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Promoting Trade in Medical Goods To Tackle COVID-19 Challenges

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KEY MESSAGES

- The global trade in medical goods to support the fight against COVID-19 is significant, amounting to nearly USD 1 trillion.
- APEC economies account for 40.8 percent (USD 404.5 billion) of the global import value of medical goods and 28.8 percent (USD 271.8 billion) of the global export value.
- More than 90 percent of the trade in medical goods by APEC involves 10 APEC economies.
- Most APEC economies apply low most-favoured nation (MFN) tariffs to medicines and medical equipment, but impose higher tariff rates on the medical supplies and personal protective products that are essential to tackling the COVID-19 challenges.
- Trade policy is an important tool to facilitate access to medical goods to cope with the challenges raised by COVID-19 and APEC is a relevant forum to strengthen efforts in this area.
- APEC economies could discuss collective initiatives to permanently reduce or eliminate tariffs on medical goods; commit to avoid the implementation of any unnecessary trade-restrictive measures, particularly export restrictions affecting trade in medical goods; and commit to maintain supply lines open and functional.

The COVID-19 pandemic presents unprecedented challenges at the global level. This situation is testing health systems everywhere, as well as the capacity of governments to fight the pandemic and tackle its social and economic consequences.

From a medical perspective, more than 150,000 people have died from COVID-19 as of 20 April 2020; around 1.5 million people are still infected and fighting against the disease; and several health institutions are facing bottlenecks trying to give proper care to those requiring medical attention. These institutions are struggling to obtain the appropriate resources to face COVID-19, such as medical supplies, equipment and protective gear.

Some governments, in implementing policy responses against this background, are inadvertently affecting the flow of medical goods across economies, according to the World Trade Organization (WTO 2020, 1).

The intention of this Policy Brief is to highlight the importance of the trade in medical goods, analyse the tariff levels affecting these products in the APEC region, and provide policy recommendations to facilitate the provision of medical goods.

In addition, the Policy Brief will offer suggestions on what APEC could do collectively to ensure that economies are able to access these vital products to combat COVID-19.

Trade in Medical Goods

In order to estimate the amount of trade in medical goods in the APEC region, this Policy Brief takes into account the 92 products included in the WTO information note dated 3 April 2020 (WTO 2020, 11–13).¹ The products included takes into consideration the lists developed by Helble (2012, 28–35) and the World Customs Organization (2020).

Medical goods are classified into four categories: (1) medicines (pharmaceuticals); (2) medical supplies, such as hydrogen peroxide, disinfectants, gauze, surgical gloves, plaques for x-rays, syringes and catheters; (3) medical equipment, including sterilisers, microscopes, x-ray devices and thermometers; and (4) personal protective products, namely, hand soap, hand sanitisers, face masks, protective visors and other cleaning products.

From a global perspective, trade in medical goods is significant in APEC and worldwide (Table 1). World imports of medical goods amount to USD 991.1 billion in 2018, and imports by APEC economies represent 40.8 percent (USD 404.5 billion) of this value. Demand for medical goods has been increasing in recent years: imports have been growing at around 12 percent per year between 2015 and 2018. On the export side, world exports of medical goods for 2018 total USD 944.2 billion.² APEC exports are 28.8 percent of this amount, at USD 271.8 billion.

Medicines dominate imports of medical goods in APEC. Exports of medical products are more equally distributed among all product categories.

