

## Comments on Section 232 National Security Investigation of Imports of Personal Protective Equipment, Medical Consumables, and Medical Equipment, Including Devices

The Coalition for a Prosperous America (CPA) strongly supports the Commerce Department's investigation of Imports of Personal Protective Equipment, Medical Consumables, and Medical Equipment, Including Devices.

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October 17, 2025

Ms. Julia A. Khersonsky
Deputy Assistant Secretary for Strategic Trade
Bureau of Industry and Security
Office of Strategic Industries and Economic Security
Department of Commerce
1401 Constitution Ave NW
Washington, DC 20230

# Re: Comments on Section 232 National Security Investigation of Imports of Personal Protective Equipment, Medical Consumables, and Medical Equipment, Including Devices [BIS-2025-0258; XRIN 0694-XC134]

#### Dear Ms. Khersonsky:

The Coalition for a Prosperous America (CPA) strongly supports your Department's investigation of Imports of Personal Protective Equipment, Medical Consumables, and Medical Equipment, Including Devices.

Any import reliance on products covered by this investigation's scope presents a clear national security risk, as demonstrated in the response by national governments worldwide to the arrival of the COVID-19 virus.

CPA's submission will focus on medical gloves and syringes. Information on these two products directly in response to the Department's questions is included below, with more information included as **Exhibit A (Gloves)** and **Exhibit B (Syringes)** attached to this letter.

Before addressing these two products, however, CPA would like to urge the Department to consider the adoption of ongoing processes for this Section 232 action that build on the success of other Section 232 actions' inclusion rounds.

## **Ongoing Processes to Further National Security Goals of The Action**

Building on the successful inclusion rounds of the steel and aluminum Section 232 actions, the Department should establish productby-product *processes* for import adjustments on this Section 232 action.

Beyond merely facilitating the addition of products to a single ad valorem tariff rate, however, the inclusion process for this action should:

 Request recommendations for product-specific tariff rates that would further the goal of reducing the national security threat from import reliance;

- 2. Encouraging requests for new 10-digit HTSUS statistical breakouts (along the lines of the Section 484(f) process) where doing so would aid in product tariff-setting; and
- Encourage submissions on product-specific rules of origin to protect cross-border supply chains where there is no new investment in reshoring.

While CPA prioritizes setting tariff-rates product-by-product, to the extent that there will be a blanket ad valorem tariff for products covered by the scope of the investigation, CPA encourages a limited quota approach for imports supplying a preferential tariff agreement Certificate of Origin. Similar to both the textiles and automotive industry, many of the medical products covered by this investigation's scope involve a highly integrated North American supply chain. This gives time to facilitate reshoring, or, per point number three above, if there is no planned new investment in domestic production, develop product-specific rules of origin that go far beyond mere "substantial transformation" tests, and control for both originating material as well as enterprise control and leadership.

## **Gloves & Syringes**

(i) The current and projected demand for PPE, medical consumables, and medical equipment, including devices, in the United States;

- Gloves: U.S. demand for medical gloves is large and rising, driven by healthcare utilization, infection control, and growth in pharma, labs, and clean-room manufacturing. The U.S. medical-glove market was about \$2.27 billion in 2023 and is projected to reach \$4.17 billion by 2030, a CAGR of roughly 9.1%. Demand is reinforced by defense, semiconductor, and biomanufacturing operations that require sterile, nitrile-based PPE. The trajectory underscores the need to stabilize domestic capacity to meet demand and reduce exposure to volatile imports.
- Syringes: U.S. demand for medical syringes exceeds 8 billion units annually and continues to grow. Drivers include expanding vaccination programs, the rise in biologic drug therapies, insulin-dependent diabetes care, and aging populations requiring regular injections. Federal health agencies—including HHS and ASPR—project continued growth of 2–3 percent annually for basic injection devices and as much as 10 percent for prefilled and safety syringes.

