

TRADE IN MEDICAL GOODS IN THE CONTEXT OF TACKLING COVID-19: DEVELOPMENTS IN THE FIRST HALF OF 2021

INFORMATION NOTE¹

KEY POINTS:

- The total imports and exports of medical goods were valued at US\$ 1,286 billion in the first half of 2021. This represents a growth of 12.4 per cent compared to the same period of 2020.
- In the first half of 2021, the medical goods sector comprised 6.1 per cent of total world trade, compared to 5.4 per cent for the second half of 2019, just before the COVID pandemic.
- As vaccination numbers increased, the highest year-on-year growth was for medical supplies, including items critical for administering vaccines (i.e. rubber gloves, syringes and needles), which grew by 34.8 per cent.
- The supply of these items, especially rubber gloves, is geographically concentrated, and any potential for disruption should be identified and planned for. Four of the top five suppliers were countries in Asia and accounted for 86 per cent of the export market for gloves, with Malaysia's share at 54 per cent.
- Trade of testing materials and diagnostic reagents remains high, which grew by 54.5 per cent in the first half of 2021 compared to the same period of 2020.
- The trade of COVID-19 critical products slightly slowed down in the first half of 2021, valued 4 per cent less than that of the second half of 2020, but it was still 29 per cent more than the value before the pandemic (the second half of 2019).
- The export of face masks was 24.7 per cent less than the first half of 2020, mainly because of price decline.
- Bilateral trade of COVID-19 critical products for the top three traders of such goods (China, Germany, United States) slowed down compared to previous semesters.
- Average applied most-favoured-nation (MFN) tariffs for rubber gloves by WTO members was 8.2 per cent, but syringes and needles had lower tariffs, at under than 4 per cent. Lowering or eliminating these tariffs will reduce import costs and facilitate vaccine administration.

1 INTRODUCTION

This report updates the information note series "[Trade in medical goods in the context of tackling COVID-19](#)".² It presents trade statistics for medical goods³ for the first half of 2021 and comparisons with previous years. This update includes a case study of rubber gloves, syringes and needles, the critical products for administering COVID-19 vaccines.

¹ This document has been prepared under the WTO Secretariat's own responsibility and is without prejudice to the positions of WTO members or to their rights and obligations under the WTO. Data sources for all figures cited in this information note are the [Trade Data Monitor](#), the [WTO Integrated Database](#) and the [WTO STATS Portal](#).

² The original report was "[Trade in medical goods in the context of tackling COVID-19](#)", issued on 3 April 2020, with the updates issued on [20 December 2020](#) and [30 June 2021](#).

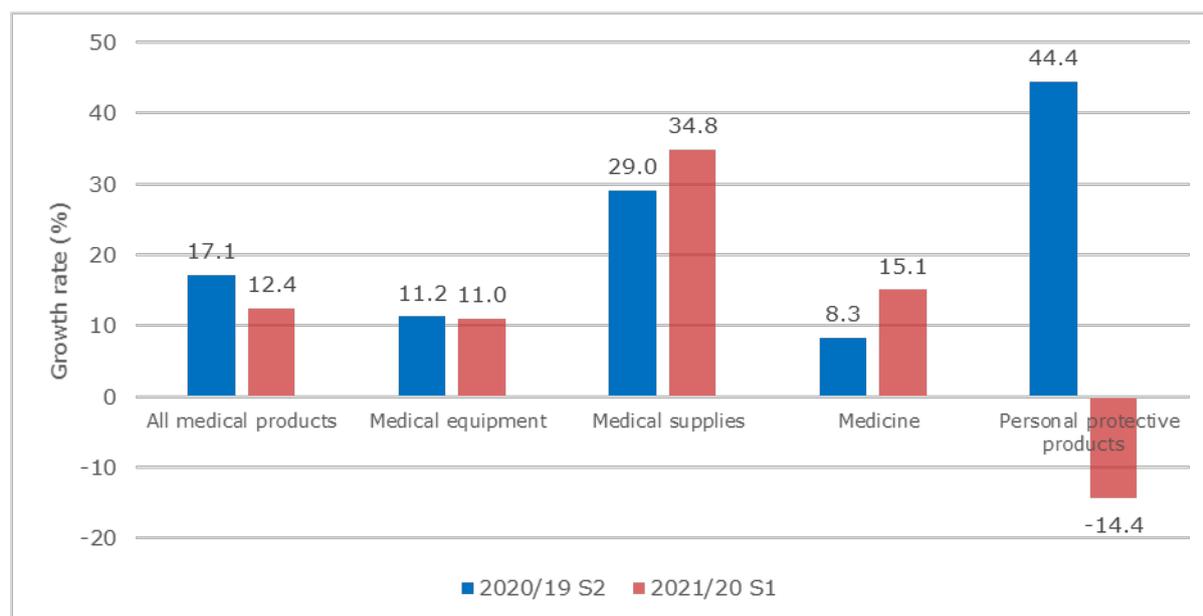
³ Medical goods and categorization are listed in the Annex.

2 MEDICAL GOODS TRADE SUSTAINED HIGH GROWTH AND INCREASED SHARE IN TOTAL WORLD TRADE

Global trade in the first half of 2021 grew sharply by a 29 per cent year-on-year increase compared to the same period of 2020, a big recovery from the nominal contraction of -14 per cent in the first half of 2020.⁴

The trade in medical goods continued to expand, growing by 12.4 per cent in the first half of 2021 year-on-year (see Chart 1). Although this was a slower increase compared to the year-on-year growth for the second half of 2020, at 17.1 per cent, it still represents a growth of 31 per cent increase compared to the trade in the first half of 2019 and it is a continuation of the 16 per cent whole year's growth in 2020.