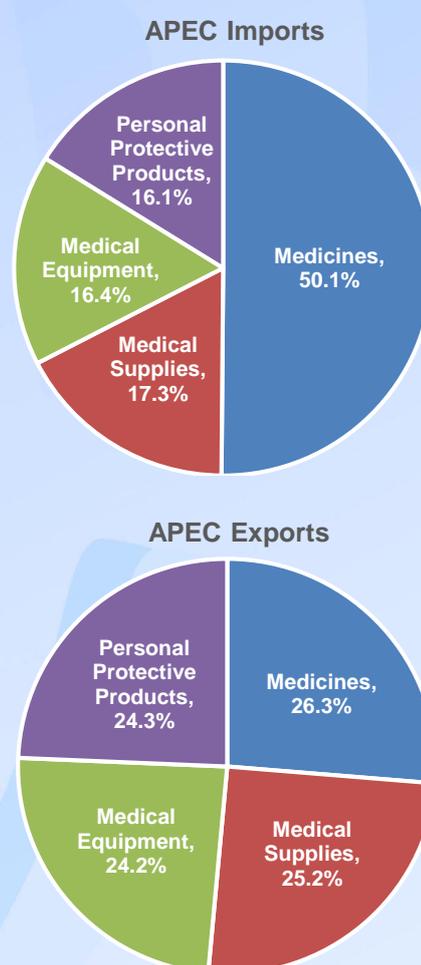
In 2018, APEC imports of medical goods comprise medicines (50.1%), followed by medical supplies (17.3%), medical equipment (16.4%) and personal protective products (16.1%) (Figure 1). In terms of exports, each of the four categories account for around a quarter of total APEC exports, with medicines (26.3 percent) being the most important export category.

Table 1. Trade in medical goods – World and APEC

Imports (USD billion)	2015	2016	2017	2018
APEC	281.5	292.2	361.3	404.5
World	702.5	713.0	901.3	991.1
Share of APEC in World Imports	40.1%	41.0%	40.1%	40.8%
Exports (USD billion)	2015	2016	2017	2018
APEC	205.1	204.7	245.1	271.8
World	667.7	672.5	859.9	944.2
Share of APEC in World Exports	30.7%	30.4%	28.5%	28.8%

Source: International Trade Centre – Trade Map; APEC Policy Support Unit (PSU) calculations.

Figure 1. Distribution of APEC trade in medical goods by category (Year 2018)



Source: International Trade Centre – Trade Map; APEC PSU calculations.

¹ For classification purposes, the list of products uses the harmonised system (HS) 2017 nomenclature at the sub-heading level (6-digit codes).

² In theory, world imports should equal world exports. In practice, statistical figures differ due to different protocols in recording

methods by the exporting and importing sides, such as valuation issues, time of recording, exchange rates and treatment of sensitive confidential transactions.

Medicaments consisting of mixed or unmixed products top the list of medical goods imported by the APEC region in 2018, representing 28.8 percent of the total (Table 2). Many of the products often mentioned by medical experts in the media as important for prevention, testing and treatment of COVID-19 appear in the top 10 list of products imported by APEC, such as plastic face masks; hand sanitiser; needles, catheters and similar products; and diagnostic and laboratory reagents. These four products account for 18 percent of the APEC imports of medical goods.

The 10 most exported medical goods by the APEC region in 2018 feature many of the same goods found in the top 10 imports list. Medicaments consisting of mixed or unmixed products, mentioned earlier as the most imported medical product, are also the most exported (Table 3).

Of note, a significant share of the APEC exports of medical goods in 2018 is made up of products that are currently in high demand due to the COVID-19 crisis. Face masks made of plastic and textile materials; hand sanitiser; needles, catheters and similar products; and diagnostic and laboratory

Table 2. Top 10 APEC imports of medical goods (Year 2018)

#	Type	Description	USD billion	Share
1	MED	Medicaments consisting of mixed or unmixed products ... for retail sale	116.4	28.8%
2	PPP	Face masks (plastic)	30.9	7.6%
3	MED	Immunological products, ... for retail sale	30.5	7.5%
4	ME	Instruments and appliances used in medical, surgical or veterinary sciences, n.e.s.	27.9	6.9%
5	PPP	Hand sanitiser	17.7	4.4%
6	MS	Needles, catheters, cannulae and the like, used in medical, surgical, dental or veterinary sciences	12.8	3.2%
7	MS	Diagnostic or laboratory reagents on a backing, prepared diagnostic or laboratory reagents and certified reference materials	11.3	2.8%
8	MED	Medicaments containing hormones or steroids ... for retail sale	11.2	2.8%
9	MS	Antisera and other blood fractions	11.0	2.7%
10	MED	Vaccines for human medicine	9.8	2.4%
Total Top 10 APEC Imports			279.3	69.1%
Total APEC Imports			404.5	100.0%