In emergency scenarios, the demand spike is exponential. During the COVID-19 vaccine rollout, the United States required an estimated 850 million syringes in a single year to meet vaccination goals. National preparedness planning assumes a similar or greater surge requirement in the event of a pandemic or bioterror attack. Syringes are not stockpiled in large quantities due to shelf-life limitations; therefore, domestic surge capacity is critical to national health security.

(ii) the extent to which domestic production of PPE, medical consumables, and medical equipment, including devices, can meet domestic demand;

• Gloves: Domestic production currently supplies less than 1% of U.S. nitrile-glove demand. Despite federal Industrial Base Expansion funding, most facilities remain incomplete or underutilized due to sustained import underpricing. Recent closures and layoffs—including more than 500 at a major U.S. producer—illustrate the commercial pressure from low-priced imports. Only a small number of original awardees remain in operation, demonstrating the need for tariff stabilization and long-term procurement to scale.

Syringes: The United States retains substantial syringe production capability, concentrated among a handful of large-scale manufacturers operating plants in Nebraska, Connecticut, and Utah, as well as several smaller producers. These facilities employ tens of thousands of American workers and produce billions of units annually. Yet, years of import underpricing have depressed margins and disincentivized expansion.

(iii) the role of foreign supply chains, particularly of major exporters, in meeting United States demand for PPE, medical consumables, and medical equipment, including devices;

- Gloves: The U.S. relies almost entirely on foreign suppliers—principally Malaysia, China, Thailand, and Vietnam—for nitrile medical gloves. These nations dominate both glove manufacturing and upstream NBR feedstock supply, embedding foreign cost control across the chain. Post-COVID, Chinese firms expanded production into Vietnam under a "China-Plus-One" model, preserving Chinese pricing power. This structure leaves U.S. end users exposed to external shocks and strategic pricing decisions abroad.
- Syringes: Global syringe supply chains remain highly concentrated in China and India for commodity-grade syringes, while higher-value products—such as safety and auto-disable syringes—are produced primarily in the United States, Europe, and Japan. China's dominance is not driven solely by labor or material costs but by state-backed subsidies, including credit, feedstock pricing, and export rebates. In contrast, U.S. manufacturers operate under rigorous regulatory, labor, and environmental standards that increase production costs but ensure higher quality. This imbalance erodes North American integration under USMCA, as China has been documented to use Mexico as a transshipment vehicle—potentially routing syringe subassemblies through maquiladora zones to reenter the U.S. duty-free. Following the September 2024 imposition of 100% ad valorem tariffs on Chinese-origin syringes, U.S. imports from China fell by 91%, while imports from Mexico rose 20%, indicating a shift in sourcing patterns and raising concerns over tariff circumvention. These trends underscore the urgent need for strict origin verification, end-to-end traceability of components, and application of Section 232 or 301 measures to any Chinese inputs rerouted through North America. While allied suppliers play a critical role in supply diversification, resilient sourcing ultimately requires secure domestic manufacturing and enforcement mechanisms that prevent adversarial dominance.

(iv) the concentration of U.S. imports of PPE, medical consumables, and medical equipment, including devices, from a small number of suppliers or foreign nations and the associated risks;

- Gloves: U.S. imports are highly concentrated: in 2024, Malaysia supplied 44% and China 39% of U.S. medical-glove imports. Such concentration magnifies risk from supply disruptions, trade actions, or energy shocks in a small set of countries. Even as China's direct share has dipped, affiliated production in Vietnam and Thailand maintains Chinese influence via ownership and feedstock. This concentration, layered on subsidy-driven overcapacity, creates systemic risk for U.S. healthcare security.
- Syringes: China's dominance—accounting for over 60 percent of U.S. syringe imports by volume in 2024, compared to just 8 percent from Mexico—represents a dangerous concentration that poses critical risks to public health and defense readiness. The COVID-19 pandemic revealed how import dependence can paralyze national response, as syringe shipments from Asia faced delays of up to 12 weeks due to freight and port disruptions. These vulnerabilities persist today, and if China were to restrict exports amid a geopolitical crisis, U.S. inventories could be depleted within weeks. GAO findings confirm that foreign sourcing dependencies contributed to severe medical supply shortfalls during the pandemic. Though not syringe-specific,

these findings highlight the systemic danger of inadequate domestic capacity—exactly the type of threat Section 232 is intended to address.

