I hope you enjoy the first issue of Developments. Developments is a semi-annual newsletter that provides the latest information regarding infectious diseases and vaccine development. This newsletter also serves as a method of communicating with the over 10,000 individuals who have volunteered for our studies.

For those of you who participated in smallpox vaccine studies, please read the “Success Story” section. That section highlights how our study findings are making a difference. For those of you who like to stay current on the latest issues concerning infectious diseases and vaccine development, please read the “Cutting Edge” section. That section is meant to educate readers on the most advanced issues related to vaccine development.

Enjoy the newsletter and please do not hesitate to offer feedback. Please email your thoughts to: vaccine@slu.edu.

Sincerely,
Robert Belshe, M.D.

Cutting Edge: “Bird” Flu

The “bird” flu is an infection caused by “bird” flu viruses. In 2003 and 2004, outbreaks of H5N1 (a type of “bird” flu) occurred among poultry in 8 Asian countries. Over 100 million birds in the affected countries either died from the disease or were killed in attempts to control the outbreak.

Although human infections of H5N1 are rare and have not been spread from person to person, there have been a few cases in Thailand, Vietnam, and Cambodia. Most of those infected contracted the virus from handling infected poultry. The death rate of those infected is about 50%.

Scientists are concerned that the H5N1 virus could one day be able to infect humans and spread easily from person to person. Because the H5N1 virus does not commonly infect humans, there is little or no immune protection against it in the human population.

The Vaccine Center plans to help study an experimental “bird” flu vaccine this Fall.

To learn the facts about “bird” flu visit: http://www.cdc.gov/flu/avian/gen-info/facts.htm

Success Story: Diluting the Smallpox Vaccine

After September 11, expanding the U.S. smallpox vaccine supply was a critical part of the country's bioterrorism preparedness plan. Smallpox causes high fevers, aching and blisters, called pox, over the entire body. About 30% of infected people die.

The U.S. stopped routine smallpox vaccination in 1972 and the disease was declared eradicated worldwide in 1980. Leftover doses of the vaccine were stockpiled. The U.S. and Russian governments hold stocks of the virus, and bioterrorism experts worry they could fall into the hands of terrorists.

The Vaccine Center led a national study involving healthy adult volunteers and found that the country's limited stockpile of vaccine could be diluted 5 to 10 times and still be 97% - 99% effective respectively.

The findings suggest that the current U.S. stockpile of smallpox vaccine (about 15.4 million doses) could be extended to at least 75 million and perhaps up to 150 million doses. This stretches the current smallpox vaccine supply to protect more Americans!

The Vaccine Center thanks all of the study volunteers who helped make this public health achievement possible!
Vaccine Myth:

Vaccines Don’t Work.

The Haemophilus flu type b (Hib) was the most common cause of bacterial meningitis, causing about 15,000 cases and 400-500 deaths annually. The number of cases and deaths had been steady for decades.

After the current Hib vaccine was introduced in 1990, the amount of Hib cases dropped to less than 50 cases per year!

Hib vaccine is now routinely given as part of childhood vaccines.

- source: immunize.org

NOTE: The Vaccine Center participated in the research of the currently used Hib vaccine. We would like thank all of the study volunteers who helped make this scientific breakthrough possible.

Reminder:

August is National Immunization Awareness Month (NIAM). This year’s campaign slogan is, “Are you up to date? Vaccinate!” To learn if you are up to date on all of your vaccinations please visit:

http://www.cdc.gov/nip

Vaccine Trivia

Question: Who invented the polio vaccine?

Answer: Jonas Salk

50th Anniversary of the Polio Vaccine

April 12, 2005, marked the 50th anniversary of the first polio vaccine.

Polio was eliminated in the U.S. because protecting the public's health was perceived as a simple necessity, and every effort was made to see that the vaccine would be freely distributed and polio would be eradicated.

Since this effort 50 years ago, we now protect children from more than 12 vaccine preventable diseases and disease rates have been reduced by 99% in the U.S.

Yet, without diligent efforts to maintain immunization programs here and strengthen them worldwide, the diseases seen 50 years ago remain a threat to our children. Learn more at:

http://www.cdc.gov/nip/events/polio-vacc-50th/default.htm

Latest Vaccine Recommendations

Tetanus, Diphtheria and Pertussis (Tdap) Vaccination for Adolescents

On June 30, 2005, the Advisory Committee on Immunization Practices (ACIP) to the Centers for Disease Control and Prevention (CDC) recommended that adolescents 11 and 12 years of age be given Tdap instead of the tetanus-diphtheria (Td) booster currently given to adolescents.

ACIP also recommended that Tdap be given to 13-18 year-olds who missed their 11-12 year dose of Td, and 11-18 year-olds who have already been vaccinated with Td are encouraged to receive a dose of Tdap to further protect against the pertussis. Learn more at:

www.cdc.gov/nip/pr/pr_tdap_jun2005.htm

Meningococcal Vaccination for Adolescent & College Freshman

The ACIP currently is recommending that 11-12 year-olds and college freshman receive the meningococcal vaccine, MCV4. Learn more at:

www.cdc.gov/nip/vaccine/mening/mening_fs.htm

Vaccine Studies that Need Volunteers

The Center for Vaccine Development studies a wide-variety of experimental vaccines including: flu, TB, smallpox, herpes, hepatitis C, and many more. Studies currently seeking volunteers are:

Herpes Vaccine Study for 10-17 year-old females:

- Purpose: To evaluate the safety and effectiveness of an experimental vaccine to prevent herpes.
- Key points: Your child CANNOT get herpes & will NOT be exposed to herpes
- Time commitment: About 5 visits over 12 months: 3 about 60 min. & 2 about 20 min.
- Payment: $50 per visit

Herpes Vaccine Study for 18-30 year-old females:

- Purpose: To evaluate the safety and effectiveness of an experimental vaccine to prevent herpes.
- Key point: You CANNOT get herpes & will NOT be exposed to herpes
- Time commitment: About 9 visits over 20 months: 4 about 60 min. & 5 about 15 min.
- Payment: $50 per visit

To learn more about these vaccine studies:

Phone: 314-977-6333
Email: vaccine@slu.edu
Website: http://medschool.slu.edu/vaccine