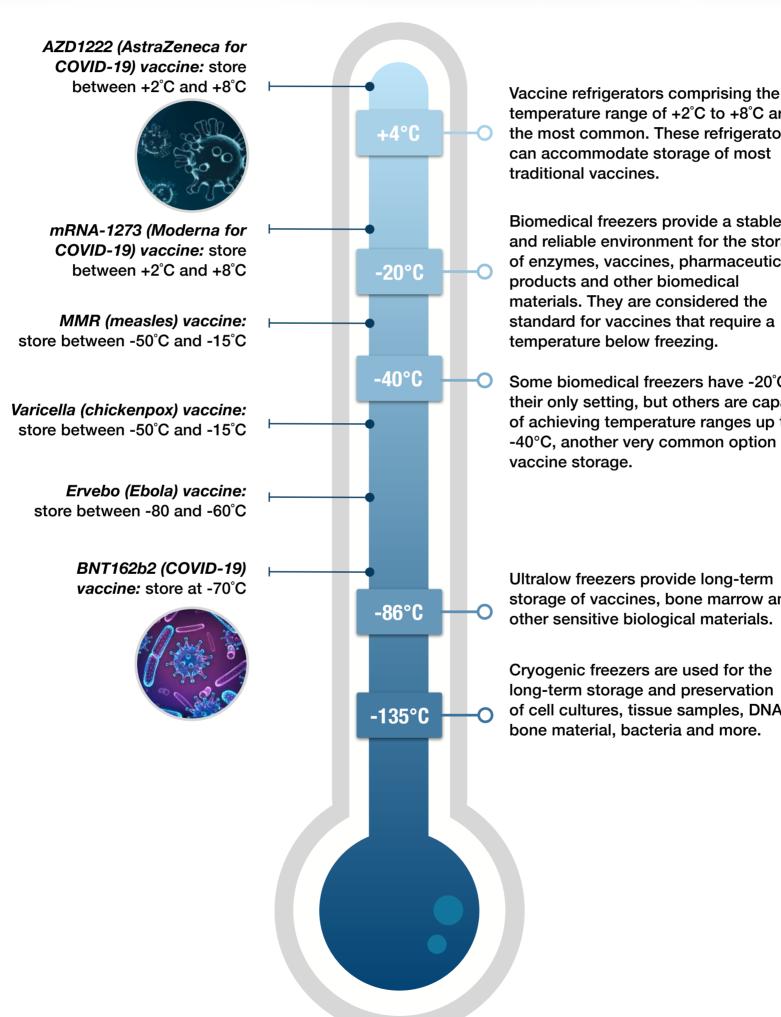
Storing Vaccines at the Right Temperatures

In December 2020, Pfizer and BioNTech's BNT162b2 COVID-19 vaccine became the first-ever mRNA-based vaccine to be approved by the FDA. To add to its uniqueness, the vaccine is one of the only to require a temperature below -50°C all along the cold chain terrain to ensure its stability, efficacy and safety. For comparison sake, let's take a look at common temperatures along the cold chain, as well as temperature requirements of other vaccines, including those developed to treat COVID-19.



temperature range of +2°C to +8°C are the most common. These refrigerators can accommodate storage of most traditional vaccines.

Biomedical freezers provide a stable and reliable environment for the storage of enzymes, vaccines, pharmaceutical products and other biomedical materials. They are considered the standard for vaccines that require a temperature below freezing.

Some biomedical freezers have -20°C as their only setting, but others are capable of achieving temperature ranges up to -40°C, another very common option in vaccine storage.

Ultralow freezers provide long-term storage of vaccines, bone marrow and other sensitive biological materials.

Cryogenic freezers are used for the long-term storage and preservation of cell cultures, tissue samples, DNA, bone material, bacteria and more.