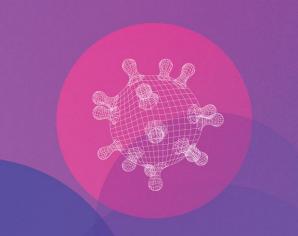
## COVID-19 Vaccine for Townhall: Second Shot

Linda Goss DNP, APRN-BC, CIC, COHN-S, FAPIC, Interim Director, System Infection Prevention and Control 12/30/2020







Recap:

- QHS has received and is immunizing staff with the Pfizer BioNTech COVID-19 vaccine
- Collectively the organization has immunized close to 4,000 employees and providers
- Few adverse events have been reported and none have been recorded as anaphylactic reactions
- The vaccine is recommended to be delivered in two doses 21 days apart to be fully effective
- Protection can be achieved in as little as 7 days per the data however, in order for antibodies to fully develop at least 14 days are required.



- The body relies on millions of tiny proteins to keep itself alive and healthy, and it uses messenger RNA, of which every strand is made up of four molecular building blocks called nucleosides. These tell cells which proteins to make.
- Designing your own mRNA, would theoretically, allow the process to be hijacked and fight a potential infection or reverse a disease process.
- Synthetic mRNA had to be able to "sneak in" as to not alert the body's defenses before the full potential could be realized.
- Katalin Karikó, an SVP at BioNTech, a name blended from Biopharmaceutical New Technologies, was a researcher attempting to obtain grants to prove this theory. She now oversees the mRNA work after years of rejection, grant denial and even a demotion at the University of Pennsylvania. She is now overseeing the mRNA technology at BioNTech.
- Moderna, a word developed from modified and RNA, also produces a vaccine using the mRNA technology and recently received full FDA EUA.



- QHS has received doses of the Pfizer BioNTech Covid-19 vaccine however we could receive Moderna in the future,
- The two vaccines are not interchangeable
- They both require two doses for full effectiveness and the recommendation is to receive the Pfizer BioNTech Covid-19 vaccine second dose at 21 days and the Moderna Covid-19 vaccine second dose at 28 days.
- mRNA vaccines have been studied before for flu, Zika, rabies, and cytomegalovirus (CMV).
   When the information about the COVID-19 virus became available scientists began designing the mRNA instructions for cells to build the unique spike protein into an mRNA vaccine.
- Pfizer vaccine developers report 95% effective at preventing laboratory-confirmed COVID-19 illness in people without evidence of previous infection after two doses.
- Moderna vaccine developers report 94.1% effective at preventing laboratory-confirmed COVID-19 illness in people who received two doses who had no evidence of being previously infected.
- Pfizer is approved by EUA for ages 16 and above
- Moderna is approved by EUA for ages 18 and above



What is in the news:

### First case of highly infectious coronavirus variant detected in Colorado

Scientists say the coronavirus variant discovered in the United Kingdom is more transmissible but does not make people sicker. (The Washington Post)

By <u>Joel Achenbach</u>, <u>Ben Guarino</u>, <u>Lena H. Sun</u> and <u>Isaac Stanley-Becker</u> Dec. 29, 2020 at 7:45 p.m. EST

"A federal scientist familiar with the investigation said the man's lack of known travel — in contrast with most confirmed cases outside the United Kingdom — indicates this is probably not an isolated case."

"The Centers for Disease Control and Prevention confirmed as much in a statement Tuesday afternoon, saying additional cases with the new variant will be detected in the United States in coming days. The variant's apparent increase in contagiousness "could lead to more cases and place greater demand on already strained health care resources," the agency said in a statement."

Ref: <u>https://www.washingtonpost.com/health/coronavirus-variant-colorado-us/2020/12/29/8e6379fc-4a01-11eb-a9f4-0e668b9772ba\_story.html</u>



### In the news:

## The curse of the incidental illness: Seen as side effects to Covid vaccinations, ailments may have little to do with them

### BY HELEN BRANSWELL @HELENBRANSWELL DECEMBER 28, 2020

"On an average day, 110 people in this country may <u>develop Bell's palsy</u>, a temporary facial paralysis, and another 274 will develop <u>Guillain-Barré syndrome</u>, a form of paralysis that usually resolves over time. The trigger for these medical events often isn't known. But when they happen shortly after someone gets a vaccine — especially a new one — well, conclusions will be drawn."

"Britain has reported several cases of anaphylaxis among people who have received the Pfizer vaccine. In the U.S., about 11 cases have been reported since the vaccine rollout began earlier this month, according to the CDC."

