



### **FASD Center News**

- Update on National Association of FASD State Coordinators

### **FASD-Related Literature**

- Burden of prenatal exposure to alcohol: Revised measurement of cost
- Costs of fetal alcohol spectrum disorder in Alberta, Canada
- Fetal alcohol spectrum disorder
- Potential role of the placenta in fetal alcohol spectrum disorder
- Fetal alcohol syndrome among grade 1 school children in Northern Cape Province: Prevalence and risk factors
- Prenatal alcohol exposure increases vulnerability to stress and anxiety-like disorders in adulthood
- Pregnant girl, 14, accused of drunk driving
- Pregnancy and alcohol: Why they don't mix
- Violence reports surge after grog ban in Fitzroy Crossing
- Helping others quit starts with setting an example
- How alcohol harms developing brains
- Don't call it ADHD
- Special Report: Tragic birthright

### **FASD Conferences**

- National Conference on Juvenile Justice of National Council of Juvenile and Family Court Judges
- FASD: INTO ACTION: A Three-Day Session on Fetal Alcohol Spectrum Disorders
- 25th Annual Pacific Rim International Conference on Disabilities

### **Funding Opportunities**

- Interventions for Youth and Young Adults with Fetal Alcohol Spectrum Disorders  
Applications for FY 2009 Grants to Expand Substance Abuse Treatment Capacity

### **FASD Web Site**

- Fetal Alcohol Family Association of Manitoba

## **FASD CENTER NEWS**

### **Update on National Association of FASD State Coordinators**

To champion State-based efforts, the Fetal Alcohol Spectrum Disorder (FASD) Center for Excellence supports the National Association of FASD State Coordinators (NAFSC), which it helped to establish in 2003. Of the more than 40 States and jurisdictions with FASD-related staff, 20 have designated an FASD coordinator who participates in NAFSC. Association activities focus on capacity building and disseminating information on successful initiatives among the States. The group meets quarterly, and at the meeting on February 17, 2009, members provided updates

on prevention, intervention, and legislative activities related to FASD in their States. Activities reported include the following:

- Providing training sessions on FASD at various locations, including conferences; a clinical practice; an Air Force base; a nursing college; a department of developmental disabilities and a department of public health; a large school district (presentation to teachers and educators); middle schools, high schools, and colleges (presentation to students with use of a peer-education model); and a State university (presentation to professionals)
- Convening statewide task forces to advance the FASD agendas of the States, with task force activity noted in Hawaii, Michigan, Mississippi, New York, Pennsylvania, South Dakota, and Texas
- Overseeing projects to build capacity for evaluation; to institute demonstration screening projects; to assist persons with hearing-related disabilities, through SAMHSA's program for screening, brief intervention, and referral to treatment; to reduce alcohol abuse and increase effective use of contraception by women who are receiving substance abuse treatment and are pregnant or have a child younger than 6 months old; and to provide screening, diagnosis, treatment, and referral for persons with fetal alcohol syndrome
- Working to pass laws to increase funding for services, to require signage warning pregnant women about the risk of FASD, to collect data on substance use, and to require FASD training for State agency personnel

Many States reported staff and program cuts due to statewide budget deficits.

In addition to the work each coordinator oversees at the State level, NAFSC members cooperate on special projects. These efforts include (1) mentoring State representatives on the processes of designating a coordinator and establishing State FASD task forces and (2) working to establish requirements for labels warning about FASD on kits for ovulation predictors and pregnancy tests.

## FASD-RELATED LITERATURE

### **Burden of prenatal exposure to alcohol: Revised measurement of cost**

*The Canadian Journal of Clinical Pharmacology*. 2009 Winter; 16(1):e91-102. Epub Jan 23, 2009  
Stade B, Ali A, Bennett D, Campbell D, Johnston M, Lens C, Tran S, Koren G

In Canada, incidence of fetal alcohol spectrum disorder (FASD) is estimated at 1 in 100 live births, and the leading cause of developmental and cognitive disabilities is FASD. Only one study has examined the cost of FASD in Canada. That study did not include prospective data and costs for infants younger than age 1 year, for adults older than age 21 years, or for persons in institutions. Objectives of this more recent study were to calculate revised estimate of direct and indirect costs of services to patients with FASD. Study results demonstrated that the cost burden of FASD in Canada was profound. Inclusion of costs for infants who were 1 year old or younger, for adults older than 21 years, and for persons residing in institutions provided a more accurate estimate of the total costs of FASD. Implications for practice, policy, and research are discussed in the study.

