

# Nurse's Notes Vol. 8

by Marie Angell Habershaw BSN, RN



It's hard to believe it has been nine weeks of this new way of life. This has not been easy or comfortable, but you have all been working so hard to adjust and stay positive. It is an accomplishment for sure, and it is my hope and prayer that you are all safe and well.

This week, we are hearing how scientists around the world are working non stop on COVID-19 vaccine development. This will be pivotal in fighting the physical, emotional and economic aspects that the virus has had, and will continue to have. Vaccine development and contact tracing are the two most important issues on the horizon. So let's look at how vaccines are developed.

## General Vaccine Information

All vaccines contain the same genetic material as the disease they are trying to prevent, but in weakened forms. This allows us to be able to have the vaccine without getting sick ourselves.

The purpose of the vaccine is to stimulate our own body's defense system - the immune system. This allows us to produce antibodies, the same as if we were exposed to the disease itself. So after the body has had a chance to develop these antibodies, the immune system has a memory and will go into action to defend against the virus.

For children, vaccines have successfully managed to control many serious and life threatening diseases such as the following: Measles, Varicella, Meningitis, Polio, etc. Successful vaccine development has dramatically changed the course of these and many other diseases.

## What Would a COVID-19 Vaccine Look Like?

When we are exposed to this or any other virus, the germ enters our bodies through the nose, mouth or eyes. This is thought to be the way the virus is transmitted. This is why we are told to cover our mouths, wash our hands, and to not touch our faces. Once in the body, the virus rapidly multiplies and causes an infection. This is what causes us to feel ill. As a response to the infection, the body's immune system is triggered to produce antibodies - these white blood cells fight off the infection. A vaccine mimics the infection, but almost never causes illness because of the weakened state of the germ. But, the vaccine does trigger the immune system to develop the antibodies necessary and specific to fight COVID-19.

As with any vaccine, there may be a few people who will develop mild and temporary side effects. These could be a rash at the site of the vaccine injection, headache, etc. It is important to know that these side effects are mild and will go away quickly - but the body will hopefully maintain the immunity.

## Vaccine Development News

There are many companies diligently working on COVID-19 vaccine development. One Massachusetts based company, *Moderna*, announced this week that they are beginning a Phase II trial after receiving approval from the FDA. These trials are focused on safety and making sure that while the vaccine would be effective in preventing the disease transmission, it would also have no serious or long lasting side effects.

Usually, vaccine development is a lengthy process. Because of the devastating effects that COVID-19 has had on our safety and on our economy, researchers are in hyper drive to develop this vaccine. Globally, it is inspiring to see scientists working together on this common goal.

## While We Wait

- Practice social distancing
- Wash your hands
- Wear a mask
- Avoid touching your face,
- Teach your children - they will need to be ready to practice all this when they go back to school

As always, if I can be of any help to you, feel free to email me at [mhabershaw@iccatholicschool.org](mailto:mhabershaw@iccatholicschool.org) Take care!