











February 23, 2011

Advisory Committee on Immunization Practices Centers for Disease Control and Prevention 1600 Clifton Road, N.E., Mailstop E-05 Atlanta, GA 30333

#### Dear Members of the Committee:

We write as a coalition of organizations deeply concerned about anal cancer and the virus that causes the majority of cases, the human papillomavirus (HPV). Please accept this letter in lieu of testimony for the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP) hearing on February 24th to consider routine vaccinations to prevent HPV and the cancers they cause in men and women.

We are encouraged that the Food and Drug Administration's (FDA) approval of the anal cancer indication for the quadrivalent HPV vaccine means women will now be routinely recommended to vaccinate against anal precancer and cancer, in addition to cervical, vulvar and vaginal cancers. While we understand that no vote will be taken at the hearing, we urge you to build on the FDA's approval of the anal cancer indication and to extend routine recommendations for the HPV vaccine to include men. By preventing the most carcinogenic HPV infections, the HPV vaccine has great potential to prevent the chronic conditions, painful cancer treatments and deaths that result from the virus.

HPV, which causes cervical, anal, vulvar, vaginal, penile and head and neck cancers, is the most common sexually transmitted virus in the United States. It also causes genital warts, which can have negative social and sexual implications. According to the American Social Health Association, 75% of the United States population between the ages of 15 and 49 has had an HPV infection in their lifetime. Although the majority of HPV infections are fought by the immune system and do not become cancer, there are around 15 oncogenic HPV types that can lead to diminished quality of life and death.

HPV-related precancer and cancer morbidity is a significant burden – physically, emotionally, and financially – on patients and the healthcare community. While cervical cancer rates have fallen in recent years thanks to routine diagnostic tests such as the Pap smear, over 12,000 women are diagnosed with cervical cancer annually in the United

States, indicating that many women are still slipping through screening protocols. In the meantime, HPV-related cancers in other sites, such as the mouth and anus, are on the rise.

Anal cancer is a serious disease diagnosed in over 5,200 people a year and the incidence is growing. The leading cause of anal cancer – at 80 - 90% – is HPV. Unfortunately, anal cancer screening is not widespread. There is still much debate on the best screening practices within the clinical community. Many at-risk people do not know that they should be checked for anal cancer. Cancer therapies have not improved significantly in decades and late stage HPV-related cancer patient outcomes are still very poor. While we are hopeful the low number of therapeutic options may change in the future, our greatest prospect for putting a stop to death and illness related to HPV-associated cancer is prevention, education, and screening.

The quadrivalent vaccine, which protects against the HPV types that most commonly cause HPV-associated cancers, remains our best tool to reduce mortality and morbidity related to these diseases. It is unlikely that new therapeutics will be commercialized and nationwide screening programs will be implemented in the near future in a manner that will lead to a significant shift in early diagnosis and treatment of these diseases. United States inoculation rates for the vaccine are significantly less than other developed countries such as the United Kingdom and Australia. At such low rates, the United States population does not benefit nearly as much as it could from herd immunity through the vaccination of women. The routine vaccination of men provides an excellent opportunity to safeguard the entire population against diseases that otherwise lack sufficient resources.

### The Federal Government Has Recognized the Benefit to Vaccinating Against HPV

We commend the steps the FDA and ACIP have already taken to reduce HPV rates in the United States. From 2006 to 2009 the ACIP made a series of recommendations that included routine vaccination for the prevention of the HPV types that most commonly cause cervical, vulvar and vaginal cancers and genital warts in women. In men, the ACIP also provided guidance that the vaccine may be given to reduce the likelihood of acquiring genital warts. Specifically, the FDA approved the quadrivalent vaccine, Gardasil, to protect from HPV-16, HPV-18, HPV-6 and HPV-11, and the bivalent vaccine, Cervarix, to protect against HPV-16 and HPV-18.

The FDA announced in December 2010 that the quadrivalent vaccine also protects against anal precancer and cancer. Dr. Karen Midthun, Director of the FDA's Center for Biologics Evaluation and Research, stated in December that the vaccine "as a method of prevention is important as it may result in fewer diagnoses and the subsequent surgery, radiation or chemotherapy that individuals need to endure." The data submitted to the FDA illustrated that preventing infection by HPV-16 and HPV-18 would lead to significantly reduced rates of anal precancer and cancer, as many cell abnormalities are caused by these HPV types.

# **HPV Leads to Precancer and Cancer in Both Men and Women and Should be Actively Prevented in Both Populations**

By making the HPV vaccine more accessible to the public, the United States will provide for its citizens the ability to drastically reduce their exposure to the most common HPV types that progress to anal precancer and cancer, in addition to other HPV-related cancers, in men and women.

The need for the vaccine is particularly high for men-who-have-sex-with-men (MSM). While the absolute number of people annually diagnosed with anal cancer is larger for women, the MSM population has the highest incidence of the disease. HIV-negative MSM are seventeen times more likely to develop anal cancer and HIV-positive MSM are twice as likely as HIV-negative MSM to develop it. The HPV vaccine should be recommended for routine vaccination in all boys as MSMs may not self-identify until sexual activity has already commenced. Additionally, HPV is also present among the heterosexual male population leading to anal cancer, genital warts and HPV transmission.