Chart 1: Year-on-year trade growth in medical goods, by product group, 2020 S2 and 2021 S1



Source: WTO Secretariat.

When the COVID pandemic started in the second half of 2019, the medical goods sector accounted for 5.4 per cent of total world trade. The share of the sector continued to grow and was worth US\$ 1,286 billion (exports plus imports) in the first half of 2021 (see Table 1), which comprised 6.1 per cent of total world trade for the same period.

The growth and share of the four main groups of medical products varied during the last two years, as the pandemic unfolded. At the start of the COVID crisis, the highest growth was in personal protective products, which include face masks. As vaccination numbers increased, the highest year-on-year growth was 34.8 per cent for medical supplies, which include items critical for administering vaccines (i.e., rubber gloves, syringes and needles). Personal protective products, which had grown by 44.4 per cent in the second half of 2020 year-on-year, contracted during the first half of 2021 by -14.4 per cent. The year-on-year growth of COVID-19 critical products slowed down to 3.1 per cent in the first half 2021 compared to the strong expansion of 34 per cent in the second half of 2020.

As a share of all medical products, medicine has consistently accounted for more than half of the value of trade in medical products (see Chart 2). The other three product groups accounted for the remaining half but the relative importance, in terms of share, varied. Personal protective products used to have the lowest share in the second half of 2019 but had the second largest share during the following semester, (first half of 2020), from 13.6 per cent to 18.1 per cent, respectively. Medical supplies had the second highest share during the second semester of 2019 but were overtaken by

⁴ WTO Secretariat calculations based on data from the [WTO STATS Portal](#).

personal protective products during the first half of 2020. Nonetheless, its share recovered and continued to rise since widespread vaccination started. The product group currently accounts for almost a fifth (19.5 per cent) of the medical goods sector.

Table 1: Trade in medical products, 2019 S2 to 2021 S1

Product category	Value (US\$ million)				Year-on-year growth (%)	
	2019 S2	2020 S1	2020 S2	2021 S1	2020/19 S2	2021/20 S1
EXPORTS						
All medical products	508,649	565,668	594,770	640,812	16.9	13.3
Medical equipment	72,729	71,091	79,834	79,223	9.8	11.4
<i>Ventilators</i>	4,132	6,201	7,822	5,655	89.3	-8.8
Medical supplies	86,904	93,735	110,825	122,198	27.5	30.4
<i>Test kits & diagnostic reagents</i>	14,228	16,901	22,417	22,841	57.6	35.1
<i>Rubber gloves*</i>	4,067	5,528	11,117	16,518	173.3	198.8
<i>Syringes and needles**</i>	4,374	4,348	4,507	5,073	3.1	16.7
<i>Other supplies</i>	64,234	66,958	72,783	77,766	13.3	16.1
Medicine	278,561	299,329	304,265	349,765	9.2	16.8
Personal protective products	70,455	101,514	99,845	89,626	41.7	-11.7
<i>Facemasks</i>	39,009	70,486	66,133	53,078	69.5	-24.7
<i>Other protective products</i>	31,446	31,027	33,713	36,548	7.2	17.8
COVID-19 critical products⁵	154,608	190,150	204,939	197,943	32.6	4.1
IMPORTS						
All medical products	519,741	578,132	609,240	645,125	17.2	11.6
Medical equipment	73,685	72,896	83,026	80,627	12.7	10.6
<i>Ventilators</i>	4,211	6,479	8,471	6,356	101.2	-1.9
Medical supplies	85,029	91,847	111,022	128,013	30.6	39.4
<i>Test kits & diagnostic reagents</i>	14,421	17,213	24,204	29,872	67.8	73.5
<i>Rubber gloves*</i>	4,221	5,377	10,474	17,066	148.1	217.4
<i>Syringes and needles**</i>	4,560	4,635	4,825	5,598	5.8	20.8
<i>Other supplies</i>	61,828	64,622	71,520	75,478	15.7	16.8
Medicine	291,751	308,126	313,294	349,182	7.4	13.3
Personal protective products	69,276	105,262	101,897	87,302	47.1	-17.1
<i>Facemasks</i>	39,202	74,409	67,522	51,608	72.2	-30.6
<i>Other protective products</i>	30,074	30,853	34,375	35,694	14.3	15.7
COVID-19 critical products	152,606	193,626	207,168	197,639	35.8	2.1

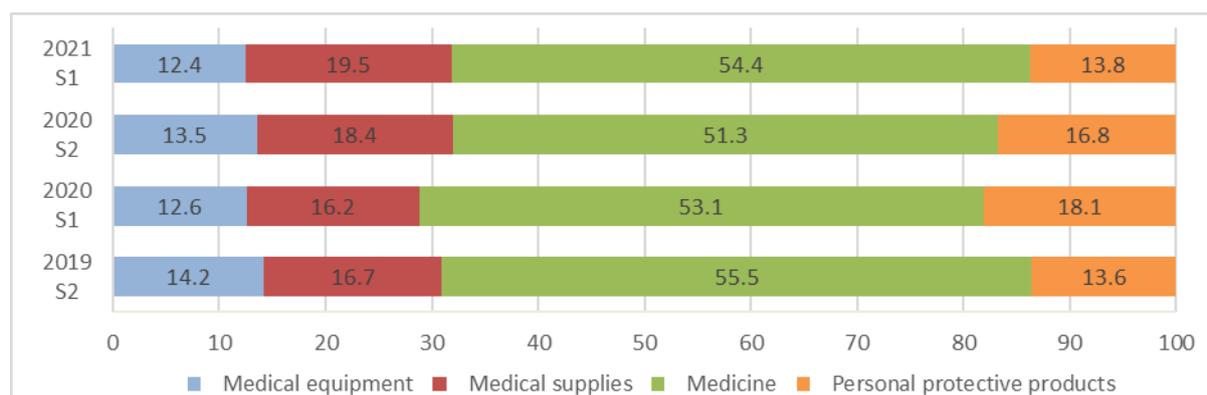
* HS subheading codes 401511 and 401519.

