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# The Role of Pharmaceutical Logistics in Combating the Pandemic

Kuehne+Nagel helps to secure global pharmaceuticals supply – including Covid-19 vaccines.



11

billion Covid-19 vaccine doses or more will be transported worldwide in the next 1.5 to 2 years.



Around half of all Covid-19 vaccines are transported by air. Over the entire period, the total volume of cargo will be equivalent to the contents of nearly a thousand B747 freighter aircraft.



In the current coronavirus epidemic, no industry has a greater role to play than pharmaceuticals and healthcare. A decade or so ago, Kuehne+Nagel took the strategic, long-term decision to strengthen its pharmaceutical logistics business, which had been an important driver of growth for the Company for many years. That was a highly prescient decision, as it turned out to be just what was needed in the situation we are now facing – although the expansion plan had not factored in a global pandemic.

## Taking on responsibility for society

Kuehne+Nagel took responsibility for combatting the pandemic back in early 2020, shipping millions of face

masks and other protective equipment. The Company established an "air bridge" between China and Germany with over 30 charter flights, for example.

Kuehne+Nagel has over 240 GxP-certified sites and more than 3,000 specialists in pharmaceutical logistics worldwide. The network now covers all four corners of the earth. Kuehne+Nagel's function as logistics partner to the pharmaceuticals industry involves accepting pharmaceuticals from the manufacturing site, product warehousing and picking as well as distribution of product to the respective end markets. A crucial component of its success is the outstanding service mentality shared by its employees around the world.



The vaccines must be stored at consistently low temperatures.

Kuehne+Nagel has developed its own solution in the form of Temperature Pods.



# Kuehne+Nagel serving the global pharma supply chain – also for Covid-19 vaccines

Kuehne+Nagel was also quick to step up and signal its willingness to help with the global distribution of the Covid-19 vaccine. Even before the first vaccines had been authorised, Kuehne+Nagel CEO Dr. Detlef Trefzger emphasised in the *Wall Street Journal*: "it will be a wave (of demand for logistics services), but it's nothing where we will say, 'it's impossible'".

More than 11 billion doses of vaccine will be needed around the world over the next few years to achieve herd immunity. Logistics experts reckon that less than 1,000 747 cargo aircraft in total will be needed to transport them. In Air Logistics alone, Kuehne+Nagel has a network of 100 IATA-certified pharmaceutical sites standing ready across all continents.

A key asset is its direct access from warehouse to runway – since keeping the products at or below fridge temperature is crucial for vaccines. Kuehne+Nagel prepared for vaccine distribution early on, setting up hypercare teams in spring 2020, distributing ancillary materials such as vials and syringes to customers all around the world, and training staff. Temporary distribution centres were set up for vaccines, with dozens of refrigeration units at key sites. This ensured that Kuehne+Nagel was ready for global distribution when the first vaccines were approved at the end of 2020. In Europe alone, the logistics company has a fleet of 200 of its own refrigeration trailers as well as additional capacity via suppliers.

The example of vaccine logistics demonstrates that having Kuehne+Nagel as logistics partner provides a reliable link between manufacturers and end users – including the last mile to the patient.



### Mobile cooling - the Temperature Pod

Kuehne+Nagel has developed an in-house solution that it calls Temperature Pods - fully-insulated refrigerated containers fitted with deep-freeze units. They are mobile and versatile, as they can be modified to reflect demand, volume and location. Most importantly: they meet all of the pharmaceutical industry's requirements on ensuring patient safety. Since the containers can be transported almost anywhere, from an airport apron to a conference centre, they can be positioned as close as necessary to the patient in support of final mile distribution. At sites with high population densities, the solution is scalable as additional units can be added at any time. The Temperature Pods are highly adaptable. When demand for vaccine distribution to the whole population declines or the site is to be returned to its original use, the pod can be repositioned or removed at short notice.



Going the last mile: In Germany's North Rhine-Westphalia, Kuehne+Nagel distributes the doses to the vaccination centres, clinics, surgeries and nursing homes.