

Pfizer-BioNTech COVID-19 Vaccine U.S. Distribution Fact Sheet



Pfizer is working closely with the U.S. government, including state officials, on vaccine distribution, and we are very grateful for their partnership.



Pfizer is a proven, reliable multinational vaccine producer, supplying vaccines to more than **165 countries**. Pfizer manufactures more than **200 million doses** of Pfizer vaccines annually and is one of the largest sterile injectables suppliers in the world, producing more than **1 billion sterile units** per year.



Our track record gives us confidence in our ability to quickly scale, manufacture and distribute large quantities of a high-quality COVID-19 vaccine, leveraging multiple sites in the United States and Europe. We have experience working with customers with different infrastructures in all markets.



During the initial stage, our contracts are with governments, and we will be providing doses according to their preferred channel and designated vaccination locations, subject to regulatory authorization or approval. We seek to work with governments to support distribution to their defined priority groups, and we anticipate that points of vaccination will vary but may include hospitals, outpatient clinics, community vaccination locations and pharmacies.



We have developed detailed logistical plans and tools to support effective vaccine transport, storage and continuous temperature monitoring. Our distribution is built on a flexible, **just-in-time system**, which will ship the frozen vials to the point of vaccination.



In the U.S., our distribution approach will be to largely ship from our **Kalamazoo, Michigan** site direct to the point of use (POU). We also will use our existing distribution centers in **Pleasant Prairie, Wisconsin**.



We will be utilizing **road and air modes** of transportation in the United States, where we expect to be able to get product to any POU within a day or two.

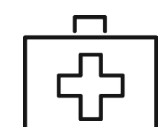


We also have developed packaging and storage innovations to be fit for purpose for the range of locations where we believe vaccinations will take place. We have specially designed, temperature-controlled thermal shippers utilizing dry ice to maintain recommended temperature conditions of **-70°C±10°C for up to 10 days**. The intent is to utilize Pfizer-strategic transportation partners to ship by air to major hubs within a country/region and by ground transport to dosing locations.



We will utilize **GPS-enabled thermal sensors** with a control tower that will track the location and temperature of each vaccine shipment across their pre-set routes. These GPS-enabled devices will allow Pfizer to proactively prevent unwanted deviations and act before they happen.

Once a POU receives a thermal shipper with our vaccine, they have three options for storage:



- Ultra-low-temperature freezers, which are commercially available and can extend shelf life for **up to six months**.
- Refrigeration units that are commonly available in hospitals. The vaccine can be stored for **five days** at refrigerated **2-8°C conditions**.
- The Pfizer thermal shippers, in which doses will arrive, that can be used as temporary storage units by refilling with dry ice for **up to 15 days of storage**.



After storage for 15 days in the Pfizer thermal shipper, vaccination centers can transfer the vials to 2-8°C storage conditions for an additional five days, for a total of 20 days. Once thawed and stored under 2-8°C conditions, the vials cannot be re-frozen or stored under frozen conditions.



The various storage options at the POU allow for equitable access to the Pfizer vaccine to areas with differing infrastructure.

For additional questions, please visit our COVID-19 hub at www.pfizer.com/health/coronavirus