** HS subheading codes 901831 and 901832.

Source: WTO Secretariat.

⁵ Critical medical products include: disinfectants/ sterilization products; face masks; gloves; hand soap and hand sanitizer; patient monitors and pulse oximeters; protective spectacles and visors; sterilizers; syringes; thermometers; ultrasonic scanning apparatus; ventilators, oxygen masks; X-ray equipment; and other devices such as computer tomography apparatus.

Chart 2: Share of all medical products, 2019 S2 to 2021 S1



Source: WTO Secretariat.

With regard to specific products, face masks accounted for 70 per cent of trade for personal protective products in terms of value during the first half of 2020, but its share decreased to 59 per cent for the first half of 2021 (-27.8 per cent year-on-year). The sharp increase of trade values during the start of the pandemic could be mainly attributed to the price spike owing to shortages: anecdotal evidence indicates a quintupling of prices in the first quarter of 2020. Increased domestic production and more abundant supply resulted in prices decreasing and stabilizing. In terms of quantity, the global market is projected to grow at an average annual rate of 22.9 per cent from 2019 to 2023 – from 14,600 million units to over 33,360 million units in 2023⁶.

Demand for ventilators, which peaked at the start of the pandemic, resulted in a near doubling in trade value, with year-on-year growth of 95.3 per cent in the second half of 2020. This has since flattened because such medical equipment is both durable and reusable and is generally linked to hospital capacity. In the first half of 2021, the trade value even shrank by 5 per cent compared to the same period of 2020.

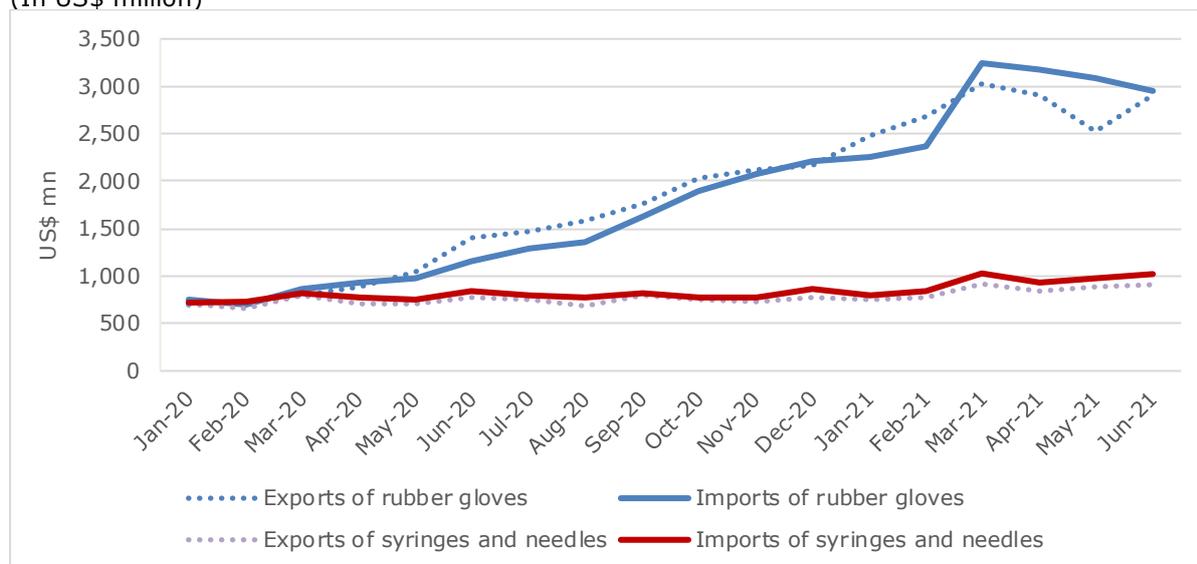
Testing remains extensive to track the incidence of the virus, and thus demand for test kits and diagnostic reagents remained unabated. Since the first half of 2020, there has been double-digit growth in exports and imports of test kits and year-on-year first-semester growth in 2021 was 54.5 per cent.

Following the development and approval of COVID-19 vaccines, the supply of items critical for administering vaccines became crucial. They might not seem like high-value products, and they account for a negligible share in the medical goods sector (less than 1 per cent each for rubber gloves, syringes and needles). However, the share more than doubled to 2.6 per cent for gloves in the first half of 2021 (see Chart 3).

⁶ See <https://blog.marketresearch.com/the-global-respiratory-masks-market-projected-to-grow-22.9>.

Chart 3: Monthly trade of selected vaccine administration products, January 2020 to June 2021

(In US\$ million)



Source: WTO Secretariat.

3 CHINA, GERMANY AND THE UNITED STATES REMAIN THE TOP THREE TRADERS OF COVID-19 CRITICAL PRODUCTS

China, Germany and the United States remained the top three traders of COVID-19 critical products (see Table 2). While the top three leading merchandise traders have a combined share of 31 per cent of world trade for the first half of 2021, their total share for COVID-19 critical products was even higher, at 41 per cent in 2020 but slightly lower at 38 per cent in the first half of 2021 (see Table 2 and Charts 4 and 5).

