



Kansas City, Missouri, Health Department,
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HIV Funds May Be In Peril

As the years go by and the number of persons living with HIV/AIDS grows in the nation, the distribution of the federal government's fiscal support to communities has changed as the result of the Ryan White HIV/AIDS Treatment Modernization Act of 2006. The new law changes the method of determining eligibility for Part A (formerly Title I of the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act). Now both 22 Eligible Metropolitan Areas (EMAs) and 34 newly designated Transitional Grant Areas (TGAs) share the funding. However, the priority in funding is given to the 22 EMAs.

These changes in federal policy may have significant impact on the funds available in the Kansas City metropolitan area. Prior to the new legislation, the Kansas City area was a Title I EMA, however it was downgraded (along with 28 other communities) to a TGA. To be an EMA under the new legislation, a metropolitan area must have had more than 2,000 HIV/AIDS cases over the prior 5 years; TGAs must have had between 1,000-1,999 cases.

The first round of funding (formula funds) were awarded by the Health Resources and Services Administration in March with \$303,113,785 divided among the 22 EMAs while just \$73,017,544 was divided among the 34 TGAs.

Kansas City received \$2,524,021 which approximated the amount of funding received the prior year. Where the uncertainty lies for the Kansas City TGA is with next round of funding (supplemental funds) which will be released in May. It already has been announced that a third pot of funds, the Minority AIDS Initiative, will be awarded on a competitive basis.

While this "downgrade" in the Kansas City metropolitan area's status may seem bad, the community needs to understand that technically the metropolitan area does not even qualify for the TGA status. The number of HIV/AIDS cases in the prior 5 years was 30% short of the minimum needed to be a TGA. And, that is where the good news truly lies – namely, the metropolitan area has done a very good job in not allowing HIV/AIDS to continue unabated, minimizing the number of persons who contract the infection each year. That the infected individuals in this community may be penalized by the new federal legislation as a result of the community's public health efforts over the years, unfortunately, is a sad fact repeated frequently in this country's efforts to control communicable diseases – good performance results in loss of funding whereas poor performance is often "rewarded."

Missouri Stops Testing Birds for West Nile Virus

The Missouri Department of Health and Social Services (MDHSS) has discontinued testing dead birds for West Nile virus (WNV) because of federal funding cuts. MDHSS is encouraging the public to report dead birds to their local public health de-



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partment so that the information can be entered into a state database.

Also, MDHSS will not test birds for the H5N1 avian influenza virus. Other agencies participate in wild bird and poultry testing for this virus. The following website provides information on where to call with different questions regarding H5N1 and dead birds: www.dhss.mo.gov/PandemicInfluenza/subcommittees/zoonic/O2S1DeadSickBirdCalls.doc.

Expanded Birth Certificate Data

In 2003, the US Standard Certificate of Live Birth was revised (www.cdc.gov/nchs/vital_certs_rev.htm). The prior revision was implemented in 1989. A critical component of the recommendations for this revision focused on fundamental changes in the way that data are collected. Adoption of the revised form is done on a state by state basis and, partly as a consequence of this revision, most states will need to re-engineer their vital statistics systems. As of this writing, the Missouri Department of Health and Senior Services has not yet adopted the 2003 revision of the certificate of live birth.

Expanded health data from the revised birth certificate are just starting to become available (*Nat Vital Stat Rep* 2007;55(12):1-23, www.cdc.gov/nchs). Data from 2004 for the states of Idaho, Kentucky, New York (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington provide a more in-depth examination of risk factors in this pregnancy, obstetric procedures, characteristics of labor and delivery, method of delivery, abnormal conditions of the newborn, and congenital anomalies. The following are some highlights from that data.

