

IMPACT OF COVID-19 ON DEMAND FOR PPE IN THE HEALTHCARE INDUSTRY

Growth Opportunities in an Era of Change



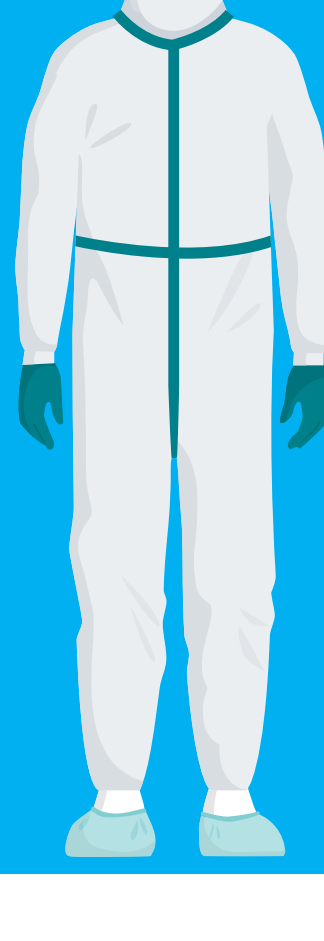
DISRUPTION OF THE PPE INDUSTRY VALUE CHAIN

COVID-19 is impacting the availability of PPE for the healthcare industry value chain in various ways. Some of these changes are short-term and while some are transformative

SHORT-TERM AND DIRECT

Responses that aim to cater to the current crisis and enhance availability of PPE for the healthcare industry. Some examples below

- Major PPE players are ramping up local production to try and meet the growing demand
- Export controls on masks, goggles, gloves and other PPE brought about by several Asian countries, particularly China are gradually easing but the demand is overwhelming and capacities are falling short
- Government agencies relaxing controls to ease supply challenges



LONG-TERM AND TRANSFORMATIVE

The drivers for transformation are very strong and current COVID pandemic could enhance the speed of change. Some examples below

- Strategic stockpile of critical PPE supplies will grow multifold to address any such eventualities in the future, ensuring steady demand in the next 18-24 months
- Distribution strategies for the healthcare industry may witness changes
- Growth of industrial PPE companies catering to healthcare PPE and vice versa
- Substantial growth in indigenous manufacturing capacities to reduce dependence on imports
- Growth of new entrants, M&A activities

COVID-19 IMPACT ON DEMAND FOR HEALTHCARE PPE

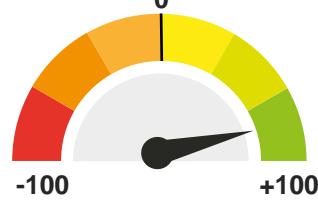
Overall PPE for Healthcare Industry to experience HIGH growth in demand, being at the forefront of delivering care for COVID-19 patients

SURGICAL MASKS

Disproportionately high COVID-19 patient volumes putting strain on scarce PPE resources.

Higher usage of surgical/procedural masks by all workers around COVID patients driving demand.

Demand expected to be high even after pandemic ends.

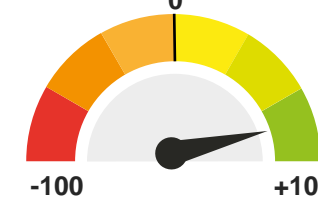


N95s

Disproportionately high COVID-19 patient volumes putting strain on scarce PPE resources.

N95s becoming preferred masks for healthcare workers

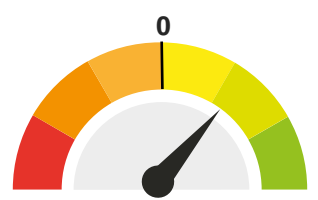
Emergency Use Authorizations (EUA) to help ease supply shortages by allowing industrial use N95s for healthcare applications



SURGICAL GLOVES

Cancellation of elective surgeries impact demand for surgical gloves in the short run.

Once COVID threat passes, the demand will rise to original levels and beyond.



EXAMINATION GLOVES

High patient volume creating huge demand for examination gloves.

Most products manufactured overseas, putting a huge pressure on supply chain and global capacities



COVERALLS/GOWNS

High demand from healthcare, EMS and Lab workers during transportation, care, and testing of COVID patients

Demand expected to be high even after pandemic ends.



