDT often rise dramatically and rapidly in patients who have been abstaining from alcohol for a while and then return to drinking, even if in fairly low amounts. This apparently unique characteristic of CDT makes it an especially useful early indicator of relapse in patients who are in alcohol treatment.

Although there are several other useful biological markers of heavy drinking available – such as the liver enzyme gamma glutamyl transferase (GGT) and the mean corpuscular volume (MCV) of the red blood cell – the unique advantage of CDT is that very few conditions, other than alcohol consumption, cause CDT to rise. Other biological markers tend to reflect dysfunction in body organs that, while often due to heavy drinking, may also be caused by other common physical problems. Furthermore, whereas testing for blood or urine alcohol concentration measures very recent alcohol consumption, the CDT test measures sustained alcohol use, and CDT values remain elevated for several days after drinking has stopped.

The standard way of measuring CDT is to measure it as a percentage of circulating transferrin that is carbohydrate-deficient. In 2001, the FDA approved a single kit that clinical laboratories can use to detect transferrin levels and calculate the percentage of circulating transferrin which is carbohydrate-deficient. The cutoff value for the %CDT test is 2.6% and is the same for males and females.

## Why is CDT particularly useful?

There are many good self-reporting questionnaires to aid in identifying people with drinking problems – such as the CAGE, the Michigan Alcoholism Screening Test (MAST), and the Alcohol Use Disorders Identification Test (AUDIT) – but some individuals who drink at risky levels or are dependent on alcohol may not be able or willing to admit their level of alcohol intake or the problems that alcohol is causing them. As an objective biological measure, CDT can assist in identifying these individuals, thus helping them enter the alcohol treatment services they need. In addition, measuring CDT values over time is helpful to give feedback to patients with the aim of enhancing their motivation for change. CDT performs very well as an indicator of relapse in patients who are receiving abstinence-oriented alcohol treatment.

## How can CDT results be used to motivate change in patients with alcohol problems?

Providing feedback to patients has been recognized as a key element in enhancing motivation of patients to modify their drinking behavior. The treatment manual for Motivational Enhancement Therapy in Project MATCH provides recommendations for doing this. One of the earliest studies of brief intervention illustrated the benefit of using feedback based on a biochemical marker. During a five year follow-up, patients who had had high levels on GGT and who had been given feedback on subsequent GGT levels revealed significant reductions in alcohol consumption, sick days, hospitalization rates and mortality. Since GGT levels can also be elevated from non-alcohol related conditions, the use of a biomarker such as CDT that is specific to alcohol consumption, is expected to provide even better results.

In giving patients feedback on their levels of CDT, the clinician should present the information objectively, yet empathetically. It is also important that the information be given in a manner that is fully understandable and compelling to the patient. Use of figures and graphs showing where the patient's CDT test results fall (relative to the laboratory reference range of the test, or in comparison with the general population) should assist in this. Showing the patient a plot of his or her test values during the course of treatment should also reinforce change efforts or, if the tests reveal a pattern of rising scores, elicit discussion of a relapse event and its precipitants.

## How frequently should CDT-testing be performed during treatment and continuing care?

CDT testing has been used for years by the life insurance industry in the United States, but is just now becoming used in clinical settings. In Europe, it is used in clinical settings, but even more so by the legal system, to monitor abstinence in persons convicted of driving while intoxicated. In treatment settings, CDT testing should be done more frequently early in the recovery process, the period of highest risk for relapse. As the patient's recovery stabilizes, testing frequency can diminish. One recommended strategy is to test patients every two weeks for the first three months in recovery and then reduce testing to once a month during the later months of follow-up and continuing care if the patient otherwise appears to be doing well.

## How should CDT results be interpreted as indicators of likely relapse?

Two strategies have been used for identifying relapse based on a review of CDT results. The first involves simply looking at ongoing CDT test values to see if they exceed the cutoff value of the test (i.e., 2.6%CDT). The second approach, which is becoming more popular and is probably preferable, involves examining the *pattern* of test scores for each patient across time. If the current value exceeds by 30% or more the lowest value observed for that patient up to that point in time, then the patient is assumed to have relapsed.

(Continued on page 7)

## Carbohydrate Deficient Transferrin

(Continued from page 6)

### How can CDT be used in the workplace?

A recent study (U. Hermansson et al, Occupational Medicine [London]. 53(8):518-26. 2003) in a large workplace setting describes the use of CDT to screen day workers and shift workers for high-risk alcohol consumption. In a similar study by the same group, CDT was used to examine absenteeism due to sickness over a period of 36 months; absenteeism data was obtained through the company's payroll system. In both studies, employees who attended a regular routine health screening were offered voluntary screening with the AUDIT and CDT. Almost 1000 employees participated in this study and 20% screened positive by either the AUDIT or CDT. Accordingly, the studies concluded that workplaces have a good reason for using a more systematic approach to alcohol screening.

### How can I use and learn more about the CDT test?

Meriter's General Medical Laboratories is now performing CDT tests for outpatients as well as inpatients. Physicians can order CDT tests for outpatients as well as inpatients from Meriter's GML. GML sends these tests to an outside laboratory. In 2005, GML hopes to be performing CDT tests in-house. For more detailed information, see the review article by N. Montalto and P. Bean, "Use of contemporary biomarkers in the detection of chronic alcohol use," in the international journal Medical Science Monitor [, Vol. 9(12):RA285-90, 2003] or contact Dr. Bean for reprints (Phone: 608-829-1973; E-mail: PamBean@charter.net).