(v) the impact of foreign government subsidies and predatory trade practices on the competitiveness of PPE, medical consumables, and medical equipment, including devices, manufacturers, in the United States;

- Gloves: China's state-supported petrochemical and manufacturing sectors benefit from tools like low-cost financing, direct support, and industrial planning that suppress upstream NBR and downstream glove prices. Southeast Asian manufacturers amplify this advantage by purchasing subsidized Chinese feedstock. The result is persistent underpricing that displaces U.S. production and prevents scale investments. These are structural—not cyclical—distortions requiring durable Section 232 remedies
- Syringes: Chinese syringe producers benefit from a coordinated industrial policy framework that includes VAT export rebates, preferential credit from state banks, and local subsidies—tools consistent with China's broader subsidization strategies in strategic sectors. While syringe-specific subsidies are not formally published, international bodies such as the OECD and WTO have documented China's interventionist practices across related industries. These supports allow Chinese firms to sustain export prices roughly 83 percent below global averages, with syringes landing in U.S. ports at approximately \$0.10 per unit—just 17% of the \$0.59 average from other suppliers. This is not the result of market efficiency, but of deliberate price suppression aimed at displacing competitors. Left unaddressed, these practices distort trade and entrench U.S. dependence on a foreign adversary for a critical medical input. Without corrective action, syringes risk following the same trajectory as other overrun sectors like steel, solar, and PPE.

(vi) the economic impact of artificially suppressed prices of PPE, medical consumables, and medical equipment, including devices, due to foreign unfair trade practices and state-sponsored overproduction;

- Gloves: Average import prices fell from \$0.035/glove (2022) to \$0.028 (2025), while Chinese and Vietnamese gloves entered at \$0.017-\$0.018, roughly one-third of U.S. costs. By contrast, U.S.-produced gloves price around \$0.061/glove, underscoring an unsustainable gap. Suppressed prices deter private capital, strand partially built facilities, and hollow out domestic capacity. Without correction, the U.S. remains exposed to renewed shortages in any future emergency.
- Syringes: The downstream impact of Chinese syringe dumping has been severe, with U.S. producers losing volume, revenue, and in some cases exiting the market altogether. Despite rising input costs, syringe prices declined from 2019 to 2023, driven largely by China's ultra-low-priced exports. The 100 percent ad valorem tariff imposed in September 2024 raised Chinese prices only modestly—from \$0.10 to \$0.14 per unit—suggesting exporters may be absorbing the cost through subsidies. Even post-tariff, Chinese syringes remain far below the \$0.30-\$0.50 range typical of U.S. and European suppliers, perpetuating undercutting that threatens market share. Compounding the economic harm is declining product quality: the FDA issued multiple 2023–2024 warnings about brittle, leaking, or non-sterile Chinese syringes. This combination of commercial damage and clinical risk directly jeopardizes national security and clearly meets the criteria for action under \$705.4(v)-(vi).

