

AKNG COVID-19 Vaccine information



How the vaccines work:

- Vaccines (Pfizer and Moderna) contain a small strip of messenger RNA (mRNA) that is wrapped in a small lipid layer (layer of natural fatty acids)
- The cells pick up that mRNA and transport it to the part of the cell that makes proteins—the endoplasmic reticulum
- The mRNA is used by the cell to make several copies of the spike protein (identical to COVID-19's spike protein) that are then pushed out of the cell
- The spike protein is recognized as foreign and the body makes antibodies and other immune cells to attack it
- Within a few days, the mRNA is fully broken down and disposed of—it does not remain in the body
- The body develops a long lasting immune response, so if it ever sees the spike protein on the COVID-19 virus, it will destroy the virus immediately
- Of note, the mRNA CANNOT get into the cell nucleus and combine with your DNA
- After two doses, on average patient antibody levels will be significantly higher than those who get COVID-19 naturally—thus immunity should be longer lasting after a vaccine compared to those getting the disease naturally

Safety of the COVID-19 vaccines:

- The vaccines are very safe
- They CANNOT give you COVID-19 because there is no virus in the vaccine
- There are no preservatives in the vaccines (kept frozen)
- 44,000 people enrolled in the Pfizer vaccine study (ages 12 and up)
- 30,000 people enrolled in the Moderna vaccine study (ages 18 and up)
- No life-threatening side effects noted in either study
- Severe vaccine reactions for all known vaccines in the world occur within 6 weeks
- The Pfizer/Moderna vaccines were studied for 8 weeks post vaccination and had no severe vaccine reactions

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- There have been 2 cases of anaphylaxis in the UK and 2 case in Alaska since Pfizer was released
- Anaphylaxis causes facial/throat swelling and shortness of breath
- All patients who had anaphylaxis got medical care and did fine
- Patients with a history of vaccine-induced anaphylaxis should talk to their doctor before getting the vaccine
- USARAK will have a medical provider with emergency medications and equipment on site for COVID-19 vaccination events

Vaccine side effects

- **Pfizer** (most side effects were mild and lasted 1-3 days)
 - pain at the injection site (84.1%)
 - fatigue (62.9%)
 - headache (55.1%)
 - muscle pain (38.3%)
 - chills (31.9%)
 - joint pain (23.6%)
 - fever (14.2%)
 - injection site swelling (10.5%)
 - injection site redness (9.5%)
 - nausea (1.1%)
 - lymph node swelling (0.3%)
- **Moderna** (most side effects were mild and lasted 1-3 days)
 - pain at the injection site (88.4%)
 - fatigue (68.5%)
 - headache (63.0%)
 - muscle pain (23.7%)
 - chills (48.3%)

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- joint pain (45.2%)
- fever (14.8%)
- injection site swelling (10.8%)
- injection site redness (7.4%)
- nausea (21.3%)
- lymph node swelling (8.4%)

Vaccine effectiveness

- Both the Pfizer and Moderna vaccines looked at cases of symptomatic COVID-19 and they were 94-95% effective after 2 doses
 - Pfizer vaccine trial had 8 COVID-19 cases in the vaccine group (1 severe) and 162 cases in the placebo group (9 severe)
 - Moderna vaccine trial had 11 COVID-19 cases in the vaccine group (zero severe) and 185 cases in the placebo group (30 severe)
 - Even after one dose they were both >50% effective
- This level of effectiveness is on par with the best vaccines in the world

Emergency Use Authorization

- The FDA can give a vaccine Emergency Use Authorization (EUA) approval after 2 months of safety data
- Full approval can be granted after 6 months of safety data
- The Pfizer vaccine was given EUA approval on 11 December
- The Moderna vaccine was given EUA approval on 18 December
- Until full approval, the vaccine will be **voluntary** for Service Members
- Once fully approved, it is likely (but not certain) that this will become a mandatory vaccine for Service Members

Vaccination prioritization plan

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- The vaccine will be given in phases once it is received (Soldiers, DA Civilians, and Contractors that work with Soldiers/DA Civilians are eligible for the vaccine)
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 - Phase 1A- Healthcare workers, Emergency Services, Public Safety
 - Phase 1B.1- National leadership, Immediate Response Force Units
 - Phase 1B.2- Units preparing to deploy OCONUS prior to July, 2021
 - Phase 1B.3- Quick Reaction Force Units, DoDEA, Child and Youth Services, Dining Facility food handlers
 - Phase 2- High risk beneficiaries
 - Phase 3- Health population

Benefits of the vaccine:

- Obtaining the vaccine significantly lowers one's personal risk of getting COVID-19
- By protecting oneself, we are protecting our friends, colleagues, and family members
- Once enough of our troops are immunized (herd immunity), it will be safe to begin to open up again (group events/training, contact sports, unit PT, travel, restaurants, etc.)