Vaccines save money

The economic benefits of immunization are as dramatic as its effective prevention of childhood diseases, according to a recent study.

Sponsored by the U.S. Centers for Disease Control Prevention, research conducted at Battelle, a non profit research and development firm in Arlington, Va., showed a direct correlation between dollars spent on immunization and health care cost savings.

For each dollar invested, administration of the MMR vaccine saved $16.30, DTP immunization saved $6.20 per dollar spent and OPV vaccination saved $3.40 in health care costs, researchers said, concluding that vaccination "is a sound and justifiable societal investment." (See accompanying chart.)

Choices in treating otitis media

In an AAP-conducted survey, 70 percent of pediatricians asked said they would begin otitis media treatment, in an otherwise healthy young child, with antibotic therapy, continuing for 20.8 days.

Forty-four percent chose amoxicillin. Nearly one-fourth (24 percent) said they would wait 4.9 weeks before initiating further therapy.

Nineteen percent said they would begin amoxicillin/decongestant therapy, most often in combination with antibiotic or other treatment, for 16.6 days. Dimetapp was the favored antihistamine for 29 percent of respondents.

If effusion persisted for six weeks, 37 percent of pediatricians who initially prescribed antibiotics said they would change to amoxicillin/clavulanate for 15 days, or Cefaclor for 13 days. Another 37 percent said they would consult and/or refer for additional treatment, and 22 percent said they would perform or refer for myringotomy or tube surgery.

Pediatricians who Initially recommended combination antibiotic/antihistamine/decongestant therapy would choose alternative treatments and/or alternatives chosen by those who initially prescribed antibiotics only.

Few respondents said they would continue therapy unchanged, begin steroids, begin or change antibiotics/decongestants if otitis media with effusion persisted. Almost half (48.6 percent) said they would not consider antibiotic prophylaxis to prevent recurrences, 35 percent said they would, and 17 percent were unsure.

The Academy, in cooperation with the American Academy of Family Physicians, and the American Academy of Otolaryngology, is developing a practice parameter on managing otitis media with effusion in young children.

Conducted by the AAP Department of Research, Periodic Survey #19 on Management of Otitis Media with Effusion received replies from 1,211 AAP members.

Possible Kawasaki syndrome case found

The cause of Kawasaki syndrome, which has replaced rheumatic fever as the most frequent cause of acquired heart disease in children, has been linked to specific strains of staphylococcus and streptococcus bacteria, according to a study published in a recent issue of Lancet, the British medical journal.

Discovered by a team of investigators from the National Jewish Center for Immunology and Respiratory Medicine, Denver; New England Medical Center, Boston; and the University of Minnesota, Minneapolis; researchers found a previously unknown strain of "staph" in 11 children with Kawasaki syndrome, and another as-yet-uncharcterized strain of "strept" in two other patients at Floating Hospital for Children at New England Medical Center.

Both strains secrete toxins that can produce a massive, harmful reaction in the immune system, including inflammation of the coronary arteries. Investigators speculated that if the findings of the study led to a definitive test for Kawasaki syndrome, earlier treatment with standard gamma globulin (VGG) may minimize the disease's impact on coronary arteries.

HIV primary-care guidelines

The U.S. Department of Health and Human Services Agency for Health Care Policy and Research has released new guidelines to assist primary care providers with early care and counseling for patients recently infected with the human immunodeficiency virus (HIV).

At primary care practitioners who might have had limited contact or experience with HIV-infected patients and their caregivers, the guidelines recommend that providers attempt to coordinate all aspects of medical care. Special recommendations for women, adolescents and children are included, as they comprise the largest segment of new HIV cases.

Appropriate disclosure of HIV status, medical evaluation and all aspects of care management are covered in the guidelines. Accompanying materials include a quick reference guide, Early Evaluation and Management of HIV Infection, and two booklets for persons living with HIV, and care givers of HIV-infected children. Materials are free.

For copies, call (800) 342-2437. Spanish materials are also available by calling (800) 544-7432. Materials for deaf patients may be requested by calling (800) 243-7889.

Gene predicts bone density

Researchers have found a gene that predicts bone density, aiding in early detection, lowering the risk for osteoporosis, according to the National Institute of Arthritis and Musculoskeletal and Skin Diseases at the National Institutes of Health (NIH).

Physicians at the Garvan Institute of Medical Research in Sydney, Australia, found a single gene that accounts for 75 percent of the total genetic effect on bone density. There are two forms of the gene. Normal infants receive "half" from each parent, resulting in three possible-gene pair, or "allele" combinations. One combination produces the strongest bone density, another a medium effect, and the third the weakest bone density. NIH funded the research.

Adolescent drug use increasing

Ilicit drug use by adolescents increased significantly from 1992 to 1993, reversing a downward trend of drug use that began in 1981, according to findings in the 1993 Monitoring the Future Study, sponsored by the National Institute on Drug Abuse.

All drug use, with the exception of cocaine (both crack and powder form) increased among 8th, 10th and 12th grade students surveyed, with regard to both current (within the past month), and annual use. Cocaine use remained level and alcohol use decreased among high school seniors.

LSD use showed a statistically significant increase among 12th graders with 10.3 percent reporting having tried LSD at least once in their lives, compared to 8.6 percent the year before.

Annual LSD use by seniors increased from 5.6 percent in 1992 to 6.8 percent in 1993, nearing the peak use level in the mid-1970's, the survey said.

Annual marijuana use statistics among high school seniors rose from 21.9 percent in 1992 to 26 percent in 1993, and current use increased from 11.9 percent to 15.5 percent.

Daily use of alcohol among high school seniors decreased from 3.4 percent to 2.5 percent. Binge drinking (having five or more drinks in a row in the last two weeks) remained constant at 28 percent. Among 10th graders however, binge drinking increased from 21.1 percent in 1992 to 23 percent in 1993. Eighth-graders' rate of binge drinking...