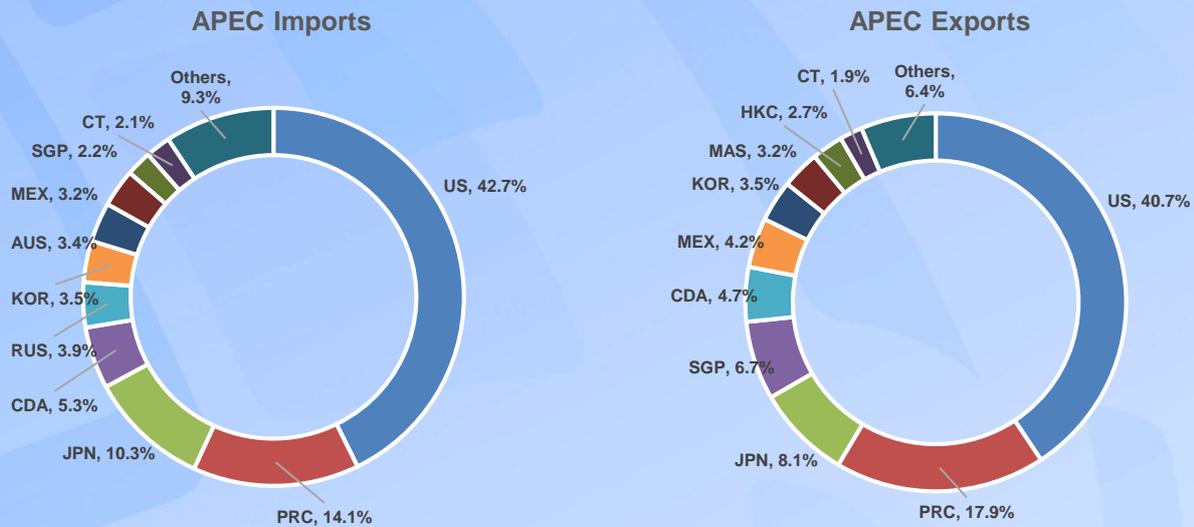
ME=medical equipment, MED=medicines, MS=medical supplies, PPP=personal protective products
Source: International Trade Centre – Trade Map; APEC PSU calculations.

Table 3. Top 10 APEC exports of medical goods (Year 2018)

#	Type	Description	USD billion	Share
1	MED	Medicaments consisting of mixed or unmixed products ... for retail sale	38.1	14.0%
2	PPP	Face masks (plastic)	31.4	11.6%
3	ME	Instruments and appliances used in medical, surgical or veterinary sciences, n.e.s.	25.0	9.2%
4	PPP	Hand sanitiser	16.7	6.1%
5	MS	Needles, catheters, cannulae and the like, used in medical, surgical, dental or veterinary sciences	14.7	5.4%
6	MED	Immunological products, ... for retail sale	12.3	4.5%
7	MS	Diagnostic or laboratory reagents on a backing, prepared diagnostic or laboratory reagents and certified reference materials	11.4	4.2%
8	MS	Antisera and other blood fractions	8.2	3.0%
9	PPP	Face masks (textile material)	7.8	2.9%
10	ME	Instruments and apparatus for physical or chemical analysis, or for measuring or checking viscosity ...	7.4	2.7%
Total Top 10 APEC Exports			173.1	63.7%
Total APEC Exports			271.8	100.0%

ME=medical equipment, MED=medicines, MS=medical supplies, PPP=personal protective products
Source: International Trade Centre – Trade Map; APEC PSU calculations.

Figure 2. Distribution of APEC trade in medical goods by economy (Year 2018)



Source: International Trade Centre – Trade Map; APEC PSU calculations.

reagents together represent 30.2 percent of the APEC exports of medical goods.

Most of the trade of medical goods by APEC comes from three economies.