It is worth noting that the concentration of the export of COVID-19 critical products moderately decreased, with the total share of the top ten exporters shrinking over the last three semesters from 72 per cent in the first half of 2020 to 69 per cent one year later. This implies that more countries are exporting similar products. Notable among the exporters is Malaysia, whose exports grew by an impressive 146 per cent year-on-year in the first half of 2021. On account of abundant rubber supply, the growth can be attributed to the production of medical supplies (specifically rubber gloves).

China's share of exports contracted by 11 percentage points, from 28.7 per cent in the first half of 2020 to 17.7 per cent one year later – a decrease of US\$ 19.5 billion and partly attributed to the decreased export value of face masks.

The US share of the import of COVID-19 critical products was over 20 per cent, which is more than double that of the share of the next largest importer, Germany, which has remained around 8 per cent for the last two semesters. Year-on-year import growth for the first half of 2021 was highest for China (24.1 per cent) followed by the Netherlands (19.4 per cent). Among the top ten importers, there was a significant decrease of more than 10 per cent for France, Japan and the United Kingdom.

Table 2: Top 10 exporters and importers of COVID-19 critical products

Economy (2021 ranking)	Value (US\$ million)			Year-on-year growth (%)		Share of COVID-19 critical products (%)		
	2020 S1	2020 S2	2021 S1	2020/ 19 S2	2021/ 20 S1	2020 S1	2020 S2	2021 S1
EXPORTS								
China	54,552	50,860	35,051	149.5	-35.7	28.7	24.8	17.7
United States	23,076	23,175	25,206	-1.2	9.2	12.1	11.3	12.7
Germany	17,281	19,938	20,655	16.6	19.5	9.1	9.7	10.4
Netherlands	11,018	13,441	13,811	22.0	25.3	5.8	6.6	7.0
Malaysia	4,440	7,574	10,934	85.4	146.2	2.3	3.7	5.5
Japan	5,776	6,509	6,782	1.9	17.4	3.0	3.2	3.4
Mexico	6,259	6,904	6,686	8.5	6.8	3.3	3.4	3.4
France	5,278	6,083	6,394	11.9	21.2	2.8	3.0	3.2
Belgium	5,614	6,289	6,149	12.3	9.5	3.0	3.1	3.1
Ireland	4,234	4,709	5,406	0.1	27.7	2.2	2.3	2.7
Total share of top 10 exporters						72.3	71.0	69.2
IMPORTS								
United States	36,363	42,152	39,699	49.6	9.2	18.8	20.3	20.1
Germany	17,130	15,711	15,947	33.8	-6.9	8.8	7.6	8.1
China	11,877	12,849	14,736	10.5	24.1	6.1	6.2	7.5
Netherlands	8,717	9,528	10,408	17.8	19.4	4.5	4.6	5.3
Japan	9,958	9,212	8,953	28.6	-10.1	5.1	4.4	4.5
France	10,242	9,412	8,441	54.9	-17.6	5.3	4.5	4.3
United Kingdom	7,268	2,002	6,181	134.2	-15.0	3.8	5.8	3.1
Mexico	5,227	5,442	5,668	1.8	8.4	2.7	2.6	2.9
Canada	5,528	6,485	5,657	62.2	2.3	2.9	3.1	2.9
Belgium	5,455	5,556	5,461	16.7	0.1	2.8	2.7	2.8
Total share of top 10 importers						60.8	62.0	61.3

Source: WTO Secretariat.

Chart 4: Share in world trade of the top ten exporters of COVID-19 critical products, 2020 and 2021 S1

(In per cent)

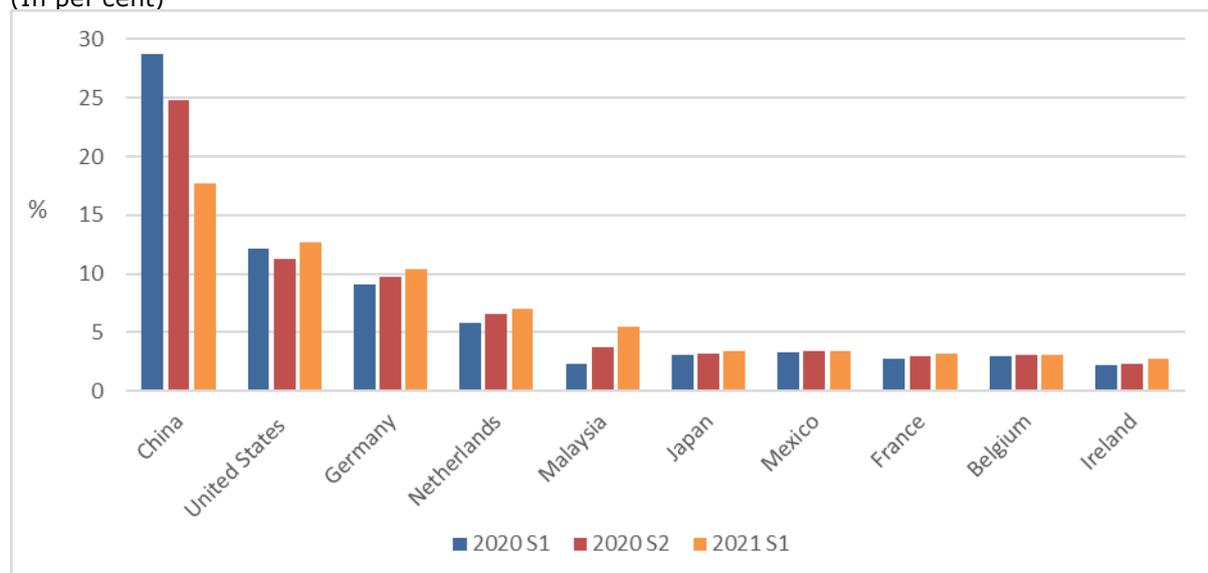
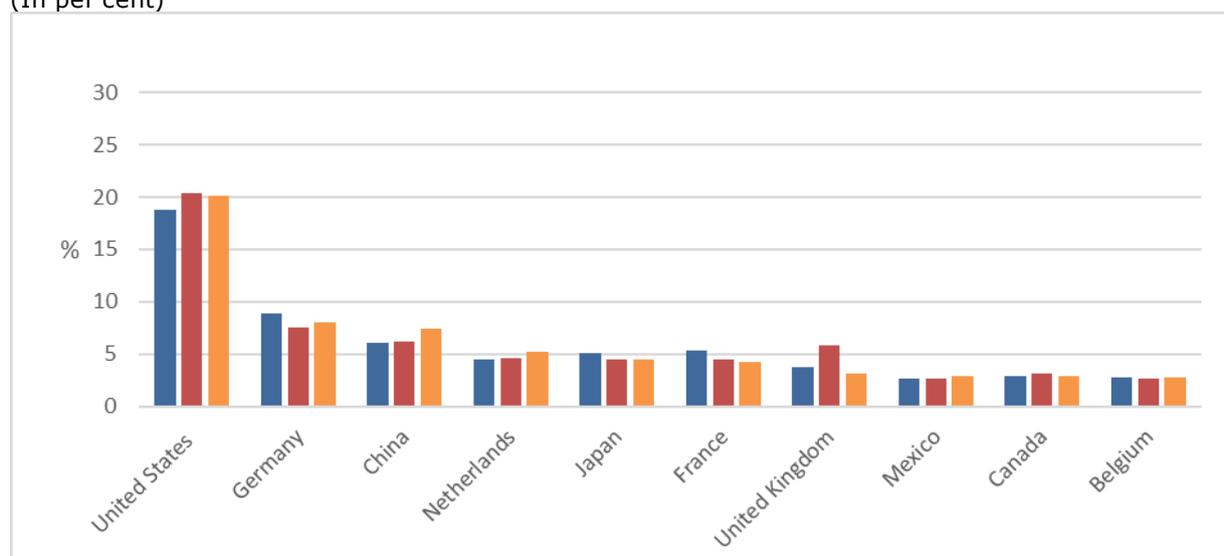