- Gestational diabetes is substantially more prevalent than prepregnancy diabetes, 4.4% compared with 0.7%. The risk for both prepregnancy and gestational diabetes increases rapidly with maternal age.
- Just over 1% of all births were the result of infertility treatments. Twin births were >10 times and triplets/+ births were >60 times as likely to occur when infertility treatments were used. Nearly 50% of all triplets, 14% of all twins, and 0.85% of singleton births resulted from infertility treatments.
- Cervical cerclage (the circumferential banding or suturing of the cervix to prevent or treat early cervical dilation and premature delivery) was performed in 0.44% of births. The rates increased with maternal age and were twice as high among non-Hispanic black women as non-Hispanic white and Hispanic women.
- External cephalic version procedures are used to move the fetus in utero from a nonvertex to vertex presentation to avoid a breech presentation at delivery. They were performed in 0.34% of deliveries with a success rate of 58%. Nonvertex presentations occurred in about 3% of births.
- In just over 1% of births, steroids were given to the mother prior to birth for fetal lung maturation. Steroids are considered a beneficial intervention for infants at risk of preterm delivery (they treat neonatal respiratory distress syndrome). Therefore, it is not surprising that their use increased as the gestational age decreased.
- Antibiotics are given to mothers at risk of preterm labor, premature rupture of the membranes (PROM), and other risk factors to prevent neonatal sepsis. Almost 20% of women received antibiotics during labor.
- Just over 5% of all infants required assisted ventilation immediately following delivery, with 0.13% requiring assisted ventilation for >6 hours. Surfactant replacement therapy was given to 0.1% of term infants compared to 3% of preterm infants.
- Nearly 7% of infants were admitted to a neonatal intensive care unit (NICU). By maternal age, rates of admissions were highest among infants born to teenage mothers and mothers 35 y of age and older.
- The most commonly reported birth anomalies were cyanotic heart disease (80.6/100,000 births) and hypospadias (malformation of the penis; 173.7/100,000 male births). Limb reduction defect and cleft palate alone were reported at 33.9 and 33.3/100,000, respectively. The overall rate for suspected chromosomal disorders was 58.8/100,000 births. Rates for suspected chromosomal disorders for mothers 35 y old and older were at least double those for younger mothers.

Potpourri

SWEDISH SMOKERS take on average nearly 8 more days of sick leave per year than non-smoking colleagues (*Tobacco Control* 2007;16:114-118). Sweden has the highest sickness-absence rate among industrialized countries, losing 25 working days per employee due to sickness compared to 9 days in the United States.

LOW BIRTHWEIGHT, a result of preterm birth or intrauterine growth restriction, is a well established indicator of survival in childhood. And a recent study has found that low birthweight was associated with an increased risk of hospitalization from infectious diseases (*Am J Epidemiol* 2007;165:756-761). The risk of hospitalization increased by 9% for each 500 gram reduction in birthweight. Although peaking in infancy, this increased risk persisted until 10 years of age. Both preterm and intrauterine growth restricted babies have depressed immune function.

VACCINATION OF children with pneumococcal vaccine has led to significant and unexpected drops in repeat ear infections and the need for insertion of ear tubes (*Pediatrics* 2007;119:707-714).

VIETNAMESE POTBELLIED MINIATURE PIGS were introduced to the US in the early 1980s and were promoted as a household pet by emphasis on their small size, clean habits, and reputed intelligence. At that time, Kansas City's animal control ordinances considered them as livestock and prohibited their being kept in areas of the city not zoned for agriculture. The then City policy makers, however, made an exception for fire houses. The number of these pigs kept as pets in the US is currently unknown, but sources on the Internet suggest they are still popular and inexpensive pets to acquire.

As with many types of pet animals, rescue groups have come into being because pig owners have had to relinquish the pigs for a variety of reasons, including the pig growing larger than expected, zoning restrictions, and behavior problems, particularly aggression towards people. (*JAVMA* 1997;211:462-565).

A recently published study examining human directed aggression by miniature pet pigs found little difference between castrated males, sexually intact females, and spayed females (*JAVMA* 2007;230:385-389). The presence of multiple pigs in the same house resulted in a very statistically significant reduction in the prevalence of aggression directed towards humans, from 39% of pigs that were the only pig in the home to 21% where at least 2 pigs resided together.

Ages of weaning and neutering and the presence of objects intended to serve as environmental enrichment for the pigs were not associated with frequency of aggression.

PET OWNERSHIP is thought to have health benefits including mental health, physical health, reduced physician services, lower blood pressure, and reduced risk of heart disease. However, many of these reports have lacked a sound scientific basis for the conclusions drawn. Data from the 15 year Health and Social Support Study, on the other hand, found that pet ownership was associated with poor rather than good perceived health (*PLoS*

Basic Math & Stats Course

The Office of Epidemiology & Community Health Monitoring will be offering its 2-day course on basic mathematics and statistics on

Wednesday and Thursday

July 25th & 26th.