### **Costs of fetal alcohol spectrum disorder in Alberta, Canada**

*The Canadian Journal of Clinical Pharmacology*. 2009 Winter; 16(1):e80-90. Epub Jan 16, 2009  
Thanh NX, Jonsson E

Although many programs targeting fetal alcohol spectrum disorder (FASD) are implemented, the province of Alberta is still lacking information on its costs for FASD. The purpose of this study was to estimate costs for these disorders in Alberta by analyses of data from the United State and

Canada, including Alberta. For Alberta, the annual long-term cost for FASD rose from \$130 to \$400 million each year, the annual short-term cost rose from \$48 to \$143 million, and the daily cost rose from \$105,000 to \$316,000. According to the researchers, these cost increases suggest the need for a provincial strategy to prevent FASD. The costs of FASD can be used to evaluate the benefits of prevention programs to society.

### **Fetal Alcohol Spectrum Disorder**

*Journal of the Indian Academy of Pediatrics*. Dec 7, 2008; 45(12):977-983  
Nayak RB, Murthy P.

Current prevalence, clinical features, pathogenesis, and differential diagnosis of fetal alcohol spectrum disorder (FASD) are the focus of this review. Discussion also highlights the need for physicians to be aware of this condition. The investigators searched the Internet for articles by using the terms fetal alcohol syndrome, fetal alcohol spectrum disorders, and women and alcohol. This review highlights several established findings. Alcohol consumption during pregnancy can lead to a spectrum of deficits in the fetus. Although physical features are essential to the diagnosis of fetal alcohol syndrome (FAS), in FASD, neurocognitive and behavioral deficits can be present in the absence of physical features. Because there is no known safe amount of alcohol consumption during pregnancy, abstinence from alcohol for women who are pregnant or planning a pregnancy must be strongly advised.

### **Potential role of the placenta in fetal alcohol spectrum disorder**

*Pediatric Drugs, Official Journal of the International Alliance for Better Medicines for Children*. 2009; 11(1):26-9  
Gareri J, Brien J, Reynolds J, Koren G

This study explores the role of the placenta as a potential source of variability in mediating exposure of the fetus to alcohol consumed by the mother. The researchers used data on analyses to detect and measure fatty acid ethyl esters (FAEE), which are nonoxidative metabolites of ethanol in meconium. Meconium is a unique toxicological matrix that accumulates in the bowel of the developing fetus. The presence of this substance provides an opportunity to quantify fetal exposure to alcohol through measurement of FAEE. Data used in this study were obtained from a previous clinical case report on human dizygotic twins and a previous series of studies of guinea pig littermates. Mediators of susceptibility to alcohol-related toxic effects on the prenatal environment are relatively unknown. The placenta has been proposed as a potential source of variability in the fetal environment, primarily through its significant metabolic capabilities. From this study, the researchers concluded that identical levels of maternal exposure to ethanol produced differing levels of fetal exposure in a dizygotic human twin pair and a series of guinea pig littermates, as evidenced by analysis of FAEE in meconium. These data indicate that the placenta may have an unappreciated role in mediating ethanol-induced injury to the fetus.

### **Fetal alcohol syndrome among grade 1 school children in Northern Cape Province: Prevalence and risk factors**

*South African Medical Journal*. Nov 2008; 98(11):877-82.  
Urban M, Chersich MF, Fourie LA, Chetty C, Olivier L, Viljoen D.

Objectives in this study were to describe the prevalence, characteristics, and risk factors for fetal alcohol syndrome (FAS) and partial FAS among school children in grade 1 in Northern Cape Province, South Africa. The investigators found that a high proportion of pupils (nearly 1 in 10) had FAS or partial FAS. Prevalence in the town of De Aar was the highest described to date in South Africa. FAS and partial FAS may contribute to the extremely high rate of growth

retardation in South Africa as a whole, and they are a major cause of learning disability. These epidemiologic features are important in the design of preventive interventions.

### **Prenatal alcohol exposure increases vulnerability to stress and anxiety-like disorders in adulthood**

*Annals of the New York Academy of Sciences*. November 2008; 1144:154-75

Hellemans KG, Verma P, Yoon E, Yu W, Weinberg J

Children and adults with fetal alcohol spectrum disorders (FASD) have higher rates of depression and anxiety disorders than those in control populations. The researchers examined effects of prenatal exposure to alcohol on anxiety, locomotor activity, and hormonal reactivity in male and female rats tested on the elevated plus maze, a task commonly used to assess anxiety-like behaviors in rodents. Findings suggest that fetal reprogramming of hypothalamic-pituitary-adrenal (HPA) and hypothalamic-pituitary-gonadal (HPG) systems by alcohol may at least partly underlie enhanced susceptibility of adults to depression and anxiety-like disorders as a result of prenatal exposure to alcohol consumed by their mothers.