(vii) the potential for export restrictions by foreign nations, including the ability of foreign nations to weaponize their control over supplies of PPE, medical consumables, and medical equipment (including devices);

- Gloves: During COVID-19, export bans and factory shutdowns in Asia triggered acute U.S. shortages, hospital rationing, and the infiltration of counterfeit or reused gloves. Import prices spiked five- to ten-fold, demonstrating how foreign suppliers can weaponize control during crises. With no resilient domestic base, similar shocks would quickly cascade through U.S. healthcare and defense. Building local capacity is therefore a national-security imperative.
- Syringes: China has a well-documented history of weaponizing trade, using export controls on rare earths (2010), PPE (2020), and critical minerals (2023) to exert geopolitical leverage. During the COVID-19 pandemic, it restricted exports of masks—even those made by U.S. firms operating in China—and threatened broader medical supply cutoffs during diplomatic tensions. Syringes could be next: Beijing's "Health Silk Road" strategy places medical manufacturing at the core of its global influence, making syringe exports a potential tool of coercion in future crises, particularly in a Taiwan-related conflict. Even without an outright ban, China could restrict supplies through licensing delays, quota manipulation, or fabricated quality inspections. Continued dependence on Chinese medical devices leaves the U.S. vulnerable to strategic blackmail.

(viii) the feasibility of increasing domestic capacity for PPE, medical consumables, and medical equipment, including devices, to reduce import reliance;

- Gloves: The U.S. has the industrial base and technology to scale nitrile-glove and NBR production rapidly once pricing is stabilized. A combined tariff of \$0.045 per glove plus 150% ad valorem, paired with a \$15/kg NBR duty, creates investable conditions. Federal tools—like the DoD Office of Strategic Capital and DPA Title III—can close financing gaps and complete stalled projects. With these measures, a sovereign PPE supply chain can be restored and sustained.
- Syringes: Domestic syringe production is highly feasible given the U.S.'s technical capabilities, regulatory infrastructure, and skilled workforce. Key advantages include an established industrial base, access to North American raw materials, and proven public-private models—such as BARDA-backed expansions—that accelerate scale-up. Since 2020, more than \$2.5 billion has been invested in U.S. medical device manufacturing, with roughly half directed toward syringes, needles, and blood-collection systems. Industry leaders have shown they can add hundreds of millions of units in annual capacity with modest federal support. However, dumped imports continue to distort pricing; without corrective tariffs, U.S. producers cannot compete. Restoring sustainable pricing would unlock further investment and position the U.S. for near-total syringe self-sufficiency within five years.

(ix) the impact of current trade policies on domestic production of PPE, medical consumables, and medical equipment, including devices, and whether additional measures, including tariffs or quotas, are necessary to protect national security;

- Gloves: Current policy has not neutralized persistent underpricing and subsidy-driven overcapacity, leaving U.S. producers unable to compete. Implementing the combined tariff (\$0.045 per glove + 150% ad valorem) and \$15/kg NBR duty would restore price parity and predictability. Indefinite duration with five-year reviews provides certainty for capital investment while ensuring accountability. Together with procurement preferences, these measures protect national security by anchoring domestic capacity.
- Syringes: To fully address China's dumping advantage, CPA recommends replacing the current 100% ad valorem tariff with a specific per-unit tariff equal to 100% of the average landed cost per syringe. Based on 2024 trade data, this translates to a

fixed duty of approximately \$0.58 per syringe—raising China's artificially low \$0.10 landed price to a more market-aligned \$0.68. A specific tariff cannot be circumvented through under-invoicing or subsidized price compression, and would more effectively restore competitive parity, encourage domestic investment, and eliminate China's roughly 90% price advantage. CPA also urges that USMCA-compliant goods remain exempt to promote regional integration, and that Commerce establish a transparent product-level inclusion process to address future pricing abuses. Complementary measures—such as procurement preferences, subsidy monitoring, and potential quotas—should further reinforce U.S. self-sufficiency and deter tariff circumvention through transshipment.

