



COVID-19 VACCINE DISTRIBUTION

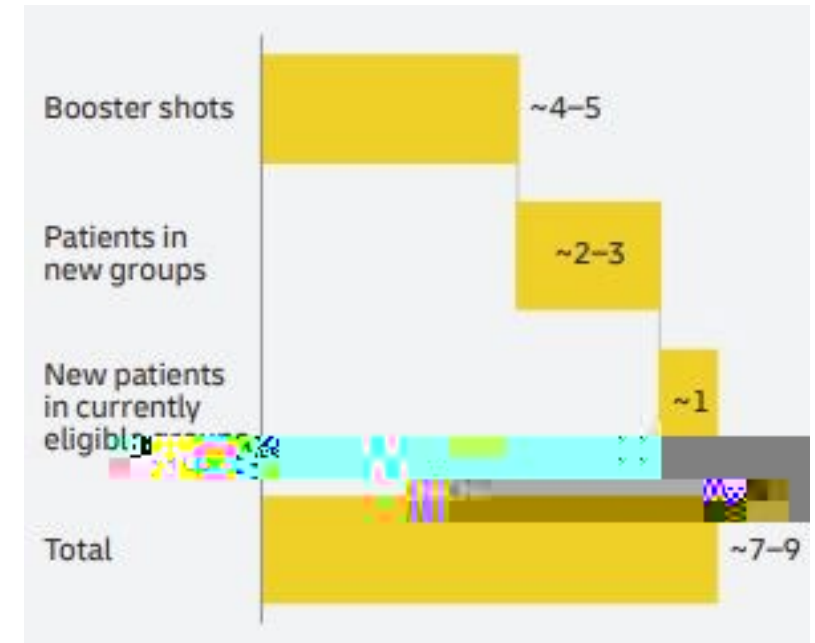
Lessons learned from a logistics perspective:
Challenges & opportunities to enhance pandemic resiliency

DHL | WTO Technical Workshop Covid-19 Vaccine | February 11, 2022

Covid-19 challenged all of us – We had to adapt quickly

- With the development of the first COVID-19 vaccines, the global vaccine supply chain and its key players faced various challenges, including:
 - An estimated 10 billion doses were needed in 2021. Estimates indicate the need of 7-9 billion doses for 2022 and beyond
 - Strict cold chain storage requirements
 - Need for trade facilitation measures to assure supply chain effectiveness
 - Leveraging from lessons learned during import/export of PPE at the beginning of COVID-19 outbreak
- Many countries implemented measures warranting the efficient and expedited import of vaccines by removing import tariff and non-tariff barriers

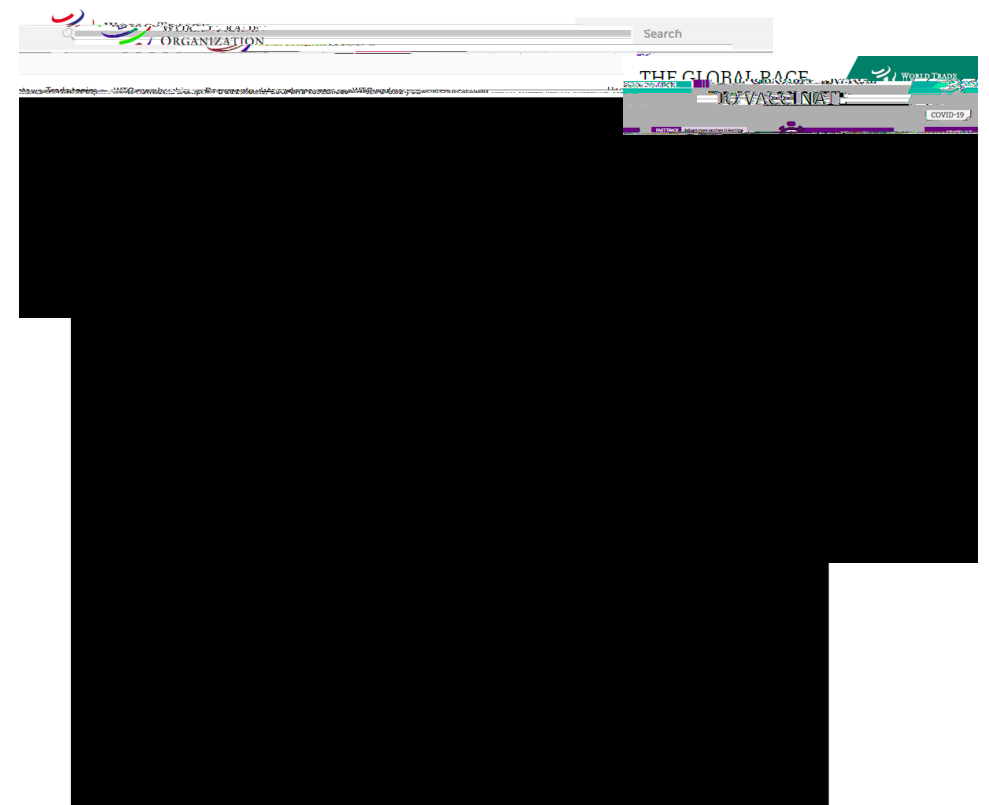
Estimated additional vaccine quantities for 2022 and beyond
(Billions)