"The idea that 1 in 500,000 people who are inoculated with a Covid vaccine might have a serious side effect — this is a hypothetical example — might seem too risky to some people. Explaining to them that they run the same risk of being hit by lightning in a given year can put a different spin on that piece of information."

"Likewise, pointing out that 1 in 500 New Jersey residents have already died from Covid-19 can remind people that the risk of not being vaccinated far exceeds the rare risks the vaccines may possibly pose, Buttenheim said." ref: <u>https://www.statnews.com/2020/12/28/chance-illnesses-</u> after-covid-19-vaccinations-could-test-public-confidence-even-if-the-problems-are-unrelated/







### Second dose:

A lot of QHS employees and providers have received their first dose

The second dose is due next week for the "first five" and the remaining first dose recipients.

What to expect:

WHAT ARE THE RISKS OF THE PFIZER-BIONTECH COVID-19 VACCINE?

Side effects that have been reported with the Pfizer-BioNTech COVID-19 Vaccine include:

Much of the same

- injection site pain
- tiredness
- headache
- muscle pain
- chills
- joint pain
- fever
- injection site swelling
- injection site redness
- nausea
- feeling unwell
- swollen lymph nodes (lymphadenopathy)

There is a remote chance that the Pfizer-BioNTech COVID-19 Vaccine could cause a severe allergic reaction. A severe allergic reaction would usually occur within a few minutes to one hour after getting a dose of the Pfizer-BioNTech COVID-19 Vaccine. For this reason, your vaccination provider may ask you to stay at the place where you received your vaccine for monitoring after vaccination. Signs of a severe allergic reaction can include:

- Difficulty breathing
- Swelling of your face and throat
- A fast heartbeat
- A bad rash all over your body
- Dizziness and weakness

These may not be all the possible side effects of the Pfizer-BioNTech COVID-19 Vaccine. Serious and unexpected side effects may occur. Pfizer-BioNTech COVID-19 Vaccine is still being studied in clinical trials.



### What to Expect after Getting a COVID-19 Vaccine

#### Accessible version: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/expect/after.html

COVID-19 vaccination will help protect you from getting COVID-19. You may have some side effects, which are normal signs that your body is building protection. These side effects **may feel like flu** and **may even affect your ability** to do daily activities, but they should go away in a few days.

#### **Common side effects**

On the arm where you got the shot:	Throughout the rest of your body:
• Pain	Fever     Tiredness
<ul> <li>Swelling</li> </ul>	Chills     Headache

### **Helpful tips**

If you have pain or discomfort, talk to your doctor about taking an over-the-counter medicine, such as ibuprofen or acetaminophen.

#### To reduce pain and discomfort where you got the shot: To reduce discomfort from fever:

- Apply a clean, cool, wet washcloth over the area.
   Drink plenty of fluids.
- Use or exercise your arm.

### When to call the doctor

In most cases, discomfort from fever or pain is normal. Contact your doctor or healthcare provider:

- If the redness or tenderness where you got the shot increases after 24 hours
- If your side effects are worrying you or do not seem to be going away after a few days

#### Remember

Side effects may feel like flu and even affect your ability to do daily activities, but they should go away in a few days.

Dress lightly.

- With most COVID-19 vaccines, you will need 2 shots in order for them to work. Get the second shot even if you have side effects after the first one, unless a vaccination
  provider or your doctor tells you not to get a second shot.
- It takes time for your body to build protection after any vaccination. COVID-19 vaccines that require 2 shots may not protect you until a week or two after your second shot.
- It's important for everyone to continue using all the tools available to help stop this pandemic as we learn more about how COVID-19 vaccines work in real-world conditions. Cover your mouth and nose with a mask when around others, stay at least 6 feet away from others, avoid crowds, and wash your hands often.

#### HEALTHCARE PROVIDER, PLEASE FILL IN THE INFORMATION BELOW:

If your temperature is \_\_\_\_\_°F or \_\_\_\_\_°C or higher or if you have questions, call your healthcare provider.

Tell your healthcare provider about:

#### Healthcare provider phone number:

Medication (if needed):

Take \_\_\_\_\_\_ every \_\_\_\_\_ hours as needed. (type and dose or amount)



### Ask your healthcare provider about getting started with v-safe

Use your smartphone to tell CDC about any side effects after getting the COVID-19 vaccine. You'll also get reminders if you need a second dose

> Learn more about v-safe. www.cdc.gov/vsafe

- For QHS employees contact the EH hotline
- At 691-8720
- For non QHS employees contact the Community hotline at 691-2916



# The vaccine isn't mandatory But.....