Chart 5: Share in world trade of the top ten importers of COVID-19 critical products, 2020 and 2021 S1

(In per cent)



Source: WTO Secretariat.

4 BILATERAL TRADE OF COVID-19 CRITICAL PRODUCTS FOR THE TOP THREE TRADERS HAS SLOWED

Although China remained the top supplier of COVID-19 critical products for both the United States and Germany, its share decreased from earlier peaks for both markets (see Table 3). In the first half of 2020, the United States imported COVID-19 critical products from China valued at US\$ 14.6 billion (40.1 per cent share), which fell to US\$ 12.1 billion (30.6 per cent share) one year later. Similarly, in Germany, imports from China of COVID-19 critical products halved from US\$ 5.6 billion to US\$ 2.4 billion over the same period.

Table 3: Bilateral trade of COVID-19 critical products for 2020 and 2021 S1

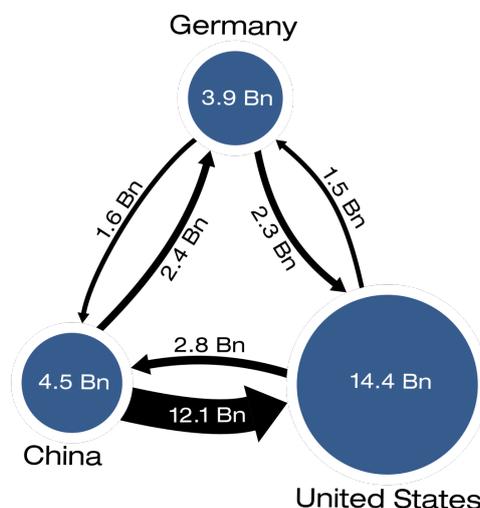
Importer	Partner	Value of imports from partner (US\$ million)			Partner's share of total COVID-19 critical products (%)			Year-on-year growth (%)	
		2020 S1	2020 S2	2021 S1	2020 S1	2020 S2	2021 S1	2020/19 S2	2021/20 S1
United States	China	14,564	16,786	12,129	40.1	39.8	30.6	173.2	-16.7
	Mexico	5,240	5,703	6,085	14.4	13.5	15.3	12.1	16.1
	Malaysia	1,239	2,019	3,557	3.4	4.8	9.0	72.5	187.2
Germany	China	5,553	3,045	2,394	32.4	19.4	15.0	185.3	-56.9
	Netherlands	1,869	2,046	2,297	10.9	13.0	14.4	19.0	22.9
	United States	1,253	1,411	1,553	7.3	9.0	9.7	41.3	24.0
China	United States	2,339	2,420	2,849	19.7	18.8	19.3	-5.8	21.8
	Japan	2,147	2,550	2,793	18.1	19.8	19.0	10.8	30.1
	Germany	1,352	1,558	1,613	11.4	12.1	10.9	9.6	19.3

The United States' import partners are less diversified compared to those of Germany and China. In the United States, more than half of its imports of COVID-19 critical products came from only three partners – China (30.6 per cent), Mexico (15.3 per cent) and Malaysia (9.0 per cent). The latter partner pushed Germany down to fourth place in the first half of 2021, during which US imports of COVID-19 critical products from Malaysia grew by 187.2 per cent year-on-year (mainly attributed to rubber gloves).

At the start of the pandemic in the first half of 2020, Germany also imported more than 50 per cent of its imports of COVID-19 critical products from three partners – China, the Netherlands and the United States. This dependence has since decreased to only 39 per cent, with the total value falling from US\$ 8.7 billion in the first half of 2020 to US\$ 6.2 billion one year later.