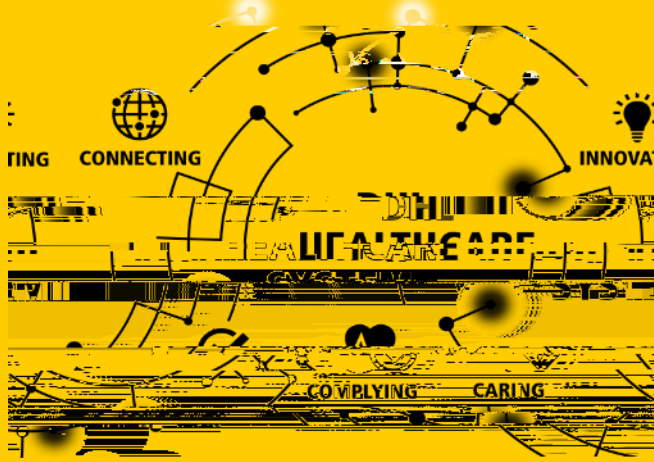
Source: DHL (2021)

Gov. authorities play a key role to ensure efficient/effective delivery of vaccines

- Trade regulatory & enforcement agencies face the challenge to ensure safety/security, whilst guaranteeing an expedite clearance of goods
- WTO and WCO created dedicated websites raising awareness and assisting authorities and stakeholders on the measures to facilitate the export and import of vaccines and related products
 - Many steps needed are already covered by international instruments/tools, e.g. TFA, RKC, Immediate Release Guidelines
 - Pre-arrival processing/clearance (advanced electronic data)
 - Digital risk-based Customs clearance (expedite clearance + protect health by minimizing human contact)
 - Coordinated border management
 - Exemption from export restrictions, fiscal charges & regulatory procedures for import permits
 - Stakeholder engagement
 - Engaging key stakeholders such as the WHO and ICC was crucial
 - Setting up a central taskforce



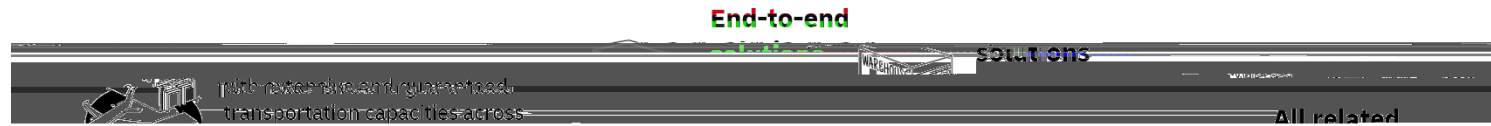
DHL has globally leading capabilities in logistics for Life Science and Healthcare goods



...to tackle the challenge of Covid-19 we have founded a global task force and upgraded in key area3 Tc 0.007 c7117 497.6628 T

The complex global vaccine supply chain was ramped-up successfully

TRUSTED PARTNER FOR COVID-19 VACCINES LOGISTICS WORLDWIDE



KEY

- 9 2 B. doses distributed
- 9 175 countries served
- 9 350 facilities involved in the process
- 9 50 collaborations with pharma & public sector
- 9 10 new and dedicated services introduced

Lessons learned from a logistics perspective

- DHL data shows that there have been **no major challenges or delays pertaining to clearance of COVID-19 vaccines** (Most shipments pre-cleared and released immediately due to the well-coordinated logistic effort between all stakeholders, regulatory engagement, high visibility and importance of vaccine imports for countries).
- A short term adaption of border management processes **will not be sufficient** to counter the current or future pandemics in the long-term.
- **No globally or regionally standardized and harmonized border processes** are in place for vaccine imports, resulting in the need to establish SOPs for each country.
- Unlike COVID-19 vaccine supply chains, the import of COVID-19 related **ancillary supplies** (e.g. needles, dilutes, PPE) and medicines is still subject to clearance and import processing delays.



THANK YOU