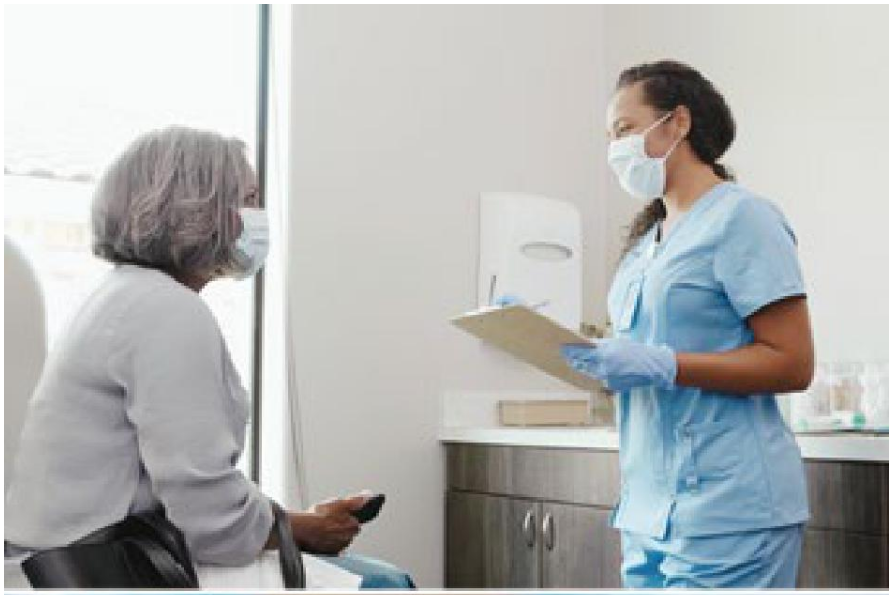
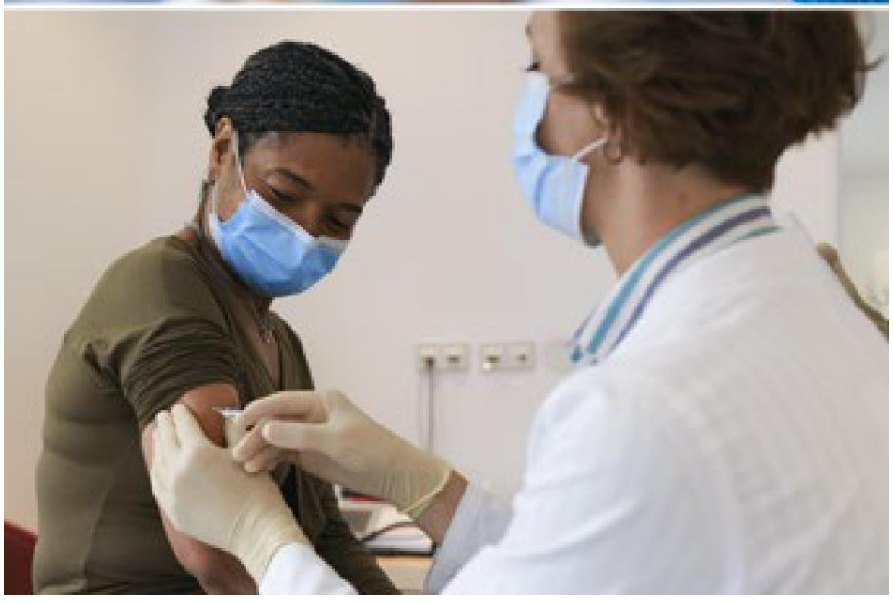
mRNA Vaccines





Overview

Scientists are seeking better ways to protect us from disease. Among the newest tools are mRNA vaccines. They give us a new way to help your body defend itself against germs. Here's how they work.

Traditional vaccines

First, let's learn about traditional vaccines. Many of the vaccines we rely on use a weak, dead or partial version of the germ we're fighting. When you get this vaccine, your immune system responds. It creates special molecules called "antibodies" to fight the germ. Later, if the live germ gets in your body, you have the antibodies needed to fight it off.

mRNA vaccines

mRNA vaccines work in a different way. They don't contain any part of the actual germ. Instead, they contain a small bit of genetic code, made by scientists, called an "mRNA sequence." When it's given to you, it tricks your cells into making a special protein that looks like part of the germ. Your immune system then reacts by making the antibodies you need to fight the germ.

Are they safe?

Are mRNA vaccines safe? Yes. An mRNA sequence doesn't change your own genetic code. It just gives your body instructions for creating special proteins that trigger your immune response. Once those proteins are made, your cells get rid of the instructions. And mRNA vaccines must go through the same tests as all other vaccines to prove that they are safe and effective.

Conclusion

For more info about mRNA vaccines, talk to your doctor.