News and Notes

NEW COMBINATION VACCINE APPROVED

The Food and Drug Administration (FDA) announced on December 16, 2002 the approval of a new combination vaccine. This vaccine will protect infants against diphtheria, tetanus, pertussis, polio, and hepatitis B. It will be marketed by SmithKline Beecham Pharmaceuticals under the name Pediarix. This vaccine is the only vaccine sold in the United States that contains DtaP (diphtheria and tetanus toxoids and acellular pertussis vaccine adsorbed), hepatitis B vaccine, and inactivated poliovirus vaccine in one vaccination. It is recommended to be administered as a three dose primary series to infants at approximately 2, 4, and 6 months of age. Previously, infants received a total of nine injections of separate vaccines for hepatitis B, DtaP, and IPV vaccines. In a trial, Pediarix produced responses that were similar to the vaccines when given separately. The most commonly reported reaction were local injection site reactions, such as pain, redness, swelling, fever, and fussiness.

For more information on Pediarix consult the FDA's website at http://www.fda.gov.

DHHS ANNOUNCES GRANTS TO PREVENT AND TREAT DIABETES AMONG AMERICAN INDIANS AND ALASKA NATIVES

On December 16, 2002, DHHS Secretary Tommy G. Thompson announced $100 million in grants to support programs that address prevention and treatment of diabetes among American Indians and Alaskan Natives, with a main focus on children and young adults. The grants are funded through DHHS' Indian Health Service (IHS) Special Diabetes Program for Indians, which was created by Congress in 1998 and was reauthorized for five additional years through the fiscal year 2008. They will be distributed to 318 tribal, urban, Indian organizations and IHS health programs in order to maintain and improve diabetes prevention and treatment programs.

Most of these programs are focused on preventing Type 2 diabetes among Indian youth and include efforts to reduce cardiovascular disease, which is associated with diabetes. Other youth focused efforts include obesity screenings, weight-management programs and school-based physical activity programs. Adult programs include individual nutritional counseling, diabetes education and outreach activities, the use of diabetes teams to improve patient care, and community walking programs.

Seventeen million Americans are diagnosed with diabetes, 16 million of which have Type 2 diabetes. In addition to the 17 million already diagnosed, 16 million more Americans have a condition identified as pre-diabetes, a condition that raises a person's risk of developing Type 2 diabetes. American Indians and Alaskan Natives are 2.6 times more likely to have diabetes than non-Hispanic whites.

The IHS is distributing the funds to grantees throughout the fiscal year in four stages. A list of grantees is available in PDF format at http://www.usnewswire.com.

DOSE DENSE CHEMOTHERAPY IMPROVES SURVIVAL IN BREAST CANCER PATIENTS

A new clinical study, conducted by Cancer and Leukemia Group B (CALGB) for the Breast Cancer Intergroup, a consortium of the National Cancer Institute, has shown that reducing the interval between doses of chemotherapy in commonly used regimens may improve survival in women who have node-positive breast cancer. This study is the first major controlled trial to show a clear survival advantage for women with this specific type of breast cancer.

Due to the availability of new drugs, dose dense chemotherapy regimens are made tolerable for patients. Specifically, filgrastim helps to prevent neutropenia, a serious complication of chemotherapy. Researchers tested dose dense and conventional chemotherapy approaches in 1,973 women with node-positive primary breast cancer and no other metastases. After the removal of their tumors each subject was assigned to one of four treatment groups, which involved the standard drugs doxorubicin, paclitaxel, and cyclophosphamide. The results of this clinical trial showed that among patients on the dose dense regimens, disease free survival rates increased to 82%, after four years, from 75% for those who received conventional treatment. Overall, this corresponded to a 26% reduction in the risk of cancer reoccurrence.

In addition, the study found that dose dense chemotherapy may lead to higher overall survival rates. Ninety-two percent of patients on the dose dense regimen

therapy were alive as compared to 90% of those on the conventional regimens after three years. This overall reduction in the risk of death corresponds to 31%. In addition, patients on the dose dense regimens suffered less cases of neutropenia. The findings of this study were presented in December 2002 at the 25th Annual San Antonio Breast Cancer Symposium. The full study will be published in an upcoming issue of the Journal of Clinical Oncology Citron, ML et al.

NEW ADDITIONS TO THE FEDERAL REPORT ON CARCINOGENS

The federal government published the 10th edition of its biennial Report on Carcinogens, adding to it approximately 17 new listings of "known" human carcinogens. This brings the count to a total of 228 elements that are "known" or "reasonably anticipated" carcinogens.