China's imports from its three main partners did not fluctuate much – around 50 per cent came from the United States, Japan and Germany, with an almost equal share for the United States and Japan. While the United States is China's top supplier, the US share in the Chinese market is less than 20 per cent and the deficit amounts to US\$ 27 billion for the whole year of 2020 and US\$ 9 billion in the first half of 2021 (see Chart 6).

Chart 6: Bilateral trade of COVID-19 critical products, first half of 2021 (US\$ billion)



Source: WTO Secretariat.

5 CASE STUDY: RUBBER GLOVES, SYRINGES AND NEEDLES ARE NECESSARY TO ADMINISTER THE VACCINE

Global collaboration and prioritized resource allocation were key to the rapid development of COVID-19 vaccines. With vaccines now available, the next strategy was to distribute and administer them as rapidly as possible to combat the spread of the virus. Chart 3 shows that the demand for rubber gloves started climbing steeply from 2020, when vaccinations started. There have also been recent forecasts of possible syringe shortage even if relative to hand gloves, the trade did not grow as steep. Chart 3 shows a sharp rise for rubber gloves, starting in February 2020, with an average monthly growth of more than 5 per cent during the 18-month period. This contrasts with the almost stable trend for the 24-month period from Jan 2018 to Dec 2019 for which the average monthly growth in trade was only 0.3 per cent. Quarterly shares of these groups of products relative to the total value of medical supplies trade are presented in Table 4.

Table 4: Quarterly trade of rubber gloves, syringes and needles, first quarter 2020 to second quarter 2021

(In US\$ billion)

Date	EXPORTS			IMPORTS		
	Rubber gloves	Syringes & needles	Cumulative share in medical supplies (%)	Rubber gloves	Syringes & needles	Cumulative share in medical supplies (%)
Jan-Mar 2020	2,187.7	2,159.1	9.80	2,313.7	2,278.4	10.8
Apr-Jun 2020	3,340.2	2,189.1	11.2	3,063.7	2,356.6	11.0
Jul-Sep 2020	4,820.9	2,248.9	13.5	4,299.6	2,402.3	12.9
Oct-Dec 2020	6,296.4	2,258.5	14.6	6,174.1	2,422.4	14.5
Jan-Mar 2021	8,188.1	2,451.5	17.5	7,856.7	2,663.8	16.7
Apr-Jun 2021	8,329.5	2,621.5	17.9	9,208.8	2,934.4	18.7

In the first quarter of 2020, the trade of rubber gloves, syringes and needles accounted for only 10 per cent of trade medical in supplies, but that share almost doubled to more than 18 per cent by the second quarter of 2021. Malaysia has always been the largest supplier of rubber gloves with more than 50 per cent of the global market even before the pandemic. Together with China and Thailand, their combined share of global exports of rubber gloves was more than 75 per cent during the first quarter of 2019. Their market dominance grew even stronger; and by mid-2021, their combined market share increased to over 83 per cent (see Chart 7).

Exports of syringes and needles are less concentrated. Although the United States and China were the top suppliers, their combined share of world exports was only around 27 per cent (see Chart 8). Compared to hand gloves, as previously mentioned, the increase in the trade of syringes and needles is not as significant (see Chart 3 above) in the first half of 2021.

Chart 7: Share of top five suppliers of rubber gloves, 2021 S1

(Percentage of world exports)