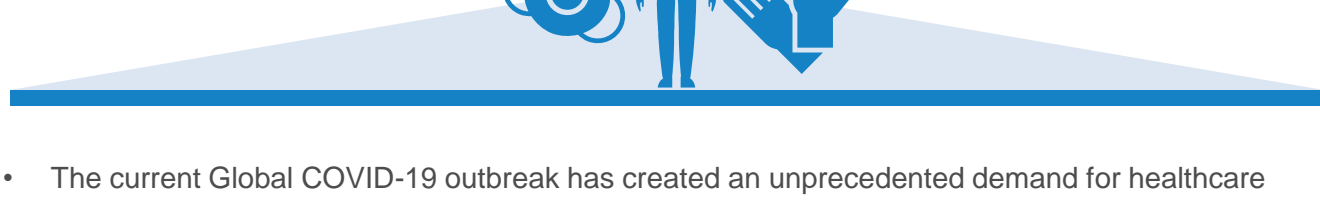
GOGGLES/FACE SHIELDS

Critical product for transmission containment from droplets due to cough/sneeze by COVID patients

Huge demand due to limited availability in stockpiles

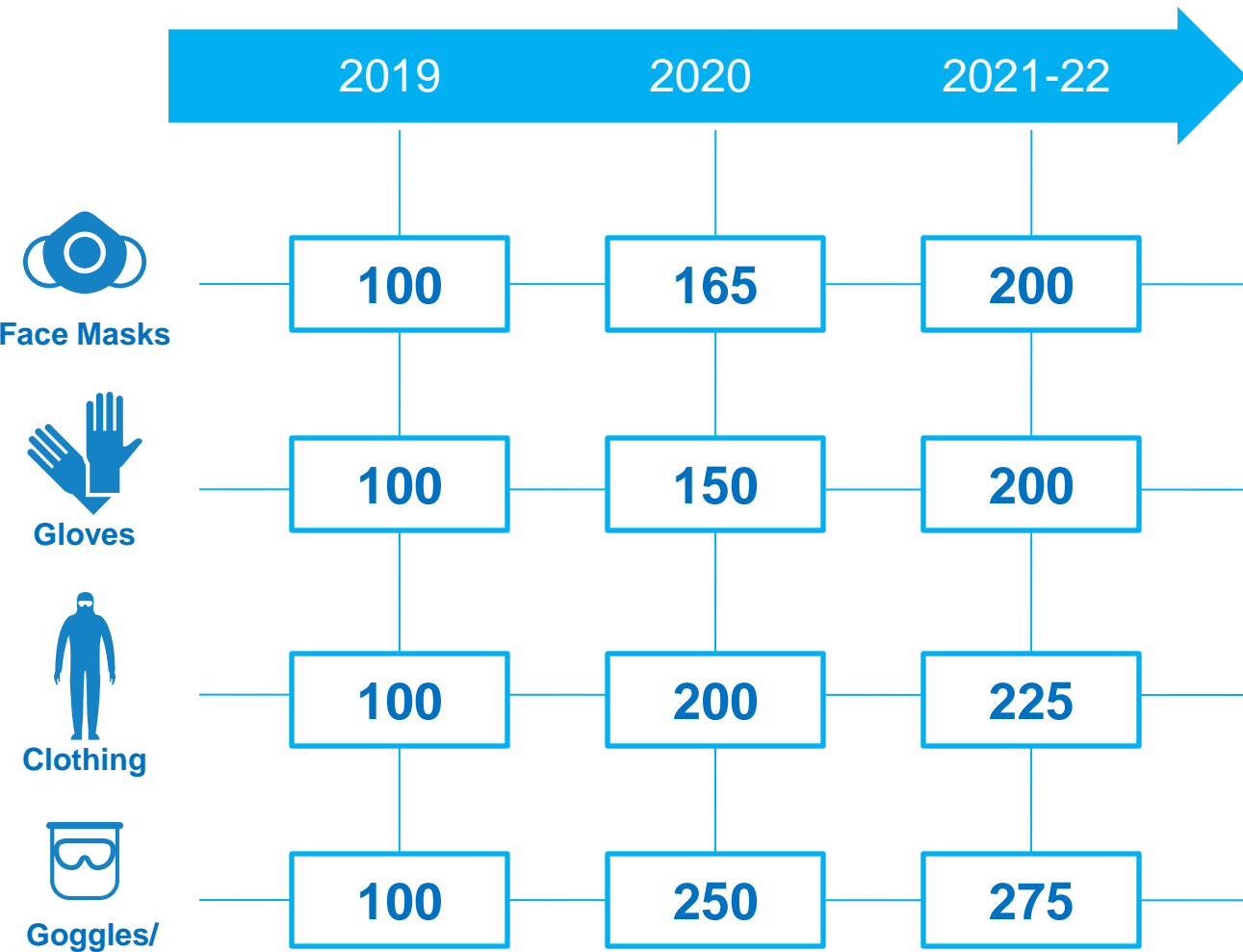


EFFORTS TO BOOST AVAILABILITY OF PPE



- The current Global COVID-19 outbreak has created an unprecedented demand for healthcare PPE products such as face masks, gloves, coveralls, gowns, goggles, and face shields.
- Although manufacturers are scrambling to scale up their production capacities in Europe and North Americas, they are realizing that this is not an easy task. Main reason is that their production is outsourced to Asian countries to the extent of between 60% and 70%. In the initial stage, COVID-19 outbreak in China created a huge demand for PPE in the local market resulting in disruption in the supply chain for other countries.
- With the spread of COVID-19 the global demand has skyrocketed and the supply chain has just not been able to meet this demand.
- Most in demand products are face masks, coveralls, gowns, and gloves. Companies like 3M, Ansell, DuPont, Honeywell Safety Products, Kimberly-Clarke Corporation, Lakeland, Moldex-Metric, and others are rising to the occasion and making huge efforts to meet this demand
- FDA has waived some requirements through Emergency Use Authorization (EUA) to allow use of NIOSH approved products in an effort to increase availability of critical PPE for healthcare workers

DEMAND GROWTH INDEX



Note- 2019 is the base volume

GLOBAL SHORTAGE OF PPE- IN THE NEWS

PPE Shortages in the limelight

Amid a massive **shortage of protective gears** for medical professionals and staff, Spain signed a contract with China worth 432 million euros to purchase 550 million masks, 5.5 million rapid test kits, 950 respirators and 11 million pairs of gloves

Salvador Illa, Spanish Health Minister - 25 March 2020