Among these new additions were steroidal estrogens, which are commonly used in estrogen replacement therapy and oral contraceptives. A few of the individual steroidal estrogens were previously listed as "reasonably anticipated carcinogens" in past publications; however, this is the first edition to list them as a single group. The report cites data from studies that show an association between estrogen replacement therapy and an increase in the risk of endometrial cancer and a smaller increase in the risk of breast cancer. There is also evidence that suggests an increased risk of breast cancer associated with oral contraceptives that contain estrogen.

In addition to these two items, other newly listed "known" human carcinogens include: broad spectrum ultraviolet radiation (UVR), which shows a cause and effect relationship with skin cancer, cancer of the lip, and melanoma of the eye; wood dust, which has an association with nasal cavity and sinus cancer; and nickel compounds, which are associated with lung and nasal cancers. Beryllium and beryllium compounds were upgraded from "reasonably anticipated" to "known" cancer-causing status. Twelve other items were added to the "reasonably anticipated" to be a human cancer-causing agent list, including chloramphenicol—an antibiotic with restricted use in the United States due to the fact it may cause fatal blood disorders—and methyleugenol, which occurs naturally in oils, herbs, and spices, and is used in flavors, insect attractants, anaesthetics, and sunscreens. This report does not consider or attempt to balance potential benefits of these products, nor does it assess the magnitude of the cancer risk of the substances. This report is provided by the DHHS and is prepared by the National Toxicology Program, a branch of the DHHS.

The full report is available at http://ntp-server.niehs.nih.gov. Hard copies may be obtained by emailing ehponline@niehs.nih.gov or writing to Environmental Health Perspectives, Attn: Order Processing, 1001 Winstead Dr., Ste. 355, Cary, NC 27513.

STRENGTHENING THE FIGHT AGAINST INFECTIOUS DISEASE

DHHS Secretary Tommy G. Thompson has announced a new partnership with the Federal Democratic Republic of Ethiopia in order to coordinate efforts to assist in prevention and control of HIV/AIDS and other infectious diseases in Ethiopia. DHHS Deputy Secretary, Claude A. Allen, and Ethiopia's Minister of Health, Dr. Kebede Tadesse, signed a Memorandum of Understanding in Ethiopia, which formalized cooperation between DHHS' Centers for Disease Control and Prevention (CDC) and the Ethiopian Ministry of Health. The goals of the partnership are to prevent HIV infection, improve care and support of HIV/AIDS patients, and build capacity to deal with the national HIV/AIDS epidemic through financial and technical assistance. Secretary Thompson stated, "Together, these diseases claim about six million lives each year across the globe. The leadership of Ethiopia had been working to establish improved methods of care for their country's people, and we welcome the opportunity to support their efforts."

Under this arrangement, plans include: preventing mother-to-child transmission, related care and treatment; supporting voluntary HIV counseling and testing centers; establishing a National AIDS Education and Training Center; supporting comprehensive HIV prevention, care and treatment centers; strengthening regional health bureaus and laboratories; improving evidence-based public health practice and service delivery; and strengthening operational research. Deputy Secretary Allen will visit a voluntary HIV counseling and testing center at Zewditu Hospital, tour a laboratory under renovation at the Ethiopian Health and Nutrition Research Institute, and inaugurate the National HIV/AIDS Resource Center in Addis Ababa, Ethiopia. The President's budget request for the 2003 fiscal year includes $12.9 billion for HIV/AIDS programs. The Bush administration proposes spending more than $16 billion in the 2003 fiscal year in order to combat HIV/AIDS at home and abroad. A full report is available at http://www.hhs.gov/news

UNICEF AND CDC REPORT ON AFGHANISTAN WOMEN'S HEALTH

A study, conducted from March to July 2002 by UNICEF and the CDC in conjunction with the Afghanistan Ministry of Health, determined that Afghan women suffer from one of the highest levels of maternal mortality in the world. Almost half of the deaths among women from the ages of 15 to 49 are a result of pregnancy and childbirth. This study, the largest of its kind ever conducted in Afghanistan, was conducted in four provinces in Afghanistan—Kabul, Laghman, Kandahar, and Badakshan—ranging from rural to urban settings. The surveys found that on average there were 1,600 maternal deaths per 100,000 live births in Afghan women. Linda Bartlett, MD—a medical officer with CDC's reproductive health program and the leader of the surveys—stated, "These women are dying needlessly. Most of these deaths could have been avoided, which suggests important opportunities for prevention." The study examined data from 13,000 households, which included an estimated 85,000 women. UNICEF and the CDC recommended the following as a result of the findings of this study: there is a need to establish properly equipped health care services in remote areas and to encourage women's use of such facilities; the need to train skilled female birth attendants; and to rebuild and repair roads to improve access to these facilities.