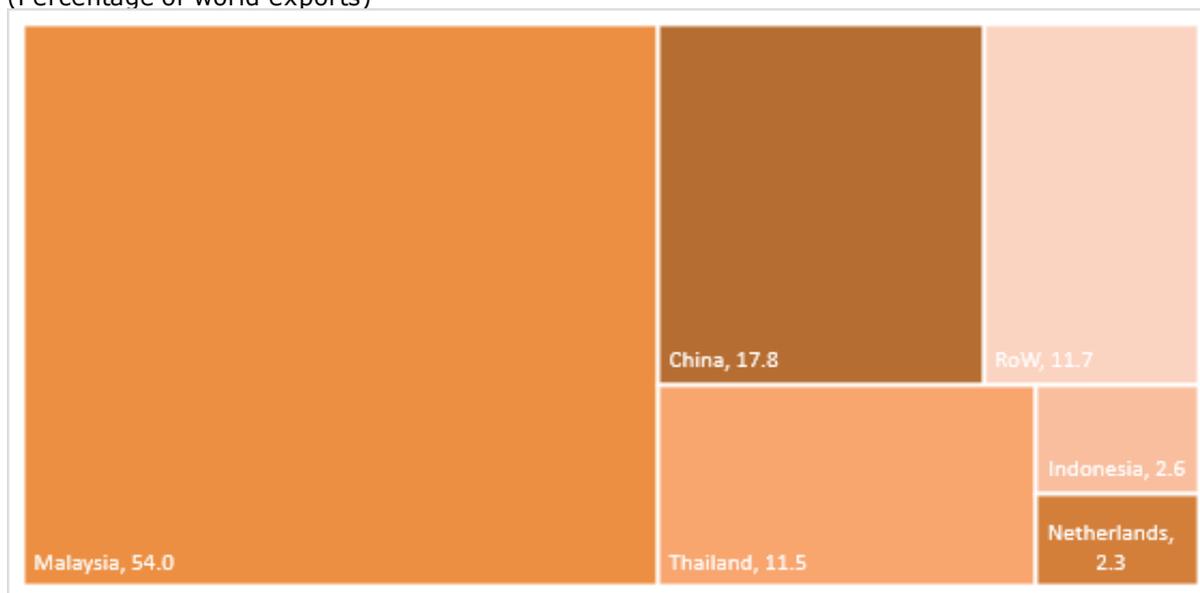


Chart 8: Share of top five suppliers of syringes and needles, 2021 S1

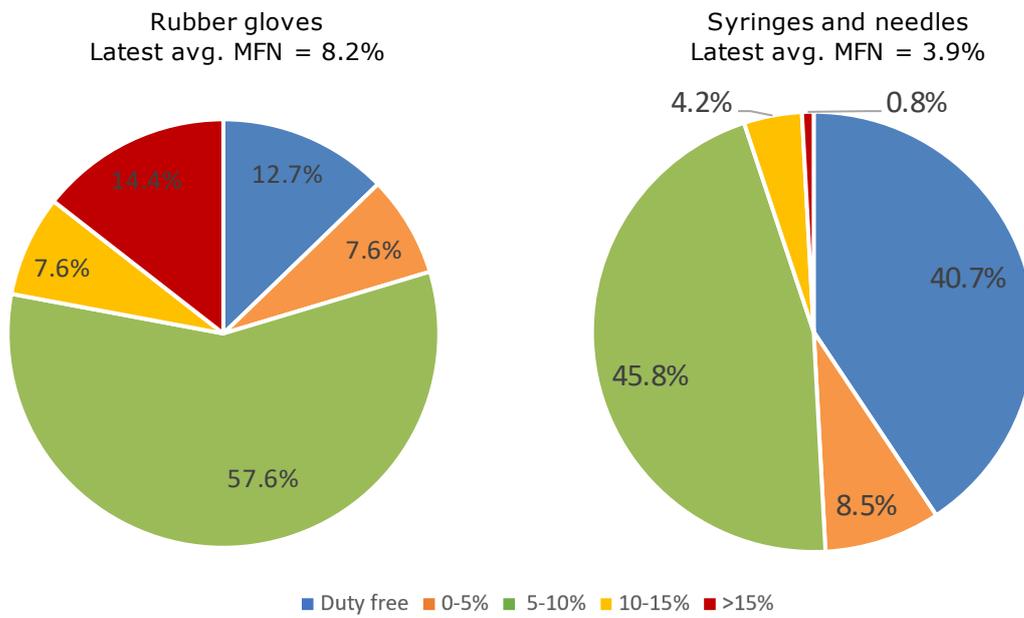
(Percentage of world exports)



Source: WTO Secretariat.

Regarding MFN import duties levied on these supplies, the average applied tariff on rubber gloves is 8.2 per cent, higher than the average tariff on syringes and needles, which is less than 4 per cent. While the global average tariffs are relatively low, some importers still impose a duty as high as 30 per cent. As shown in Chart 9, 14 per cent of countries have average MFN tariffs on rubber gloves equal to or higher than 15 per cent, while for syringes and needles, only 5 per cent of countries apply tariffs higher than 10 per cent. It is evident that Members should consider lowering or eliminating tariffs on these products to ensure the timely and adequate supply of these products to support vaccine administration.

Chart 9: Profile of WTO members on latest MFN applied tariffs on rubber gloves and syringes and needles



Source: WTO Secretariat.

ANNEX: LIST OF MEDICAL PRODUCTS

Medicines (pharmaceuticals)

HS 2017	HS short product description	ITA-E	Pharma	WCO
300213	Immunological products, unmixed, ... not for retail sale		X	
300214	Immunological products, mixed, ... not for retail sale		X	
300215	Immunological products, ... for retail sale		X	X
300219	Immunological products, n.e.s.		X	
300220	Vaccines for human medicine		X	
300310	Medicaments containing penicillins ... not for retail sale		X	
300320	Medicaments containing antibiotics, ... not for retail sale		X	
300331	Medicaments containing insulin, ... not for retail sale		X	
300339	Medicaments containing hormones ... not for retail sale		X	
300341	Medicaments containing ephedrine ... not for retail sale		X	
300342	Medicaments containing pseudoephedrine "INN" or its salts, ... not for retail sale		X	
300343	Medicaments containing norephedrine or its salts, ... not for retail sale		X	
300349	Medicaments containing alkaloids or derivatives thereof, ... not for retail sale		X	
300360	Medicaments containing any of the following antimalarial active principles: ... not put up for retail sale		X	
300390	Medicaments consisting of two or more constituents mixed together for therapeutic or prophylactic uses, not for retail sale		X	
300410	Medicaments containing penicillins or derivatives thereof ... for retail sale		X	
300420	Medicaments containing antibiotics, ... for retail sale		X	
300431	Medicaments containing insulin but not antibiotics, ... for retail sale		X	
300432	Medicaments containing corticosteroid hormones, ... for retail sale		X	
300439	Medicaments containing hormones or steroids ... for retail sale		X	
300441	Medicaments containing ephedrine or its salts, ... for retail sale		X	
300442	Medicaments containing pseudoephedrine "INN" or its salts, ... for retail sale		X	
300443	Medicaments containing norephedrine or its salts, ... for retail sale		X	
300449	Medicaments containing alkaloids or derivatives thereof... for retail sale		X	
300450	Medicaments containing provitamins, vitamins,... for retail sale		X	
300460	Medicaments containing any of the following antimalarial active principles ... for retail sale		X	
300490	Medicaments consisting of mixed or unmixed products ... for retail sale		X	X

Note: The columns labelled ITA-E, Pharma and WCO indicate whether the HS codes are also part of the 2015 WTO Information Technology Agreement Expansion (ITA-E), the 1995 WTO Pharmaceutical Agreement (Pharma) and its four reviews, or whether they are included in the WCO's HS classification reference for COVID-19 medical supplies. The abbreviation n.e.s. means "not elsewhere specified".