Around two-thirds of the imports and exports of medical goods in the APEC region come from the United States; China; and Japan. In general, imports are slightly less concentrated than exports: the top 10 APEC importers of medical goods for 2018 represent 90.7 percent of the imports, while the top 10 APEC exporters of medical goods account for 93.6 percent of the exports (Figure 2).

Imports of personal protective products in the APEC region in 2018 total USD 65 billion and exports USD 66 billion.

In the APEC region, the United States is the main importer of personal protective products such as face masks, hand sanitisers, hand soap and protective visors, followed by China; Japan; Mexico; and Canada. The top five APEC importers account for 65.5 percent of the APEC imports and 30.4 percent of the world imports of protective personal products.

China is the main APEC exporter of personal protective products. It represents 35 percent of the APEC exports of these products in 2018. The United States; Japan; Chinese Taipei; and Mexico complete the top five exporters, together accounting for 74.9 percent of the APEC exports and 35.6 percent of the world exports of protective personal products.

The APEC region imported USD 66 billion and exported USD 65 billion in medical equipment in 2018. Five economies account for 86.4 percent of the APEC exports of respiratory equipment.

Within the APEC region, the United States account for 38.4 percent of the imports of medical equipment, followed by China; Japan; Korea; and Canada. Together, these five APEC economies represent 74.1 percent of the APEC imports and 39 percent of the world imports of medical equipment.

From the export perspective, the United States is also the main exporter of medical equipment, with 42.8 percent of the APEC exports, followed by China; Japan; Singapore; and Mexico. These five economies account for 82.5 percent of the APEC exports and 39.7 percent of the world exports of medical equipment.

Among all medical equipment, those supporting respiratory functions and providing oxygen therapy are some of the most important for the treatment of COVID-19 patients in intensive care units. The United States is the main importer of respiratory equipment, at 52.7 percent of APEC imports. Other important importers are Japan; Singapore; China; and Canada. In terms of exports, Singapore and the United States together account for 50.3 percent of the APEC exports and 30.5 percent of the world exports of respiratory equipment. Other important exporters in APEC are China; Australia; and New Zealand. These five economies account for 86.4 percent of the exports of respiratory equipment.

90.6 percent of the APEC exports of diagnostic and laboratory reagents for medical tests originate from five APEC economies.

Exports of diagnostic and laboratory reagents by APEC economies for 2018 total USD 11 billion. The United States account for 63.3 percent of those exports, followed by Singapore (12.9%); Japan (5.6%); Canada (5.0%); and Korea (3.7%). However, these five economies only explain 37.7 percent of the world exports of diagnostic and laboratory reagents. The European Union is the main global exporter with a 55.5 percent share.

On the import side, the numbers show less concentration of share of imports to a few APEC economies. Similar to exports, imports of diagnostic and laboratory reagents by APEC economies total USD 11 billion. The United States; China; Canada; Korea; and Singapore together account for 68.9 percent of the reagents directed to the APEC region.

APEC is a net importer of medicines, with imports of USD 202 billion and exports of USD 71 billion in 2018.

APEC imports are significant in terms of value, but they are only 36.4 percent of the imports of medicines worldwide in 2018. The United States is the main destination, totalling 49.5 percent of the value imported by APEC. China; Japan; Canada; and Russia are other important importers. The top

five APEC importers account for 82.7 percent of APEC imports of medicines.