"The chronic, **global shortage of personal protective equipment** is one of the most urgent threats to our collective ability to save lives, WHO has shipped almost 2 million protective gear items to 74 countries, and is preparing to send a similar amount to 60 more countries, but much more is needed. This problem can only be solved with international cooperation and international solidarity, when health workers are at risk, we're all at risk."

WHO Director- General, Tedros Adhanom Ghebreyesus, 27th March 2020

"Even in high-level European hospitals, we see health workers are overwhelmed, coping with up to 80 ambulances per day, with **dramatic shortages of protective equipment** that puts them at great risk. Some doctors are forced to wear the same face mask for 12 hours."

Claudia Lodesani, MD, MSF president in Italy

"FDA cleared or approved reusable cloth gowns can be used. Adequate laundering can reduce the level of pathogen contamination to a negligible level and lower the overall risk of disease. The gown should be used at the barrier protection level indicated in the labeling. Coated or laminated fabrics should be checked to ensure they retain resistance to liquid and microbial penetration following decontamination, cleaning and/or sterilization."

FDA Guideline on re-use of **disposable protective clothing** – 12th March 2020

HOW CAN OUR TEAM HELP YOU?

- Keep You Connected to Your Customers** We will help you nurture your client relationships with improved virtual outreach programs via focused brand and demand solutions
- Revise Forecast Plans** We will bring clarity to your prior market assessments and ensure business plan continuity
- Focus on Emerging Growth Opportunities** We will power your focus on growth through turbulent times, identifying the Growth Opportunities that will emerge
- Growth Strategies Best Practices** We will bring our 60 years of best practices navigating through crisis periods to stabilize and bring confidence
- Growth Partner** We will work together to reduce risk, focus on positive outcomes and achieve a growth trajectory

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