(x) the potential for foreign control or exploitation of supply chains for PPE, medical consumables, and medical equipment, including devices, supply chain;

- Gloves: China's dominant share of global NBR capacity gives it effective leverage over glove manufacturing worldwide. Even when finished gloves are made in Malaysia, Thailand, or Vietnam, the feedstock typically originates from China, embedding its price and supply influence. This structural dependence enables foreign control over U.S. input costs and availability. Until the U.S. reestablishes feedstock and glove manufacturing at home, exploitation risk persists.
- Syringes: Chinese firms are increasingly acquiring stakes in overseas manufacturers and routing syringe components—such as plunger tips, barrels, and cannulas—through intermediaries in Mexico and Canada to circumvent tariffs and maintain access to the U.S. market. Without strict origin verification, these semi-finished goods can reenter tariff-free under USMCA, raising risks of transshipment, counterfeit labeling, and quality manipulation. To prevent exploitation, the U.S. must implement enhanced customs tracing, including digital certificates of origin and targeted audits.

(xi) the ability of foreign persons to weaponize the capabilities or attributes of foreign-built PPE, medical consumables, and medical equipment, including devices;

- Gloves: Foreign producers that dominate feedstock and manufacturing can restrict exports, drive punitive pricing, or prioritize domestic allocation during crises. These actions turn commercial dependency into strategic leverage against U.S. hospitals and defense agencies. The pandemic proved how fast such pressures materialize when supply chains are offshore. Domestic production and transparent sourcing are the only reliable safeguards.
- Syringes: A new generation of "smart syringes" equipped with electronic dose trackers, wireless connectivity, and embedded firmware introduces significant cybersecurity risks—especially when produced by firms operating under China's 2017 National Intelligence Law. China's investment in these technologies, as part of its Health Silk Road strategy, raises concerns that network-enabled medical devices could be exploited for data interception, treatment disruption, or sabotage through malicious firmware updates or cloud manipulation. In a conflict or emergency scenario, these vulnerabilities could compromise public health logistics, battlefield medicine, or hospital operations. The Department of Commerce has already flagged similar risks in other connected infrastructure, such as Chinese-built telematics systems in vehicles. To mitigate this emerging threat, Commerce should classify connected injection devices as critical infrastructure, require trusted-source procurement for products with firmware or cloud interfaces, and mandate origin disclosure for all network-capable medical consumables.

(xii) any other relevant factors.

- Gloves: Rebuilding U.S. NBR and glove capacity would create thousands of skilled jobs and anchor regional industrial ecosystems. The proposed combined tariffs add just \$2-\$3 per box of 100 gloves, a negligible cost for providers, yet they deliver major gains in price stability and supply security. With long-term purchase commitments and stronger Buy American rules, domestic producers can finally reach efficient scale. In parallel, the current impractical HTS measurement of "dozen pairs" should be revised to "by unit (glove)," and new HTS categories should be created to differentiate gloves by thickness, sterilization, and intended use, allowing for more targeted future tariff adjustments. The payoff from all these policies is a resilient, sovereign PPE supply that won't fail in the next crisis.
- Syringes: A resilient syringe supply chain is essential to public health confidence and military readiness, as any disruption—especially involving a foreign adversary—could undermine national security and destabilize emergency response. To safeguard this critical infrastructure, the Coalition for a Prosperous America urges the Department of Commerce to recommend a specific per-unit tariff on Chinese-origin syringes under HTS 9018.31 and 9018.32, set at 100% of the average landed cost, or approximately \$0.58 per syringe. This remedy would close China's pricing gap, restore fair competition, and bolster domestic manufacturing. CPA further recommends exempting trusted trade partners (e.g., Canada, Mexico, the EU, Japan), prioritizing U.S.-made products in federal procurement, and establishing a Subsidy Monitoring Task Force to identify and counter Chinese state support in medical-device sectors.