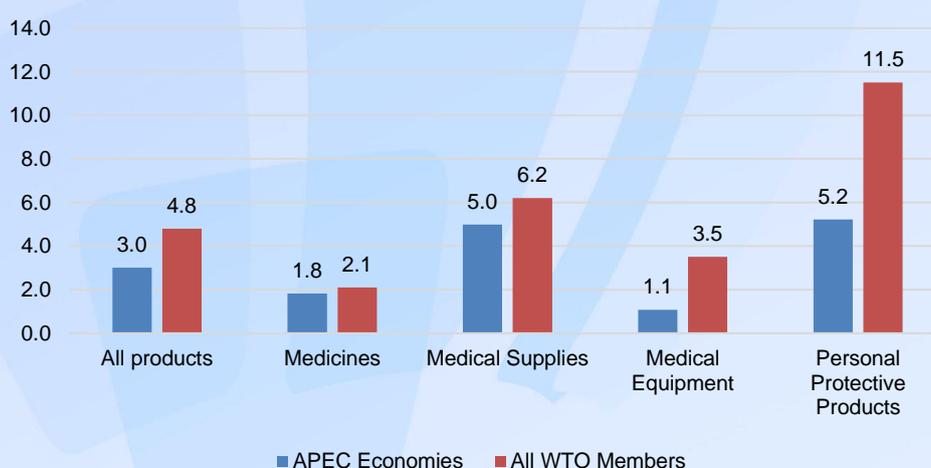
From the export side, the United States is the main origin of APEC exports, with 51 percent of the total in 2018. Other important exporters are Canada (10.4%); Singapore (10.3%); China (7.3%); and Japan (6.9%). While the export value of medicines by the APEC region is significant, it is small in comparison to that of the European Union, which exported USD 349 billion, equivalent to two-thirds of the global exports of medicines. APEC is the destination of 30.1 percent of the medicines exported by the European Union.

MFN Tariff Levels on Medical Goods in the APEC Region

Average MFN tariffs are lower in APEC than in the rest of the world.

Based on the latest data available from the WTO, the average most-favoured nation (MFN) tariff in the APEC region is 3 percent, lower than the average for all WTO members (4.8 percent) (Figure 3).³ MFN tariff levels are different across the categories of medical goods. In APEC, while the tariff averages for personal protective products and medical supplies are 5.2 percent and 5.0 percent, respectively; medicines and medical equipment record tariff averages of 1.8 percent and 1.1 percent, respectively.

Figure 3. Average MFN tariffs by product category (%)



Source: World Trade Organization –Tariff Database Facility and Tariff Analysis Online; APEC PSU calculations.

³ Ad-valorem equivalent (AVE) duties have been calculated for those products with non ad-valorem MFN tariff duties.

Table 4. Number of APEC member economies per range of average MFN tariff

Duty Range	All Medical Goods	Medicines (Pharmaceuticals)	Medical Supplies	Medical Equipment	Personal Protective Products
0	2	9	3	4	2
0 <= 2.5	9	6	6	14	3
2.5 <= 5	5	2	4	2	4
5 <= 7.5	4	3	4	1	9
7.5 <= 10	0	1	2	0	1
10 <= 15	1	0	1	0	2
> 15	0	0	1	0	0
Average MFN Tariff (%)	3.0	1.8	5.0	1.1	5.2

Source: World Trade Organization – Tariff Database Facility and Tariff Analysis Online; APEC PSU calculations.

Table 5. Highest average MFN tariffs on medical goods in the APEC region

#	Type	HS Code	Description	Average MFN Tariff (%)
1	MS	220710	Undenatured ethyl alcohol, of actual alcoholic strength of >= 80%	76.6
2	PPP	630790	Face masks (textile material)	8.4
3	MS	392620	Articles of apparel and clothing accessories produced by the stitching or sticking together of plastic sheeting	6.9
4	PPP	340130	Hand soap (liquid)	6.7
5	PPP	340111	Hand soap (bar)	6.6
6	PPP	392690	Face masks (plastic)	6.0
7	MS	401519	Gloves, mittens and mitts, of vulcanised rubber	5.9
8	MS	401511	Surgical gloves, of vulcanised rubber	5.2
9	PPP	340220	Other cleaning products	5.1
10	PPP	900490	Protective spectacles and visors	4.6

MS=medical supplies, PPP=personal protective products

Source: World Trade Organization – Tariff Database Facility and Tariff Analysis Online; APEC PSU calculations.

Most APEC economies apply low average MFN tariff rates to medicines and medical equipment.

Table 4 shows 16 APEC economies recording an average MFN tariff on all medical goods of 5 percent or less; and only five APEC economies impose average tariffs above 5 percent.

