



# Infectious Diseases

The VA and DoD health care systems have long recognized the dangers posed by infectious diseases and the importance of vaccines. After the Spanish-American War, Walter Reed, MD, led U.S. Army boards that investigated typhoid fever and yellow fever, which had killed more soldiers than had died on the battlefield during the war. That tradition of infectious disease epidemiology continues today. Recently, scientists at Walter Reed Army Institute of Research have developed 2 possible Ebola vaccines (currently in phase 2 trials), a possible Zika vaccine (phase 1 trials), and vaccine candidates for Middle East Respiratory Syndrome (MERS), HIV, and simian immunodeficiency virus.

Vaccines are among the safest medical products available and are considered the most effective. It's

not surprising, therefore, that the VA and DoD actively promote the use of vaccines. In 2015, the VA and DoD each dispensed more than 1 million vaccines to prevent the spread of infectious diseases, ranging from influenza and viral hepatitis to *Streptococcus pneumoniae* and yellow fever. Increasingly, researchers are exploring the use of vaccines to prevent cancers. The human papillomavirus (HPV) vaccine not only prevents cervical cancer, but also anal, vulvar, and vaginal cancers.

Despite the successful development of vaccines, controlling infectious diseases remains a challenge in both the VA and DoD health care systems. Cases of many infectious diseases continue to grow. The number of veterans with herpes zoster/shingles more than doubled between 2000 and 2015.

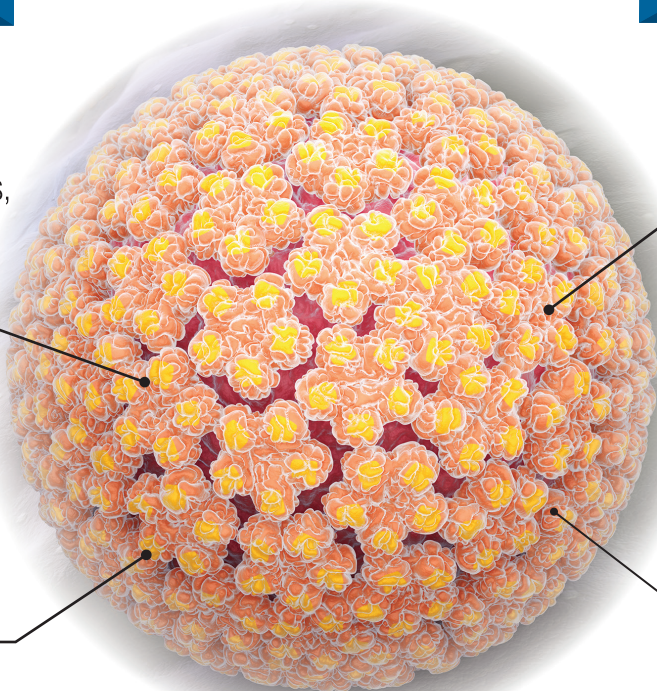
## Human Papillomavirus<sup>1-3</sup>

**14.6%** of male service members tested positive for at least 1 of 4 HPV serotypes, when they entered military service

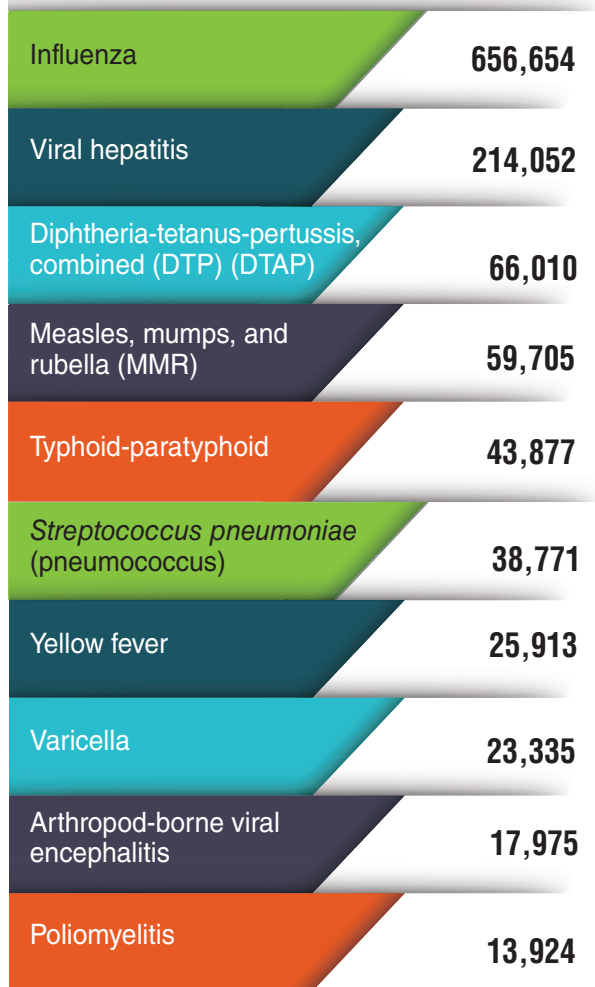
**34.2%** tested positive for at least 1 of 4 HPV serotypes 10 years later

**7.3%** of all adults tested aged 18-69 years had HPV infection

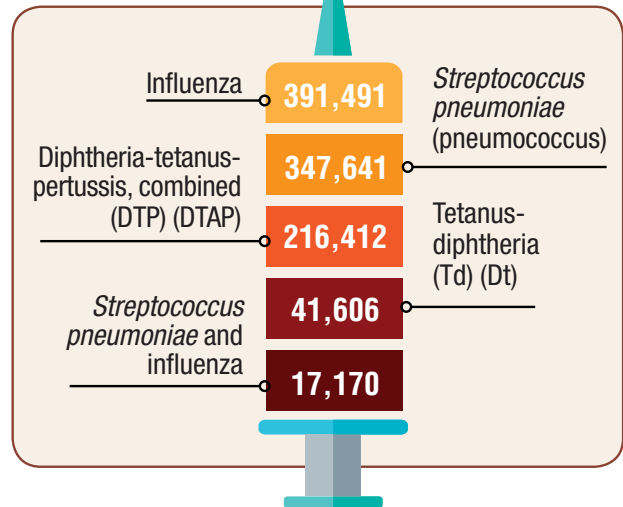
**304,021** cases of HPV infection were diagnosed from 2000 to 2012 among U.S. active-duty service members



## Top 10 Vaccinations, DoD 2015<sup>4</sup>



## Top 5 Vaccinations, VA 2015<sup>5</sup>



## HIV and Veterans<sup>6</sup>

### All veterans

newly diagnosed with HIV were connected to care within 90 days (Jan-Sep 2015)



## Veteran Herpes Zoster Cases, 2000-2015<sup>7</sup>