We look forward to the decreased rates of anal precancer and cancer with the FDA recognition that the quadrivalent vaccine protects against anal cancer and the forthcoming inclusion of the anal cancer indication in routine recommendations for women. Of the estimated 3,260 women diagnosed with anal cancer last year, a significant number were caused by HPV-16 and HPV-18. By extending routine vaccinations to include anal cancer, you will be increasing comprehensive protection against a multitude of HPV-related conditions in women. Furthermore, if all boys are similarly vaccinated, the number of women who encounter HPV-related cancers through sexual activity will decrease.

### Anal Precancer and Cancer Is Difficult to Have and to Treat

Patients living with anal cancer face a physical battle with a painful disease and grueling treatment and surgeries. The body endures chemotherapy drugs, causing prolonged fatigue, extreme nausea, and debilitating chronic pain. Radiation to a very sensitive part of the body can cause diarrhea, changed sexual functioning, extreme burns, bleeding and long-term gastrointestinal complications. Some patients require body-changing ostomies.

Unfortunately, treatment for the disease has not changed in decades and therapeutic measures to treat patients are not improving. There has been minimal funding for studies to make treatment less toxic and uncomfortable. With a vaccine available to protect against this physically-draining disease, the ACIP has the ability to improve the lives of thousands of people, and to save lives that might be cut short from anal cancer.

We must also highlight the terribly oppressive social stigma associated with anal cancer. Anal cancer is a difficult disease for patients to openly discuss with their doctors, colleagues and loved ones, a challenge that makes dealing with this cancer even more difficult than its physical burden alone. This stigma prevents equitable conversation, education and resources for the patients who have this disease.

HPV also causes the precancerous lesions that lead to anal cancer called Anal Intraepithelial Neoplasia (AIN). While not generally life-threatening, AIN can drastically affect a person's quality of life long before it becomes invasive cancer. The treatment for persistent anal precancer is frequently uncomfortable and can have lifelong side effects. These patients need to be closely monitored and often have to return for multiple treatments. By encouraging wide-spread vaccination for young men and women, the ACIP will actively decrease the impacts of this painful, and often chronic, condition. Furthermore, wide-spread use of the vaccine will also provide protection against warts, which do not generally cause cancer, but are an often uncomfortable and embarrassing symptom.

## The Vaccine Provides the Best Mechanism to Prevent Anal and HPV-Associated Cancers

Increasing vaccination rates is an essential step in preventing all HPV-caused cancers. Unfortunately, vaccine coverage is currently very poor in the United States. In 2009, just 44% of adolescent girls received one dose of the vaccine and approximately 25% received all three doses. With more wide-spread vaccination rates, we would see a reduction in the numbers of people – both men and women – living with HPV-associated and anal cancers. In other countries like the United Kingdom and Australia, vaccination rates are much higher. In the United States, we need to vaccinate both men and women in order to protect the largest numbers of the population possible against the HPV-related precancers and cancers that affect the anus, cervix, vulva, vagina, penis, head and neck.

While we limit our communication today to our support for a routine vaccination program, we note that improved and increased screening protocols to detect precancerous lesions would go a long way to reducing the number of cancer diagnoses and deaths. In addition, the quadrivalent vaccine only protects against HPV types 6, 11, 16 and 18, which will mean screening will continue to be necessary to find cancers caused by other HPV strains.

We also appreciate that there is a cost-effective argument under consideration by the ACIP. We urge the federal government and Merck, GlaxoSmithKline, as well as any other pharmaceutical company in the HPV field, to work together to bring the cost of the vaccine down.

The recommendation to vaccinate men and women routinely against anal precancer and cancer presents an effective mechanism to stop the social stigma, chronic conditions, cancers and deaths that can result from exposure to HPV. A large-scale vaccination program will decrease HPV infection and transmission and directly lead to a reduction in HPV-associated cancers and genital warts. The benefits of vaccinating adolescent women and men won't reduce the incidence of anal cancer for years. That, in addition to the low United States vaccination rate, means that we must take immediate steps to reducing HPV-associated precancers and cancers. We urge you to extend the routine recommendation to men and decrease the burden of HPV and its resulting conditions. Increased access to HPV vaccination will translate directly into saved lives.

Thank you for consideration of this testimony.

Sincerely,

Justine, Tristan and Camille Almada

Justine, Tristan . Camille Almost

Co-Founders

The HPV and Anal Cancer Foundation

Nathan Schaefer

Director of Public Policy Gay Men's Health Crisis

Hargolies

Marker M. Dehagh

Jim Pickett

Chair

International Rectal Microbicide Advocates

Liz Margolies

**Executive Director** 

National LGBT Cancer Network

Som Kage

Alan Kaye

Co-Founder and Chairman

Certhy

National Cervical Cancer Coalition

Global Initiative Against HPV and Cervical Cancer

Sarina Kaye

**Executive Director** 

National Cervical Cancer Coalition

Brian Hill

Brian Hill

Founder and Executive Director

The Oral Cancer Foundation

Dana Van Gorder Executive Director

Project Inform