In the case of medicines and medical equipment, which usually require intensive use of technology, the number of APEC economies with average tariffs above 5 percent is low (four economies for medicines, and one for medical equipment).

At the opposite end, eight APEC economies impose an average MFN tariff of more than 5 percent on medical supplies and 12 APEC economies do the same with personal protective products.

The highest average MFN tariff duties on medical goods in APEC are imposed on medical supplies and personal protective products that are essential in the fight against COVID-19.

A review of the 10 products with the highest average MFN tariffs in the APEC region shows that all are medical supplies or personal protective products (Table 5). An example is undenatured ethyl alcohol

with strength of 80 percent or above, a common ingredient in hand sanitisers; it is important for hygiene, and helps prevent the transmission of COVID-19 as it is effective in killing microorganisms, fungi and viruses.⁴ However, it has the highest average MFN tariff among all medical goods in APEC, at 76.6 percent. Ten APEC economies impose MFN tariff rates equal or higher than 10 percent on ethyl alcohol and on face masks made of textile materials.⁵

Further, important medical supplies worn by medical staff such as gloves made of vulcanised rubber, protective spectacles and visors, and clothing made of plastic sheeting appear in the list of products with highest average MFN tariffs in APEC. Other personal protective products such as plastic face masks, hand soap and other cleaning products also show high average MFN tariffs.

Policy Recommendations

Trade policy can be an important tool to assist health care systems struggling to cope with the challenges raised by COVID-19; and APEC is a relevant forum to strengthen multilateral and regional efforts in this area.

⁴ See the website by the American Chemistry Council: <https://www.chemicalsafetyfacts.org/ethanol/>

⁵ This includes four APEC economies with AVE duties above 10 percent.

To facilitate the flow of medical goods, some governments across the globe have implemented temporary waivers of import tariffs on a number of medical goods. However, in most cases, these measures are only for the duration of the COVID-19 pandemic. To facilitate access to medical goods at any time and stand ready to react under any sort of public health crisis, APEC economies could aim to develop a collective initiative to reduce or eliminate tariffs on medical goods. APEC has the track record to deliver on an initiative of this kind. For instance, the APEC List of Environmental Goods, endorsed in 2012, included a voluntary commitment to reduce tariffs to 5 percent or less in 54 environmental goods. The APEC Committee on Trade and Investment or the Market Access Group could lead efforts on this front.⁶

Besides tariffs, non-tariff measures could also impede the smooth flow of medical goods across borders. It is important for APEC economies to consider a complementary initiative to address unnecessary trade-restrictive measures, in particular, export bans and restrictions. In recent weeks, some governments around the world have implemented protective measures affecting a range of medical goods as a reaction to the COVID-19 pandemic. These measures could unintentionally restrict access to those products, which could be particularly detrimental to those economies without the facilities to produce those essential medical goods or with limited capacity to do so. In fact, these measures could increase prices and affect the production chain of some medical goods (Hoekman et al. 2020, 6–8). APEC economies could start discussions toward a declaration to prevent any unnecessary trade-restrictive measures on medical goods.

Finally, the COVID-19 pandemic has triggered an increase of internal movement restriction orders and cross-border restrictions worldwide, mostly on passenger traffic, that nevertheless have had implications for supply lines, as the restrictions have affected production lines, as well as frequency of air, road and maritime transport used for cargo. Freight costs have increased, adding pressure to firms and households. Yet, it is imperative in the context of tackling COVID-19 to keep supply lines open for the provision of medical and other essential goods. APEC could be an avenue to address this as it could build on previous initiatives on supply chain connectivity and value chain resilience and could

⁶ Some APEC economies are already pursuing bilateral initiatives on this issue. For example, on 15 April 2020, New Zealand and Singapore issued a Declaration on Trade in Essential Goods for Combating the Covid-19 Pandemic, which

bring together its member economies to commit on keeping supply lines open and functional.

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includes a commitment to eliminate customs duties for 124 essential goods, including food and healthcare products. This declaration includes 81 out of the 92 goods in the list prepared by the WTO.