### **Pregnant girl, 14, accused of drunk driving**

*New Zealand Herald*, January 29, 2009

Police were shocked to find that a driver pulled over for driving erratically was only 14 years old, 4 months pregnant, and allegedly had blood alcohol levels nearly 6 times the legal limit. The girl was reportedly referred to Youth Aid. An obstetrician at Whangarei Hospital was quoted as saying the case raised fears about possible alcohol harm to the unborn baby and that high levels of alcohol intake during pregnancy led to a distinct risk of damage to the baby's development. "And it doesn't matter if she's 14 or 44, the possibility for harm is the same," he said. "Nobody knows how much or how little alcohol is safe during pregnancy, so the general recommendation is to avoid it altogether."

[http://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=10554102](http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10554102)

### **Pregnancy and Alcohol: Why They Don't Mix**

*News Health Guru*, January 26, 2009

"No safe time, no safe amount." This is the battle cry of the Centers for Disease Control and Prevention and other organizations involved in emphasizing that avoiding alcohol during pregnancy is far better than risking the consequences, because it is unknown whether any amount of alcohol consumed during pregnancy is safe. The confirmed finding is that alcohol, like many other drugs, passes through the placenta through the umbilical cord and into the developing fetus. Alcohol is a "teratogen" – a drug or other substance capable of interfering with the development of a fetus, thus causing birth defects.

[http://news.healthguru.com/story/article/id/4121/Pregnancy\\_and\\_Alcohol\\_Why\\_They\\_Dont\\_Mix](http://news.healthguru.com/story/article/id/4121/Pregnancy_and_Alcohol_Why_They_Dont_Mix)

### **Violence reports surge after grog ban in Fitzroy Crossing**

*The Australian*, January 22, 2009

The ban on "takeaway alcohol sales" (grog) in Fitzroy Crossing is yielding noticeable results. Police say the increase in reported assaults from 57 in 2007 to 111 in 2008 is proof of a trend toward disclosure among the town's women. In the past, the women reportedly accepted drunken beatings without telling authorities. Advocates of the ban point to numerous alcohol-related suicides and other deaths and estimate that one-third of aboriginal babies in Halls Creek have fetal alcohol syndrome.

<http://www.theaustralian.news.com.au/story/0,25197,24945749-5006789,00.html>

### **Helping others quit starts with setting an example**

*New Zealand Herald*, January 9, 2009

Patricia Duncan is gathering signatures for a petition against a new liquor store. She is the adoptive mother of a 22-year-old who was born with fetal alcohol syndrome. She and her husband have given up alcohol as a means of setting an example.

[http://www.nzherald.co.nz/nz/nz/news/print.cfm?c\\_id=1&objectid=10551071&pnum=0](http://www.nzherald.co.nz/nz/nz/news/print.cfm?c_id=1&objectid=10551071&pnum=0)

### **How alcohol harms developing brains**

*Ivanhoe.com*, January 1, 2009

New study findings report that certain parts of the brain may be more susceptible to damage than others. Alcohol consumption during pregnancy can be particularly damaging to the brain's white matter – nerve fibers that transmit information between areas of the central nervous system. Abnormalities in white matter in the frontal lobes and occipital lobes can lead to executive dysfunction and altered visual-spatial abilities.

[http://www.ivanhoe.com/channels/p\\_channelstory.cfm?storyid=20529](http://www.ivanhoe.com/channels/p_channelstory.cfm?storyid=20529)

### **Don't Call it ADHD –**

*Arizona Daily Sun*, December 29, 2008

Adoptive parents of children with fetal alcohol spectrum disorders (FASD) are looking for a more comprehensive approach to a condition often misdiagnosed as simple attention deficit. The FASD Awareness Group of Northern Arizona, adoptive parents of children with FASD, are working toward this end. They believe children with a diagnosis of FASD require patient and special attention; their misbehavior in class and in social settings is often seen as a simple attention deficit or inappropriate social interaction. This erroneous perspective is but one obstacle the group hopes to overcome.

[http://www.azdailysun.com/articles/2008/12/29/news/20081229\\_front\\_187880.txt](http://www.azdailysun.com/articles/2008/12/29/news/20081229_front_187880.txt)

### **Special Report: Tragic Birthright**

*Arizona Daily Sun*, December 28, 2008

Fetal alcohol syndrome often goes undiagnosed and unsupported by the State. One Flagstaff family is fighting for change. Marsha Kenny is not a normal teenager. She is 20 years old and, at birth, had a diagnosis of fetal alcohol spectrum disorder (FASD). Her condition affects her speech, reasoning ability, social skills, and judgment. Marsha's family is trying to get the State to recognize FASD as a supportable disability that will allow Marsha and thousands of others like her to live independently as adults in a structured environment funded by the State.