Source: WTO Secretariat.

Medical supplies

HS 2017	HS short product description	ITA-E	Pharma	WCO
220710	Undenatured ethyl alcohol, of actual alcoholic strength of $\geq 80\%$			X
284700	Hydrogen peroxide, whether or not solidified with urea			X
300120	Extracts of glands or other organs or of their secretions, for organo-therapeutic uses		X	
300190	Dried glands and other organs for organo-therapeutic uses; heparin and its salts, ...		X	
300212	Antisera and other blood fractions		X	
300290	Human blood; animal blood ...; toxins, cultures of micro-organisms and similar products		X	
300510	Adhesive dressings and other articles ... put up for retail sale for medical, surgical, dental or veterinary purposes		X	
300590	Wadding, gauze, bandages and the like put up for retail sale for medical, surgical, dental or veterinary purposes		X	X
300610	Sterile surgical catgut, similar sterile suture materials, ...		X	
300620	Reagents for determining blood groups or blood factors		X	
300630	Opacifying preparations for x-ray examinations; diagnostic reagents for administration to patients		X	
300650	First-aid boxes and kits		X	
300670	Gel preparations designed to be used in human or veterinary medicine ...		X	
340212	Cationic organic surface-active agents			
340213	Non-ionic organic surface-active agents			
350400	Peptones and their derivatives; other protein substances and their derivatives, n.e.s.; ...			
350790	Enzymes and prepared enzymes, n.e.s.			
370110	Photographic plates and film in the flat, sensitised, unexposed, for X-ray			
370210	Photographic film in rolls, unexposed, for X-ray			
380894	Disinfectants, put up in forms or packings for retail sale			X
382100	Prepared culture media for the development or maintenance of micro-organisms			
382200	Diagnostic or laboratory reagents on a backing, prepared diagnostic or laboratory reagents and certified reference materials			X
392620	Articles of apparel and clothing accessories produced by the stitching or sticking together of plastic sheeting			X
401490	Hygienic or pharmaceutical articles			
401511	Surgical gloves of vulcanised rubber ...			X
401519	Gloves, mittens and mitts, of vulcanised rubber			X
701710	Laboratory, hygienic or pharmaceutical glassware, of fused quartz or other fused silica			
701720	Laboratory, hygienic or pharmaceutical glassware having a linear coefficient of expansion $\leq 5 \times 10^{-6}$ per kelvin within a temperature range of 0°C to 300°C			
701790	Laboratory, hygienic or pharmaceutical glassware n.e.s.			
901831	Syringes, with or without needles, used in medical, surgical, dental or veterinary sciences			X
901832	Tubular metal needles and needles for sutures, used in medical, surgical, dental or veterinary sciences			X
901839	Needles, catheters, cannulae and the like, used in medical, surgical, dental or veterinary sciences			X

Note: The columns labelled ITA-E, Pharma and WCO indicate whether the HS codes are also part of the 2015 WTO Information Technology Agreement Expansion (ITA-E), the 1995 WTO Pharmaceutical Agreement (Pharma) and its four reviews, or whether they are included in the WCO's HS classification reference for COVID-19 medical supplies. The abbreviation n.e.s. means "not elsewhere specified".

Source: WTO Secretariat.

Medical equipment

HS 2017	HS short product description	ITA-E	Pharma	WCO
841920	Medical, surgical or laboratory sterilizers			X
901050	Apparatus and equipment; negatoscopes	X		
901110	Stereoscopic optical microscopes	X		
901180	Optical microscopes	X		
901811	Electro-cardiographs	X		
901812	Ultrasonic scanning apparatus	X		
901813	Magnetic resonance imaging apparatus	X		
901814	Scintigraphic apparatus			
901819	Other electro-diagnostic apparatus	X		X
901820	Ultraviolet or infra-red ray apparatus used in medical, surgical, dental or veterinary sciences	X		
901890	Instruments and appliances used in medical, surgical or veterinary sciences, n.e.s.	X		X
901920	Ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus			X
902150	Pacemakers for stimulating heart muscles	X		
902212	Computer tomography apparatus	X		X
902214	Apparatus based on the use of X-rays, for medical, surgical or veterinary uses	X		
902219	Apparatus based on the use of X-rays	X		
902221	Apparatus based on the use of alpha, beta or gamma radiations, for medical, surgical, dental or veterinary uses	X		
902229	Apparatus based on the use of alpha, beta or gamma radiations, n.e.s	X		
902230	X-ray tubes	X		
902290	X-ray generators, high tension generators, control panels and desks, screens, ...	X		
902511	Thermometers, liquid-filled, for direct reading, not combined with other instruments			X
902519	Thermometers and pyrometers, not combined with other instruments	X		X
902780	Instruments and apparatus for physical or chemical analysis, or for measuring or checking viscosity ...	X		X
903020	Oscilloscopes and oscillographs	X		
940290	Operating tables, examination tables, and other medical, dental, surgical or veterinary furniture			

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Source: WTO Secretariat.

Personal protective products

HS 2017	HS short product description	ITA-E	Pharma	WCO
340111	Hand soap			
340130	Hand soap			
340220	Other cleaning products			
382499	Hand sanitizer			
392690	Face masks			
630790	Face masks			X
900490	Protective spectacles and visors			X
902000	Face masks			X

Note: The columns labelled ITA-E, Pharma and WCO indicate whether the HS codes are also part of the 2015 WTO Information Technology Agreement Expansion (ITA-E), the 1995 WTO Pharmaceutical Agreement (Pharma) and its four reviews, or whether they are included in the WCO's HS classification reference for COVID-19 medical supplies.

Source: WTO Secretariat