**Adverse event:** Any health problem that happens soon after you receive a vaccine. An adverse event could be caused by the vaccine, or the timing could be a coincidence.

**Antigen:** A small piece of a virus or bacteria that your body recognizes as foreign and builds antibodies against (see below). One virus or bacteria has many antigens. The spike protein is an antigen.

**Antibodies:** Proteins your body creates after it senses a pathogen. They help protect you from future infection. Vaccines cause your body to create antibodies without making you sick.

**Clinical trial:** A detailed scientific study where a group of people are given a medical treatment (like a vaccine) and their health outcomes are compared to another group that did not receive the treatment.

**Efficacy:** A measure of how well a vaccine protects people during a clinical trial.

**Emergency Use Authorization (EUA):** The Food and Drug Administration gives EUA to medicines in an emergency after having completed clinical trials. These trials involve tens of thousands of people and have the same safety requirements as full FDA Approval. The FDA continues to monitor drugs for safety and efficacy after they are made available through EUA.

**Herd immunity:** The point at which enough people are immune that a virus runs out of new people to infect. Experts estimate that we need 75-80% of people to get vaccinated to reach herd immunity for COVID-19 in the US.

**Messenger RNA (mRNA) vaccine:** mRNA is a small piece of material that cells use to send messages. In the Pfizer and Moderna vaccines, mRNA tells your cells to make a spike protein from COVID-19 (see below). These spike proteins tell your body to create defenses against an illness. You cannot get COVID-19 from mRNA vaccines.

**Spike proteins:** Proteins on the surface of a coronavirus that resemble the spikes on a crown. These spikes help the virus gain access to your cells, like a key in a lock.

**Viral Vector vaccine:** Like the Johnson & Johnson COVID-19 vaccine, this uses a harmless version of an adenovirus—a common virus like those that cause colds—to send a message that instructs your cells to make spike proteins. These spike proteins tell your body to create defenses against an illness. You cannot get COVID-19 from this vaccination.