DATE: October 2006

FROM: Eric E. Whitaker, M.D., M.P.H. Director

RE: CERVICAL CANCER ELIMINATION TASK FORCE RECOMMENDATION FOR HPV VACCINE

Attached please find an addendum to the Cervical Cancer Elimination Task Force Annual Report, which was published in April of this year. With the recent Food and Drug Administration approval of the newly licensed vaccine designed to protect against human papillomavirus (HPV), task force members felt it imperative to include their endorsement of the Advisory Committee on Immunization Practices’ recommendation in an addendum. According to the Centers for Disease Control and Prevention, the FDA-approved vaccine is the first vaccine developed to prevent cervical cancer, and has been found to be highly effective in preventing cervical precancers caused by the targeted HPV types, the major cause of cervical cancer in women.

The task force is committed to studying the prevalence of cervical cancer, raising public awareness of the causes and developing a statewide education, prevention and control plan.

For an overview and the role of HPV in the development of cervical cancer, please review the annual report on the Illinois Department of Public Health’s Web site at http://www.idph.state.il.us/about/Womenshealth/pubs/CervCancerEliminationTFRpt.pdf. If you have questions, please contact the Chair of the Cervical Cancer Elimination Task Force, Stacie Geller, Ph.D., at 312-355-0467.
Cervical Cancer Elimination Task Force Annual Report

Addendum - September 2006
HUMAN PAPILLOMAVIRUS (HPV) VACCINE

More than 15 years ago, a relationship between human papillomavirus (HPV) infection and cervical cancer was recognized. Since then, important strides in understanding the virus have been made, particularly in the following areas: modes of transmission and risk factors associated with transmission; the oncogenic potential of specific viral types and the mechanism by which they cause cancer; and the spectrum of infection, ranging from asymptomatic carrier states to overt warts, preneoplastic lesions, and invasive cancer. Sophisticated new tests for the detection of HPV that hold great promise for improved screening for cervical cancer precursors and invasive cancer and for the triage of abnormal cervical cytology, also have been developed. Understanding the immunology of HPV has allowed the development of new and more effective treatment modalities for HPV infection and the preliminary development of primary prevention modalities, including HPV vaccines.¹

HPV is the most common sexually transmitted infection in the United States. More than 20 million men and women in the United States are currently infected with HPV, and there are 6.2 million new infections each year. HPV is most common in young women and men who are in their late teens and early 20s. By age 50, at least 80 percent of women will have acquired HPV infection. Despite effective cervical cancer screening programs (Pap tests), these programs do not reach all women. Too many women still develop cervical cancer and die of the disease. More than 50 percent of women with cervical cancer have not had a recent Pap test.

According to the American Cancer Society, an estimated 9,710 women in the United States will be diagnosed with invasive cervical cancer in 2006 alone. About 3,700 of these women, constituting more than one-third of all diagnosed patients, will die from the disease. As of July 2006, according to the Illinois Department of Public Health’s Illinois State Cancer Registry, the projection of new cases of invasive cervical cancer for women living in Illinois is 640 new cases; of those, 190 will die.

On June 8, 2006, the U.S. Food and Drug Administration (FDA) approved a quadrivalent human papillomavirus (HPV) vaccine, manufactured by Merck & Co. Inc., for females 9 to 26 years of age. The vaccine prevents cervical cancer caused by HPV types 16 and 18. On June 29, 2006, the Center for Disease Control and Prevention’s (CDC) National Center for Immunizations and Respiratory Diseases’ (NCIRD) Advisory Committee on Immunization Practices (ACIP) recommended that three doses of the HPV vaccine be routinely given to girls aged 11 to 12. The ACIP recommendation also allows for vaccination of girls beginning at 9 years old, at the discretion of the physician or health care provider. The committee also recommends the vaccination of girls and women 13 to 26 years old. The vaccine should be administered before onset of sexual activity (i.e., before women are exposed to the viruses), but females who are sexually active should still be vaccinated. Those who have not been infected with any vaccine

¹ ACOG Practice Bulletin 61, April 2005
HPV type would get the full benefits of the vaccine. Those who have already been infected with one or more HPV types would still get protection from the vaccine types they have not yet acquired. Few young women are infected with all four vaccine types (6, 11, 16, 18).

HPV is the leading cause of cervical cancer in women. The vaccine is considered highly effective in preventing infections that are the cause of most cervical cancers. This vaccine protects against four types of HPV, including two that cause most (70%) cervical cancers (types 16, 18), and two that cause most (90%) genital warts (types 6, 11). Another HPV vaccine is being developed by GlaxoSmithKline but is not yet licensed. This vaccine would protect against the two types of HPV (16 and 18) that cause most cervical cancers.

The Cervical Cancer Elimination Task Force (CCETF) endorses the Advisory Committee on Immunization Practices’ recommendation that the vaccine be given to females ages 11 to 12, and, at the discretion of families and their doctors, be administered as early as age 9. They also recommend women ages 13 to 26 who have not yet been vaccinated receive “catch up” vaccinations. This applies to all women within this age cohort, whether sexually active or not.

The task force believes that mandating the vaccination for all (female) school children in Illinois is premature. Instead, the task force believes the best prevention against this disease is an informed public. The focus now is to better educate the public about the facts of cervical cancer, the importance of Pap tests, the treatments currently available including this breakthrough vaccine, and the lifestyle choices young women can make to reduce their chances of developing cervical cancer. Task force members will continue to work with federal and state officials on the issue of access so the vaccine can be available and affordable for anyone who can benefit from it.

While the impact of an effective HPV vaccine on cervical cancer rates may not be realized for decades (since cervical cancer takes many years to develop), the impact of this vaccine on cervical cancer precursors (abnormal Pap test results) and genital warts may be realized sooner. The approval of this vaccine is great news not only for those on the task force, but for millions of young women in this country. However, Pap tests will remain an important weapon in our arsenal against cervical cancer. Even if 100 percent vaccination coverage was achieved, the current HPV vaccine will not eliminate the need to continue cervical cancer screening in the United States because about 30 percent of cervical cancers are caused by viruses not in the current vaccine. Therefore, the task force will seek supplemental funding to be able to pursue an educational campaign and staff to support education efforts to help spread knowledge about cervical cancer and ways women can prevent it. Annual Pap tests are still imperative to prevent cervical cancer, but this vaccine brings us closer to our goal of eliminating this deadly disease.
For additional information, please go to the Illinois Department of Public Health’s Web site and view the Cervical Cancer Elimination Task Force’s 2006 Annual Report. The Web site address is: http://www.idph.state.il.us/about/womenshealth/pubs/CervCancerEliminationTFRpt.pdf