Coalition for a Prosperous America Comments on the Section 232 National Security Investigation of Imports of Medical Devices

## Coalition for a Prosperous America Comments on the Section 232 National Security Investigation of Imports of Medical Devices

Submitted Regarding: Medical and Related Nitrile Gloves, and Nitrile-Butadiene Rubber Feedstocks (HTS 4015.12.10.10, 4015.12.10.20, 4015.12.90.00, 4015.19.11.11, 4015.19.11.50, 4015.19.51.00, 4002.51.00, 4002.59.00, 4002.91.00, 4002.99, and 4002.99.90)

#### I. Introduction

The United States remains almost entirely dependent on foreign suppliers for nitrile medical gloves—a foundational product for health care, pharmaceuticals, and defense. That dependence extends upstream to nitrile-butadiene rubber (NBR), the synthetic feedstock from which nitrile gloves are made. Together, these vulnerabilities represent a critical national-security threat under Section 232 of the Trade Expansion Act.

These comments support a product-specific Section 232 determination and are focused specifically on nitrile medical gloves and their feedstocks, ensuring that each critical product is evaluated individually based on its national-security and market conditions.

To restore a secure domestic supply chain, the Department of Commerce should impose a combined tariff of \$0.045 per glove plus a 150% ad valorem rate on imported nitrile gloves and a corresponding duty of approximately \$15 per kilogram on imported NBR feedstock. The duty should apply indefinitely to the glove and feedstock HTS headings listed, with periodic five-year reviews for effectiveness. A clear per-unit tariff is simple to enforce, prevents under-valuation, and signals that the United States intends to rebuild this strategic industry.

## **II. Strategic Significance**

Nitrile gloves are indispensable across national-security sectors. In health care, they are the frontline barrier against infection for doctors, nurses, military, and emergency personnel. In pharmaceutical and biotechnology manufacturing, they ensure sterile conditions in aseptic compounding, vaccine production, and biologics packaging. In defense, aerospace, and semiconductor fabrication, gloves protect personnel and sensitive components from contamination. Gloves are also essential in rare earth mining and refining.

If glove or NBR supply were cut off, hospitals, drug plants, defense-electronics manufacturers, and rare-earth suppliers would face immediate disruptions due to the United States' dangerous import reliance. Section 232's definition of national security—covering both defense and the economic welfare of the country—clearly includes this category of goods.

## **III. Current Dependence and Vulnerability**

Current U.S. demand for medical gloves is reflected in a domestic market size of about \$2,269.8 million in 2023, and it is forecast to grow to approximately \$4,173.7 million by 2030, a compound annual growth rate (CAGR) of about 9.1%. [1]

However, according to industry data and U.S. trade flows, the United States now imports roughly 99% of its nitrile medical gloves. Market reports that estimate total U.S. demand, combined with 2024 import data, show that nearly all nitrile medical gloves consumed domestically are imported [2], [3].

Because imports have come to dominate the U.S. market, domestic nitrile-glove production remains extremely limited and has never scaled to meet national demand. Nonetheless, several companies—including Health Supply US / Glove One, Blue Star NBR, Nephron Nitrile,

American Nitrile, and SafeSource Direct—have built or begun constructing domestic glove and feedstock facilities, encouraged by a federal effort to rebuild strategic manufacturing capacity [4], [5]. Many of these projects have also received support through Industrial Base Expansion (IBx) funding [6].

However, most of these projects remain underutilized or incomplete because ultra-low-priced imports from China, Malaysia, and Thailand have made it impossible to operate profitably [7]. The recent closure of SafeSource Direct in Louisiana—resulting in the loss of more than 500 U.S. manufacturing jobs—underscores how dumped imports continue to undermine viable domestic operations [8]. Today, only Health Supply US and Blue Star NBR remain in operation among the original federal IBx awardees. Federal and private-sector investments demonstrate that U.S. manufacturing capability exists and could rapidly expand if stable market conditions were restored, but without protective tariffs to correct the current price distortion, these projects cannot achieve the scale necessary to replace imports and secure the national supply chain.

