



# From pellets to pallets to patients: the journey of a vaccine delivery device

BD is working with governments and organizations around the world to produce and supply injection devices for COVID-19 vaccination campaigns.



As orders get placed, BD business and operations teams carefully plan new demand to not disrupt routine patient care.



## Manufacturing and packaging of needles and syringes

Plastic pellets called resin are heated, melted and injected into molds to create the syringe and plastic needle parts.



Stainless steel strip is rolled into a tube, welded and shrunk to the proper wall thickness and gauge. This cannula is cut to length and put through a grinding process to form the sharp needle point.



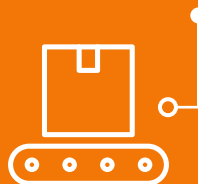
Separately, the parts for the needle and syringe are fed into high-speed assembly machines and then packaged.



BD quality engineers review each step to ensure products are safe and meet strict specifications.



Individual units are placed into case cartons, sterilized, stacked into pallets and loaded on trucks.



BD supply chain teams send these shipments to designated government or NGO distribution centers.



## Partnering with health care workers on the front lines

From here, they will be delivered to point-of-care sites and ultimately to health care workers who BD will help train to ensure safe delivery of COVID-19 vaccinations to patients.



**BD**