Today’s informational session began with Linda Kuster introducing Dr. Rhonda Moore Johnson, MD, MPH. a pediatrician originally from Pittsburgh who returned more than 20 years ago. She has recently retired from Highmark BC/BS. She works as an independent contractor with the Allegheny County Health Department to do community education about COVID-19 and vaccinations. After cautioning the audience that this talk was not to be a substitute for a personal consultation with one’s doctor and that the opinions are only hers, she began with an overview of COVID-19 (SARS-CoV-2).

COVID presents differently in different people and the reason for the difference is unknown, although people who are older or who have certain medical conditions can be at greater risk. Of 10 deaths in the US have been people ages 65 and older.

- 50 – 64, chances are one in 50
- Under 24, chances are 1 in 5000
- 180 children have died; they have mostly been Black, Latinx and Native American.

**COVID-19 timeline**

- Exposure / Pre-symptoms – infected people can go 2-14 days without symptoms, most will feel symptoms between days 4-5
- Day one – first start feeling sick with a wide variety of symptoms
- Days 2-10 – symptoms increase and may have more symptoms
- Days 10-12 – this is typically when those with severe case will need to be admitted to ICU with acute respiratory disease; usually between days 8 and 12.
- Days 10-14 – for those with a mild case of COVID-19, this is typically when they begin to feel better. Cough will last an average of 19 days.

**Variants**

Because of rapidly emerging coronavirus variants, the pandemic of 2021 is different of the pandemic of 2020. These variants spread more easily and may be associated with an increased risk of death. The virus has mutated (as all viruses do) and this virus has a greater opportunity for natural mutation because of how the widespread disease is. So far, the following mutations have been identified:

- B1.1.7 (began in UK and is currently in Allegheny County) is doubling every 7 days.
- B.1.351(South Africa and now in South Carolina)
- P.1 variant (Brazil, now in US)
There are sure to be more variants emerging. It is not certain if these variants will be detected by current tests or if they’ll be prevented by current vaccines.

**Immunity and the COVID-19 vaccine**

There are two ways to build immunity: natural (by getting the virus) and vaccination which trains your body to recognize what you are vaccinated against.

Your immune system is your first defense against infection. Thus, sleep, exercise and a healthy diet are key; she also recommends multivitamins. Avoid stress, tobacco, alcohol.

**Vaccine safety**

Dr. Johnson stressed that the vaccines are SAFE with few and tolerable side effects. Safety is the top priority of the FDA, which reviews all data from clinical trials. After authorization, the vaccine is monitored by the FDA and CDC.

These trials have been robust; the only unusual feature of these trials is the shorter period of observation after administering the vaccine.

Key facts:

- Vaccines help prevent you from getting sick, even if you are infected.
- Those who've had coronavirus will still benefit from being vaccinated. However, it is recommended that those who have had COVID-19 wait for 90 days AFTER they are symptom-free.
- Vaccines cannot give you the virus.
- Vaccines will not cause you to test positive on the viral test (you will test positive on the antibody test).
- The virus can stay in urine and stool for up to three months and still be infectious.
- The vaccines do NOT cause infertility.
- There are no microchips or heavy metals in the vaccine.
- Side effects are minor and mostly clear up in 1-2 days.
- Nobody has died from the vaccine.
- There is a lot of transparency online about the vaccine. You can learn about the trials (even the names and demographic information about the participants) and the side effects.
- The vaccine is not recommended for anyone 16 and under right now because there haven’t been trials on children. Pfizer and Moderna are currently doing clinical trials on children. Looks like older children will have a vaccine by the end of the summer; there is nothing in the works for younger children.
The COVID-19 vaccine uses messenger RNA (mRNA). mRNA vaccines do not use the virus, never enter the nucleus of the cell and do NOT interact with our DNA. Cells break down and get rid of the mRNA as soon as they are done using the vaccine’s “instructions.” This is NOT the first mRNA vaccine so we know they’re safe. The mRNA has been used for 40 years and is used for other medications. Originally developed for Ebola and Zika viruses.

**Vaccination tips**

- The vaccination is free, although the provider may bill your insurance company for an administrative fee.
- Take your photo ID and insurance card with you to the vaccination site.
- No special diet or fasting is needed.
- If you have allergies, talk with your doctor about whether you should get the vaccine. If you do have an allergic reaction, it’ll happen mostly within 15-30 minutes after the vaccine, which is why you are required to stay at the vaccination site for a period of time after receiving the injection.
- Keep your card in a special place – you might need it to travel, work or go to school.
- After your first injection (for a two-dose vaccine), enroll in v-safe, which will remind you when you need a second shot.
- After you are vaccinated, continue using all measures to protect yourself and others (masking, hand washing, distancing, cleaning and disinfecting surfaces, avoiding crowds and indoor spaces with poor ventilation). Mask layers are important.
- The vaccine doesn’t stop you for getting the virus in the nose and throat; it just stops it from entering your body. Thus, it is important that you mask to prevent spreading the disease.

The vaccine is currently voluntary, but this virus is very real. It can kill you in 5 days or leave you with significant long-term health problems (e.g., lung problems/transplant, limb amputation, dementia, heart damage).

Prevention is still the most important thing!

**For more information**

- CDC
- PA Department of Health
- Allegheny County Health Department
- Dr. Johnson’s YouTube channel at [https://www.youtube.com/channel/UCom_B8Wj5txTJTYY6sb8CcQ](https://www.youtube.com/channel/UCom_B8Wj5txTJTYY6sb8CcQ)

**Questions from the audience**

*Q: How long will the children’s trials be?*
A: Dr. Fauci believes the children’s vaccine will be approved. Currently, there are trials for 12-to-15-year-olds (Pfizer) and 13-to-17-year-olds (Moderna). Pfizer has 3000 children enrolled; Moderna is still enrolling children.

Q: *What are your thoughts on the pathogenic priming problem that happened during the previous SARS vaccine tests - where many mice that had been vaccinated and were then exposed to the live virus got very sick or died? I’ve read that type of testing hasn’t been done on the Covid19 vaccine.*

A: This is the first Dr. Johnson has heard of this. She will try to find out and send what she finds to Linda.

Q: *Are the vaccines still considered experimental?*

A: They’re approved under the emergency use authorization and are considered *investigational*. They are not experimental.

Q: *Are there any predicted or potential negative long-term effects. Is there a way to be updated on the study information to monitor new findings?*

A: Don’t know the answer to the first part of the question. This summer, it will only be a year since they were first studied, so we have no long-term data. VAERS is a public data base with every side effect listed and all related information; use it to monitor all adverse effects.

Q: *When do you think teachers will be able to be vaccinated?*

A: She wishes she had information about that. Every state is allocating the vaccine differently. It breaks her heart that kids are not in school. Remote learning doesn’t work for so many kids and families.

Q: *In your medical opinion, which vaccination works best for the new strains of the virus?*

A: They all work for the strains in the US (the UK Variant). AstraZeneca vaccine was withdrawn from South Africa because it’s not working against the new South African strain.

Q: *Is the vaccine safe for pregnancy and breast feeding?*

A: The vaccine is not known to have any effect on fertility, but it’s not known if actually getting the virus has an effect on fertility. However, the *virus* can have devastating effects on the mother’s health. There were women in every clinical trial who got pregnant after the trial and nothing happened, but there hasn’t been a controlled randomized study. You should discuss this with your doctor.

We don’t know if the virus is transmitted in breast milk, but we know it can cross the placenta. To date, no vaccines have ever been found in breast milk. Women who are vaccinated are told to continue breastfeeding.