During the COVID-19 pandemic, foreign export restrictions and production disruptions caused severe shortages of gloves [9]. Hospitals in parts of the U.S. reported rationing nitrile gloves to manage supply constraints [10]. Brokers and distributors were documented selling counterfeit or reused gloves to meet demand [11]. Import prices for gloves jumped many times over—for example, one report shows U.S. import glove prices escalating from under 5 cents per pair in 2019 to \$1.77 in 2021—reflecting 5- to 10-fold or greater increases in many cases [12].

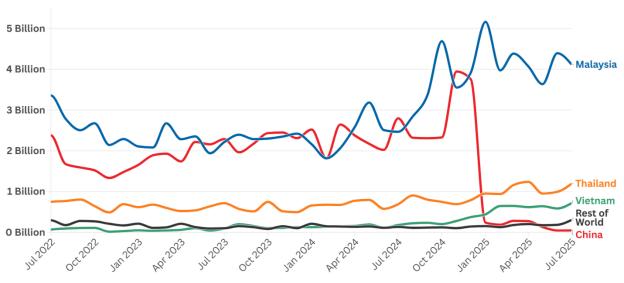
Despite the pandemic warning, U.S. dependence has increased since 2021. Chinese producers have expanded glove capacity dramatically—industry sources estimate China now produces on the order of 90 billion disposable gloves annually—flooding global supply and driving down prices [13]. Meanwhile, despite major federal investments through Departments of Health and Human Services (HHS) and Defense (DoD) initiatives, domestic nitrile-glove output remains a small fraction of total U.S. demand, and the nation continues to depend primarily on imports for medical-grade PPE as of 2025 [14]. Without import discipline, no private investor can sustain a viable domestic business in the face of such price competition.

Figure 1 illustrates the scale of America's import dependence. Imports remain at record highs through mid-2025, with Malaysia now the dominant supplier and China's shipments declining only recently following enforcement actions. Total import volumes have continued to rise even after the supply disruptions of the COVID-19 period, underscoring the nation's ongoing reliance on foreign sources and the risks posed by severe global overcapacity. Domestic production, by contrast, remains marginal and largely drowned out by low-cost imports.

Figure 1. U.S. Medical Glove Imports by Country (Total Number of Gloves, July 2022 – July 2025) [3]

#### 2025 Imports at Record Highs, with the Exception of China





Source: U.S. Census Bureau (HTS 4015.12.10.10, 4015.12.10.20, 4015.12.90.00)

Although China's direct share of U.S. medical-glove imports has declined since 2024 due to enforcement actions and shifting sourcing patterns, its control of the industry remains entrenched at the base-material level. China's import decline is misleading, as China's "China-Plus-One" strategy has shifted production to affiliated operations in Malaysia, Vietnam, and Thailand rather than reducing total Chinese influence. INTCO Medical, China's largest glove manufacturer, now produces more than 56 billion nitrile gloves and 30 billion vinyl gloves annually and has established major facilities in Vietnam [15], extending Chinese control over regional production and pricing. China increasingly commands a large and growing share of global nitrile-rubber (NBR) capacity—the core synthetic feedstock used to make nitrile gloves—driving most capacity additions and setting feedstock pricing trends [16], [17].

This upstream dominance means that even when final gloves are manufactured in Malaysia, Thailand, or Vietnam, the raw NBR almost always originates from China, giving it effective control over both pricing and supply conditions. In 2024, China supplied 39% of all medical gloves imported into the United States, while Malaysia supplied 44% [3], yet both remain heavily dependent on Chinese feedstock and chemical precursors. In practice, the global nitrile-glove supply chain is still anchored in China, even as its direct export share falls.

## IV. Upstream Feedstock Dependence (NBR)

The United States has no medical-grade NBR production in commercial operation. Every domestic glove start-up depends on imported NBR from China, Malaysia, South Korea, or Europe. Because raw materials—particularly NBR—typically constitute around 45% of total glove production cost [1], control of that feedstock conveys outsized influence over the finished-goods market. China's petrochemical sector benefits from heavy government support—including direct grants, low-interest financing, and preferential planning [18], [19]— giving it a structural cost advantage in upstream inputs that U.S. firms cannot match without trade relief.

