Many of us are in the midst of becoming fully vaccinated or waiting for our turn. Vaccines are important to help slow the spread of disease such as, COVID-19. Vaccines contain only killed or weaken forms of germs like viruses and bacteria, and in turn, train our immune systems to create proteins. These proteins, known as antibodies, will train our immune system to fight disease. When individuals are vaccinated the vaccine protects them from getting the disease and passing on the pathogen.

**How Vaccines Work:**
Vaccines help our bodies develop immunity by imitating an infection. This type of infection almost never causes illness, but it does cause the immune system to produce T-lymphocytes and antibodies. Sometimes vaccines, like the COVID-19 vaccine can cause minor symptoms, such as fever. These minor symptoms are normal and should be expected as the body builds immunity.

Once the imitation infection goes away the body is left with “memory” T-lymphocytes as well as B-lymphocytes that will remember how to fight that disease in the future.

Typically it will take a few weeks for the body to produces the T and B lymphocytes after vaccination. This is why it is important to continue to follow the guidelines put forth by the CDC to keep yourself protected right before and after vaccination.

**What is in a vaccine?**
- The antigen; this a killed or weakened form of the virus or bacteria, which will train our bodies to recognize and fight
- Adjuvants, which help to boost our immune response
- Preservatives, to ensure the vaccine stays effective
- Stabilizers, which protect the vaccine during storage and transportation

Vaccine ingredients can look unfamiliar but many of the components used in vaccines occur naturally in the body, environment and food we eat.

**What is ‘Herd Immunity’ and how is it helping us?**
‘Herd immunity’ is the indirect protection from an infectious disease. This protection occurs when a population is immune either through vaccination or immunity development through previous infection. When it comes to COVID-19 the WHO and CDC are utilizing ‘herd immunity’ through vaccination. A goal of herd immunity is to keep vulnerable groups who cannot get vaccinated safe and protected from the disease. Currently the portion of the population that must be vaccinated against COVID-19 is unknown.

**After getting a COVID-19 vaccine, will I test positive for COVID-19 on a viral test?**
Receiving the COVID-19 vaccine will not affect the PCR or antigen test results since these tests check for active disease, not immunity. There is no virus present in the mRNA COVID-19 vaccine.

The vaccine is intended to induce an immune response, so there is possibility that you may test positive for an antibody test.

**If I already had COVID-19 and recovered, do I still need to get vaccinated?**
YES! Regardless if you have already had COVI-19 or not you should be vaccinated. Experts do not yet know how long those who are recovering from COVID-19 are protected from getting sick again. If you are currently recovering from COVID-19 please discuss with your doctor about when you are eligible to receive the COVID-19 vaccine.

**QUESTIONS:**
Students contact Health Services at healthservices@baypath.edu

Employees contact Erica Blyther, RN at eblyther@baypath.edu