*Dr. Bean is Executive Director for Research at Rogers Memorial Hospital in Oconomowoc, WI. She has a Ph.D. in Experimental Pathology from the University of Southern California and has received many awards including the Young Investigator Award from the American Society of Addiction Medicine in 1997. She serves as a consultant for several companies developing new biomarkers to detect alcohol consumption including Axis Shield in Dundee, Scotland, Alcohol Detection Services in Big Bend, Wisconsin and U.S. Drug Testing Laboratories in Des Plaines, IL.*

## MEDICAL DIRECTOR ACTIVE IN MEDICAL ORGANIZATIONS

NewStart Medical Director Michael M. Miller, MD, served as a Delegate from the Dane County Medical Society to the Wisconsin Medical Society House of Delegates at the WMS Annual Meeting April 2-3 in Madison. At that meeting, Dr. Miller was re-elected to serve on the WMS Nominating Committee from District 2, and was re-elected to represent the WMS as an Alternate Delegate to the AMA House of Delegates. He has been a member of the WMS Delegation to the AMA since 2001.

Dr. Miller has been nominated by the Nominating and Awards Committee of ASAM to be candidate for President-Elect of the American Society of Addiction Medicine for 2005-07. He previously served as Secretary of ASAM, and chaired ASAM's Public Policy Committee from 1999 until April, 2004.

The Wisconsin Society of Addiction Medicine also recently named Dr. Miller chair of its new Public Policy Committee.

## NEWSTART PHYSICIANS ATTEND ASAM MEDICAL-SCIENTIFIC CONFERENCE

All three of NewStart's physicians participated in ASAM's annual meeting in Washington, DC, at which ASAM celebrated its 50th Anniversary with a major gala (see pages 4-5). At the gala, Randall T. Brown, MD, was honored for presenting the Abstract of the Year for the Medical-Scientific Conference. A new feature for this year's 35th Annual Medical-Scientific Conference was a Plenary Session focusing on Public Policy. Michael M. Miller, MD, gave a presentation at the plenary on how ASAM develops and makes use of its Public Policy Statements (<http://www.asam.org/ppol/Table%20of%20Contents.htm>).

Drs. Miller and Brown also attended a workshop on buprenorphine treatment in office-based settings, for which Dr. Miller served as a panelist.

## NEWSTART ADOLESCENT SERVICES UPDATED

Times are changing, and so has the NewStart Adolescent Program. The NewStart Adolescent staff has been working on changes to update and improve care. New educational materials have been added, to include updated videos, worksheets, games, art activities and more hands on experiences. These changes have begun and the adolescents and their parents are enjoying and benefiting from these new therapeutic experiences.

One notable change is the hours that Adolescents and their Parents meet for the Adolescent Intensive Outpatient Program. The Adolescents now participate in their therapeutic groups on Tuesdays and Thursdays from 5:00 to 8:00 pm. Adolescents and their Parents participate together on Mondays from 5:00 to 8:00 pm. This change has been made to have more flexibility when developing a therapeutic plan for each family. This allows for more adolescent individual sessions and individualized family therapy.

Also, a Phase System has been developed to allow the adolescent to progress through treatment at their own individualized pace. The adolescent is encouraged by the Phase System to take more responsibility for his or her treatment. They progress by completing goals to move into a less intensive level of care. Subsequent Phases of their therapy with the intensive treatment program may include individuals, support groups and/or family sessions to be scheduled.

We've also involved additional staff members in our Adolescent Program. Joining Lori Brattset, Jeanne Kinney and Nancy Millard in our Adolescent Program are counselors Christopher Henry and Patrick Nichols.

The NewStart Adolescent Team is pleased with how these changes have enhanced the treatment experiences of the Adolescents and their families. The Adolescents have taken more responsibility for their own progress. Their progress determines the length of time it takes for them to complete the Phases of Intensive Outpatient Treatment.

If you have any questions about the Adolescent Services at NewStart, please feel free to contact any of the Adolescent Team at 271-4144.



**NewStart**  
**Meriter Hospital**  
 202 S. Park St.  
 Madison, WI 53715  
 (608) 267-6291  
 www.meriter.com

Nonprofit Org.  
 U.S. Postage  
 PAID  
 Madison, WI  
 Permit No. 1181

## ASAM 50<sup>TH</sup> ANNIVERSARY GALA

The American Society of Addiction Medicine held a 50th Anniversary Gala to celebrate ASAM's first half-century. The Gala took place in Washington, D.C., April 24, 2004, as part of ASAM's 35th Annual Medical-Scientific Conference. ASAM is the largest national medical specialty society devoted to addiction treatment, education, research, and advocacy. NewStart's Medical Director, Michael M. Miller, M.D., FASAM, attended the celebration.



*Dr. Miller, outgoing Chair of ASAM's Public Policy Committee, with Dr. Bob Dupont (the first Director of the National Institute of Drug Abuse – NIDA – and the second Director of the White House Office of National Drug Control Policy (ONDCP – the 'Drug Czar's Office') and Dr. Mark Kraus, MD, FASAM of Connecticut, incoming Chair of the Public Policy Committee.*



*Anne Geller, MD, FASAM, President of ASAM 1993-95. Stu Gitlow, MD, ASAM's Delegate to the AMA. Gail Jara, Executive Director of the California Society of Addiction Medicine 1973-1999. Michael Miller, MD, FASAM, Past Delegate to the AMA from ASAM.*



*James F. Callahan, D.P.A., Executive Vice President/CEO of ASAM from 1989-2002, and David Mee-Lee, MD, FASAM, creator of the ASAM Patient Placement Criteria, enjoy the evening.*

# NewStart™