This course will cover a review of elementary arithmetic measures used in epidemiology, discuss rates including adjusted rates, measures of central tendency, measures of risk, Chi square tests, t-tests and z-tests. The course will include a variety of exercises to assist the participant in understanding the use of these measures and their calculation.

Space is limited so be sure to register early. To register send an e-mail to

Gerald.Hoff@kcmo.org

One 2006;1:e109). Body mass index (BMI) was the risk factor most strongly associated with pet ownership. Pet owners set in their ways and getting older were found to have slightly higher BMI than non-pet owners.

FEMALE ALCOHOLICS performed worse on a number of tests of neurocognitive function compared with alcoholic men despite a shorter duration of drinking and a lesser quantity of alcohol consumed (*Alcohol Clin Exper Res* 2007;31:745-754). These brain damaging effects of alcohol affect women more quickly than men, a situation similar to the development of heart and liver damage from alcohol. Women metabolize alcohol differently than men do and a woman will experience the alcohol effects faster than a man of the same weight. One reason is that men have more water in the bodies which better dilutes alcohol's effect. Women also may have lower enzyme levels for converting alcohol into an inactive substance.

OVERWEIGHT WORKERS cost their employers more in injury claims than their lean colleagues (*Arch Intern Med* 2007;167:766-773). There was a clear linear relationship between body mass index (BMI) and rate of claims. Employees in obesity class III (BMI ≥ 40) had 11.65 claims per 100 FTEs, while recommended-weight employees had 5.80; the effect on lost workdays (183.63 vs 14.19 per 100 FTEs), medical claims costs (\$51,091 vs \$7,503 per 100 FTEs), and indemnity claims costs (\$59,178 vs \$5,396 per 100 FTEs) was even stronger. The claims most strongly affected by BMI were related to the following: lower extremity, wrist or hand, and back (body part affected); pain or inflammation, sprain or strain, and contusion or bruise (nature of the illness or injury); and falls or slips, lifting, and exertion (cause of the illness or injury). The combination of obesity and high-risk occupation was particularly detrimental.

EPIDEMIOLOGISTS HAVE BEEN aware of what is referred to as the "Hispanic paradox," whereby persons of Hispanic origin seemed to experience lower mortality

than the non-Hispanic white population. This paradox coincided with a change from the classification of deaths and population by Spanish surname to the use of Hispanic-origin questions in the census and vital statistics. Research in Texas, however, recently concluded that there is no "Hispanic paradox" and that the past perception of such a paradox stemmed from inconsistencies in counts of Hispanic-origin deaths and populations (*Am J Public Health* 2006;96:1686-1692). The researchers found that mortality experience of Hispanics and non-Hispanic whites were fairly similar, particularly among women.

MOTHERS WHO DELIVER a low birthweight infant may themselves be at excess risk for cardiovascular disease (*Ann Epidemiol* 2007;17:36-43).

IN 1971, the Joint Commission on Accreditation of Hospitals dropped its requirement that 20-25% of hospital deaths be autopsied. As a result the total number of autopsies conducted in the US declined, while the number conducted for legal and criminal reasons has remained relatively constant. In 2003, autopsies were performed for 7.7% of deaths (*Vital Health Stat* 2007;series 20(32), www.cdc.gov/nchs). This was less than the 9.4% of deaths autopsied in 1994, the last year for which national data was available. Decedents with particular characteristics were more likely to be autopsied. For example, almost one-third of infant deaths, more than half of the decedents aged 15-24 y, and almost none of the decedents ≥ 85 y old were autopsied.

THE OVERALL PREVALENCE of human papilloma virus (HPV) infection in US women is 26.8% among 14-59 y olds and is highest among those 20-24 y old (44.8%) (*JAMA* 2007; 297:813-819). The HPV vaccine types 6 and 11 (low-risk types) and 16 and 18 (high-risk types) were detected in 3.4% of women; HPV-6 was detected in 1.3%, HPV-11 in 0.1%, HPV-16 in 1.5%, and HPV-18 in 0.8%.

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