More information on this study is available on the UNICEF website at http://www.unicef.org.

NEW ACADEMIC CENTERS FOR PUBLIC HEALTH PREPAREDNESS FUNDED

Four new centers have been incorporated into the Public Health Preparedness system by the ASPH/CDC Cooperative Agreement. The four new centers are the University of California-Berkley School of Public Health, University of Oklahoma College of Public Health, University of Michigan School of Public Health, and the University of South Carolina Norman J. Arnold School of Public Health. They are now part of a network of 19 Centers for Public Health Preparedness (CPHP) centers. This CPHP national system was established in 2000 by the CDC. Its purpose is to focus on improving the capacity of front line public health and health care workers to respond to bioterrorism and other infectious disease outbreaks and public health threats. The CPHP program provides funding for three types of centers: (1) academic centers, which link schools of public health with state, local, and regional needs; (2) specialty centers, which address specific and unique content or technology needs; and (3) advanced practice centers. Academic and specialty centers focus on disciplines, such as bioterrorism, public health law, and so on, while the advanced practice centers concentrate on operational preparedness, communications, and informational technology and training.

Further information on the CPHP system is available on the ASPH website at http://www.asph.org

PUBLIC HEALTH SYSTEMS RESEARCH AFFILIATE MEETING

The Academy Health's 2003 Annual Research Meeting—held at the Gaylord Opryland in Nashville, TN from June 27–29—includes a Public Health Systems Research Affiliate Meeting on June 26. One of the topics for the call for abstracts is public health. The deadline for submission is January 15, 2003.

Topics for next year's sessions include: preparation of public health systems and its infrastructure for potential threats to population health; communication of strategies for preventing disease and industry, assessing, building, and improving performance of public health systems. Additional conference information is available at http://www.academyhealth.org/2003. To submit an abstract, visit http://www.academyhealth.org/2003/abstracts.

EXPANSION OF GLOBAL ACCESS TO HIV/AIDS TREATMENT

The International Treatment Access Center (ITAC), a new international alliance, was launched in Geneva and Dakar. The Center's aims are to provide access to antiretroviral (ARV) drugs to the increasing population of those infected with HIV/AIDS in low- and middle-income countries. Countries where ARVs are widely available to those living with HIV/AIDS have had an extraordinary reduction in HIV related illnesses and deaths. A mere 5% of the total 42 million people with HIV/AIDS are located in low- or middle-income countries; however they account for over 99% of the 3.1 million HIV/AIDS related deaths this year.

ITAC currently unites over 50 partners, including NGOs, donors, the private sector, academic and research institutions, and international institutions working to expand ARV access. Numerous governments have reduced import taxes on HIV related drugs and countries such as Botswana, Nigeria, Costa Rica, Cuba, and Thailand have also recently set up ambitious treatment centers. For more information on ITAC, visit http://www.itacoalition.org.

PSYCHIATRIC DISORDERS AMONG DETAINED YOUTH

A study, conducted by Linda A. Teplin, PhD, of Northwestern University in Chicago, concluded that nearly two-thirds of boys and three-fourths of girls in juvenile detention have at least one psychiatric disorder. Employing a large, stratified, randomized structure and standardized diagnostic measures, the study evaluated 1,829 subjects, who were placed at the Cook County Juvenile Temporary Detention Center over the span of four years. These subjects were classified as African American, non-Hispanic white, and Hispanic teenagers from the ages of 10 to 18.

Of the population studied, half had some drug addiction disorder, and over 40% had some form of a disruptive behavior disorder. When these disorders were eliminated from the equation, close to 60% of males and two-thirds of females were impaired by, or met the criteria for, one or more mental or substance use disorders. Non-Hispanic white boys showed the highest rates of disorders and African Americans the least, with the exception of separation anxiety disorder. Hispanics had higher rates of panic disorder, obsessive-compulsive disorder, and substance abuse (other than alcohol or marijuana) than African Americans. Overall, females demonstrated higher rates of all disorders with the exception of manic episodes, psychiatric disorders, and substance abuse disorders.

In regards to the findings of this study, Teplin stated, "We are especially concerned about the high rates of depression and dysthymia among detained youth—17.2% of males, 26.3% of females." The study was funded by grants from NIH, NIMH, NIDA, NIAAA, ORWH, NCMHD, ORD, SAMSHA, and other organizations and foundations. For more information, visit http://www.nih.gov.