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Paragon Orthopedic Center
Grants Pass, Oregon

How Safe Is The Covid-19 Vaccination?

For some, the vaccine looks to be available before the year's end. There is a lot of misinformation being spread about this vaccine, so we're here to set out some facts and to help you understand how we got to this point.

How did they get it so quickly? A few key factors led to its quick development: **1**-research on SARS-1 helped scientists have a jump on figuring out a vaccine for SARS-2, which develops into Covid-19, **2**-it's an acute and not a chronic infection, so there is a response scientists can aim to induce in order to provide protection, **3**-researchers have more modern techniques that speed up their progress on vaccines tremendously, **4**-a lot of money was made available for the work to be done (billions of dollars), and regulations have been streamlined for this emergency.

Can we be sure it's safe? There is a difference between something in medicine being called "safe" and "harmless". When it comes to vaccines, if you are saying they are safe because they have no adverse effects, then none of them are because they all have had some side effects. Every medicine has unwanted side effects, but the benefits must far outweigh unwanted effects for it to be used. The providers at Paragon Orthopedic Center suggest using ibuprofen for many aches and pains, yet it sometimes has the unwanted side effect of creating small holes in the lining of your stomach and causing bleeding. The benefits far outweigh these risks, so you take it. The same is for vaccines, but since they are given to healthy people, the risks have to be very small. There could be unwanted side effects that arise as it is taken by more people. This happens with every new vaccine. But let's put this in perspective. You get into a car daily and the risk of you being in a car accident is *far greater* than you suffering a serious side effect from a vaccine. Almost everything in life has some degree of risk. It will be a challenge to determine what conditions have been caused by the vaccine and which would've happened to the individual even if they never had the vaccine. You can almost anticipate the newspaper headlines which will instill fear already, but research will have to weed out the facts. Don't fall for fake news or inflammatory headlines.

Will life return to normal once I get the vaccine? While we all want this, the answer is no. There will still be several unknowns, such as whether you can get COVID again and at what point we will have "herd immunity". You won't know who has had the vaccine and who hasn't. Right now, it looks to be a two-part vaccine, requiring two shots, and your body will take time to develop the immune response to the injection. Experts don't know how long after getting the shots that you will remain protected. Safety is of course a top priority in the development of a vaccine to stop Covid-19. Getting the vaccine will be a personal decision, but as the CDC says, the vaccine will be a safer way to build your protection against having this potentially deadly, potentially life-changing virus. Keep in mind that this is not the seasonal flu. Remember they have documented some long-term health effects of Covid-19, including possible permanent damage to the ability to smell (anosmia), joint pain, chest pain, brain fog, headaches, and an inability to overcome the fatigue that accompanies this flu.

Highlights of last week's breaking news:

- Both the Pfizer and Moderna vaccines are about 95% effective after completing **two doses**.
 - The Pfizer version of the vaccine is about 52% effective **after just one dose**.
 - If you receive your first vaccine dose from Pfizer, your second dose will also need to be from Pfizer. Same for Moderna.
- There are no serious adverse reactions reported from clinical trials of either vaccine.
- Both Pfizer and Moderna vaccines utilize novel mRNA technology. This technology does **not** interfere with our genetic materials inside of our cells. To be certain, it is **not** possible to get COVID-19 from the vaccines.
- It is not yet entirely clear how long immunity from the vaccine will last.
- If you have a documented, proven case of COVID-19 within the last three months, you should still get vaccinated.

An overview of the initial plan for vaccination phases:

- Phase 1a) healthcare providers at risk of exposure
- Phase 1b) other essential workers and adults 65+ with high risk medical conditions
- Phase 2) Focus on equitable access to critical populations and public (as supply allows)
- Phase 3) General public

In short, more than 44,000 people have undergone testing for the Pfizer vaccine and none had specific safety concerns that would halt distributing the vaccine. The Pfizer and Moderna vaccines require two shots, spaced 3-4 weeks apart. There aren't significant differences in the data between those two brands. The CDC is asking that people continue to wear masks and practice distancing after being vaccinated, since study of this virus and its vaccine is ongoing. The distribution schedule is hopeful that there will be an ample supply, but if that supply runs significantly short, you might only get one of the two shots initially because some protection for many is better than full protection for only a few. Much is still to unfold about the long-term coverage, conclusions from studies, and the distribution process, so please stay informed from a reputable source.



From Paragon Orthopedic Center in Grants Pass, Oregon

The following articles were referenced for this newsletter:

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html>

<https://www.cdc.gov/coronavirus/2019-ncov/long-term-effects.html>

<https://www.opb.org/article/2020/12/05/coronavirus-vaccine-questions-oregon-covid-19-pandemic/>

<https://www.oregon.gov/oha/PH/PreventionWellness/Vaccines/Immunization/ImmunizationProviderResources/Pages/COVIDvaccine.aspx>