[http://www.azdailysun.com/articles/2008/12/28/news/20081228\\_front\\_187814.txt](http://www.azdailysun.com/articles/2008/12/28/news/20081228_front_187814.txt)

## **FASD CONFERENCES**

### **National Conference on Juvenile Justice of the National Council of Juvenile and Family Court Judges**

Orlando, FL, March 11-14, 2009

The National Conference on Juvenile Justice, of the National Council of Juvenile and Family Court Judges, offers professionals in this field a national perspective on issues such as truancy, safe schools, gangs, family violence, child abuse and neglect, juvenile sex offenders, and substance abuse.

<http://www.ncjfcj.org/content/view/1147/315/>

## **FASD: INTO ACTION: A Three-Day Session on Fetal Alcohol Spectrum Disorders**

Portland, OR, March 12-14, 2009

A Three-Day Session on Fetal Alcohol Spectrum Disorder (FASD) provides information about FASD and the effects of drugs other than alcohol on behaviors of children, adolescents, and adults who have this brain-based condition. The training offers education on the status of research on diagnosis and a “best practices” approach to treatment and accommodation. Case examples of successful diagnosis, treatment, and accommodation are central to this training, which is targeted to professionals as well as parents of children with confirmed or suspected FASD. This experience enriches parents through their participation in the training alongside health care professionals. For additional information, contact: Wendy Temko, FASCETS, 503-621-1271 or [wtemko@fascets.org](mailto:wtemko@fascets.org).

## **25th Annual Pacific Rim International Conference on Disabilities**

Honolulu, HI, May 4-5, 2009.

The 25th Annual Pacific Rim International Conference on Disabilities is an educational opportunity from and for persons with disabilities, family members, service providers, policy makers, community advocates, and professionals in fields relating to a variety of disabilities. <http://www.pacrim.hawaii.edu/>

## **FUNDING OPPORTUNITIES**

### **Interventions for Youth and Young Adults with Fetal Alcohol Spectrum Disorders**

A new funding opportunity announcement solicits proposals in the form of cooperative agreements to develop and test the effectiveness of interventions for youth and young adults with fetal alcohol spectrum disorders. Awards issued under this FOA are contingent on availability of funds and submission of a sufficient number of meritorious applications.

Two awards for a period of 3 years are anticipated. The average yearly award is expected to be \$300,000, ranging from \$275,000 to \$350,000 per year in total direct and indirect costs. Letters of Intent are due March 9, 2009. The deadline for application is April 9, 2009.

This announcement is also posted on the Web page for Grant Funding Opportunity Announcements (FOAs), Centers for Disease Control and Prevention, at <http://www.cdc.gov/od/pgo/funding/FOAs.htm>.

### **Applications for FY 2009 Grants To Expand Substance Abuse Treatment Capacity**

The Substance Abuse and Mental Health Services Administration (SAMHSA) is accepting applications for fiscal year (FY) 2009 grants to expand substance abuse treatment capacity in targeted areas of need, local recovery, and oriented systems of care. This program is designed to foster development and use of local recovery-oriented systems of care to address gaps in treatment capacity by supporting person-centered and self-directed approaches to treatment of and recovery from substance (alcohol and drug) abuse in communities with serious drug problems.

The purposes of this program are (1) to achieve maximal integrated and comprehensive support for community-based response to a targeted, well-documented program for treatment of substance abuse and (2) to improve the quality and intensity of treatment and recovery-oriented systems of care.

SAMHSA expects that \$5.1 million in funding will be available to award up to 13 grants of approximately \$400,000 per grant for up to 3 years. The award amount may vary, depending on availability of funds and progress achieved by awardees. Grants will be awarded by SAMHSA's Center for Substance Abuse Treatment.

Eligible applicants are domestic public and private nonprofit entities. Applications for No. TI-09-001 are available by calling SAMHSA's Information Line at 1-877-SAMHSA7 [TDD: 1 800-487-4889] or by downloading the application at [http://www.samhsa.gov/grants/2009/ti\\_09\\_001.aspx](http://www.samhsa.gov/grants/2009/ti_09_001.aspx). Applicants are encouraged to apply online at [www.grants.gov](http://www.grants.gov).

Application Due Date: April 28, 2009 - Applications must be received by the due date and time to be considered for review. Additional Information: Applicants with questions about program issues should contact Cathy Nugent at 240-276-1577 or [cathy.nugent@samhsa.hhs.gov](mailto:cathy.nugent@samhsa.hhs.gov).

#### **FASD WEB SITE**

##### **Fetal Alcohol Family Association of Manitoba**

The Fetal Alcohol Family Association of Manitoba provides newsletters and information on workshops and support groups to families caring for and professionals working with persons who have fetal alcohol spectrum disorders. These services are available on the association's non-profit Web site, at [http://www.fafam.ca/htm/fafam\\_main.htm](http://www.fafam.ca/htm/fafam_main.htm).