

UNDERSTANDING YOUR IMMUNIZATIONS

*Supplemental information as companion to brochure:
"Immunization requirements for incoming U.Va students, 2010"*

Tuberculosis (PPD)

- Based on the guidelines published by The American College Health Association, the recommendations from the Centers for Disease Control (CDC) and the American Thoracic Society, Tuberculosis Screening is required within six months of college entry. This is done by having a health care provider conduct a **Risk Assessment** to determine if a 2 Step TB test or a QuantiFERON-TB test is needed.
- The 2 Step TB test consists of having the first PPD placed with the result being read by a health care provider within 48 – 72 hours. The second PPD is placed at least 7 days after the reading of the first but less than 3 months after receiving the first. The second PPD result must also be read by a health care provider within 48 – 72 hours after placement.
- The QuantiFERON-TB test involves the drawing of a blood sample. The result can usually be available in 3 days.
- No risk assessment is conducted on Health Professions (Medical and Nursing) Students. They are required to have a 2 step TB test or the QuantiFERON-TB test.

Meningitis and Menactra Vaccine

- Since 2001, all students entering four year institutions in Virginia are required to receive the meningococcal meningitis vaccine or sign a waiver to decline.
- Last year, almost 95% of the entering class chose to be vaccinated instead of signing the waiver. Certain features of college life seem to place students at greater risk including: living in crowded conditions such as residence halls, and lifestyle factors such as drinking alcohol, patronizing bars, and exposure to tobacco smoke.
- Student Health strongly recommends that students are vaccinated for meningococcal disease with Menactra, the latest and best formulation of the vaccine.

Hepatitis B

- Since 2005, Virginia requires all students entering four year institutions to receive Hepatitis B vaccine, or sign a waiver to decline.
- Most students residing in Virginia have received Hepatitis B vaccine, as it has been administered universally to infants and young students for many years.
- Students can complete the 3-shot series at Student Health, if series initiated prior to coming to school.
- Hepatitis B is a very serious viral liver infection that can lead to cirrhosis and liver cancer. It is transmitted in blood and other body fluids, and in college students the most common mode of transmission is through sexual activity.

Hepatitis A

- Hepatitis A is recommended (not required) for entering students, and is recommended because U.Va. students travel frequently when in school, and may travel to an area of the country or world where they may be exposed to Hepatitis A, which is transmitted in water or food.

Measles, Mumps and Rubella (MMR)

- Measles, mumps and rubella shots are required for U.Va. students and are a series of two doses.
- One shot of MMR is only 80% protective against mumps, while two MMR shots is 90-95% protective. Two MMR shots are required by U.Va.
- U.Va. has experienced two outbreaks of mumps in the last two academic years. During 2006/07 we had 53 cases, while during March/April 2008, we had 11 cases. All students had received the required two shots of vaccine. Among the vaccine recipients who were ill with mumps, there were no complications or hospitalizations and all students recovered uneventfully. So even though they got mumps, they were protected from complications.
- It is likely both outbreaks resulted from importation of mumps virus from elsewhere in the country or world. Because the vaccine is not 100% protective, introduction of the virus into a highly vaccinated population can still cause disease. However, because of changes in University policy for 2007/08 (including a late fee for not turning in immunization records on time) we had all but a handful of students who complied with the two shot requirement as opposed to hundreds the previous year. So achieving very high rates of compliance with the two shot requirement appears to have resulted in far fewer cases of mumps.

Chicken Pox

- Chicken pox is a relatively common ailment in students, and we see a few cases at U.Va. each year.

- Students are usually quarantined for 1-2 weeks and sometimes sent home, particularly if living in the residence hall. If a student has never had chicken pox, they are likely susceptible.
- The vaccine is safe and effective, and is available at Student Health.

Influenza

- Influenza is a significant public health issue, and many U.Va. students get the flu each year. Student Health experienced over 1,000 students with the flu this past year.
- Students are usually sick for 3-5 days, can get a complication such as pneumonia, and end up missing classes, term papers, and exams. They can also bring the flu home to parents, siblings, or elderly or frail relatives.
- The flu vaccine is generally highly effective, and Student Health strongly recommends this vaccine for students.
- Students will receive information about the flu shot clinic via e-mail and press announcements as the time approaches
- Also available is FluMist, an intranasal variety of flu vaccine. FluMist is indicated for active immunization for the prevention of disease caused by Influenza A and B viruses in healthy patients aged 5 to 49. It is administered into the nasal cavity as a misted spray, which offers another choice for administration of the vaccine. More information available at www.flumist.com.

HPV and Gardasil Vaccine

- Human papillomavirus (HPV) is a viral infection that is transmitted through sexual contact. This virus has been shown to be the cause of virtually all cervical cancers and all precancerous abnormalities on a woman's Pap smear.
- A vaccine called Gardasil that prevents 70% of HPV infections, including 89% of genital warts, was licensed by the FDA in June 2006, and is now recommended by the CDC for all females between the ages of 11 and 26 years. The vaccine is safe and very effective, and costs about \$143-150 for each dose (series of three shots in six months).
- Student Health strongly recommends all women up to the age of 26 get this vaccination; since 2006, 2,999 U.Va. students have received Gardasil.
- Gardasil has been approved by the FDA for vaccination in boys and men ages 9 through 26 for the prevention of genital warts caused by HPV 6 and 11.

Pertussis (Whooping Cough) and Tdap Vaccine

- A new, improved Pertussis, or Whooping Cough vaccine, is now included in the formulation of the tetanus and diphtheria vaccine recommended for adolescents and adults. Since 2005, the new formulation of the vaccine called "Tdap" has been licensed for use. This new vaccine can replace the regular 10 year tetanus booster for any adult under age 64, and can also be administered to students who simply want to prevent getting whooping cough during college.
- The vaccine can be given within 2-5 years of receiving the last tetanus booster (depending on student's age), and it is desirable to receive it at the same time as Menactra, (meningitis vaccine),
- Whooping cough has become a significant problem in many communities throughout the United States- including Charlottesville. Four years ago there were several hundred cases of whooping cough among high school students in the community and it spread to the U.Va. student population.

Polio

- **Children:** Most people should get polio vaccine when they are children. Most children get 4 doses of IPV, at the following ages:
A dose at 2 months
A dose at 6-18 months
A dose at 4 months
A booster dose at 4-6 years
- **Adults:** Most adults do not need polio vaccine because they were already vaccinated as children. But three groups of adults are at higher risk and *should* consider polio vaccination. (1) people traveling to areas of the world where polio is common, (2) laboratory workers who might handle polio virus, and (3) health care workers treating patients who could have polio. Adults in these three groups who **have never been vaccinated against polio** should get 3 doses of IPV: The first dose at any time, the second dose 1 to 2 months later and the third dose 6 to 12 months after the second dose. Adults in these three groups who **have had 1 or 2 doses** of polio vaccine in the past should get the remaining 1 or 2 doses. It doesn't matter how long it has been since the earlier dose(s). Adults in these three groups who **have had 3 or more doses** of polio vaccine (either IPV or OPV) in the past may get a booster dose of IPV.

Fall Vaccine Clinic: November 4th, 2010, Newcomb Hall Ballroom