To reduce structural dependence on Chinese feedstock, Commerce should extend its Section 232 determination to include the 4002-series HTS codes—4002.51.00, 4002.59.00, 4002.91.00, 4002.99, and 4002.99.90—which cover latex and solid forms of NBR and related synthetic rubbers used in glove manufacturing. Because China and Southeast Asia dominate global NBR production, U.S. producers are forced to source their primary inputs from Chinese suppliers, effectively giving China control over raw-material pricing and availability. Including these upstream materials in the determination is essential to reduce long-term U.S. exposure to Chinese price manipulation and to re-establish a domestic feedstock base capable of supporting resilient and independent glove manufacturing.

Section 232's legislative intent supports action on intermediate goods "necessary for national security." Commerce applied the same principle in steel and aluminum cases, imposing tariffs on semi-finished forms to protect upstream capacity. Applying it here to NBR is fully consistent with precedent and with the Administration's broader industrial-resilience agenda.

### V. Chinese Strategic Weaponization of PPE Supply Chains

During COVID-19, China used PPE control as a tool of strategic influence. By late February 2020, China had accumulated roughly 2 billion masks via domestic stockpiling and foreign purchases amid global shortages [20]. During that period, China halted exports of PPE while nationalizing production internally and exploiting supply for diplomatic gain.

When Italy's PPE crisis peaked in March 2020, China dispatched medical teams and large shipments of ventilators, masks, and other supplies—while European partners left Italy stranded—leveraging the aid to amplify its influence in Italian media and public discourse [21]. In the Balkans, China's PPE diplomacy extended to Serbia, where PPE shipments coincided with amplified pro-China media narratives and closer political alignment [22]. These actions show how China's control over medical supplies gave it strategic leverage internationally, influencing political and public opinion at a moment of crisis because of their supply control.

Other exporting nations also restricted supplies. Malaysia imposed export licenses and prioritized its own needs [23], while India and many other nations similarly curtailed PPE exports extensively [24]. These combined disruptions left the United States unable to meet our own needs, let alone aid allies, while China's PPE diplomacy bolstered its global influence.

Global export controls during COVID-19 exposed the fragility of medical supply chains and the risks of concentrated production. Top PPE producers imposed export restrictions that left many nations—including the United States—isolated and exploited supply control for political gain. Today, supply remains dangerously concentrated: Malaysia still produces about 60% of global gloves [25], and China dominates upstream nitrile-butadiene rubber (NBR) feedstock. Together, they control a dominant share of the world's glove and feedstock capacity, allowing them to dictate supply through export restrictions, inspections, or preferential allocation. Building U.S. capacity for 75–100 billion gloves annually would meet most domestic demand, restore resilience, and prevent future dependence on foreign monopolies.

#### VI. Economic Case for a Combined Tariff: \$0.045 Per Glove Plus 150% Ad Valorem

Import price data confirms that foreign suppliers are selling well below sustainable cost.

Table 1. Average U.S. Import Prices of Medical Gloves (USD per glove) [3]

Country	2022	2023	2024	2025*
Thailand	\$0.055	\$0.052	\$0.039	\$0.031
World	\$0.035	\$0.027	\$0.025	\$0.028
Malaysia	\$0.035	\$0.027	\$0.027	\$0.027
China	\$0.021	\$0.017	\$0.017	\$0.018
Vietnam	\$0.017	\$0.017	\$0.018	\$0.018

Source: U.S. Census Bureau (HTS 4015.12 series), author's calculations

The world-average import price fell from \$0.035 in 2022 to \$0.028 by 2025, even as import volumes hit new highs. Chinese and Vietnamese gloves entered the U.S. market at \$0.017-\$0.018 per glove, less than one-third of U.S. production costs. Notably, the near-identical pricing of Chinese and Vietnamese exports reflects the post-COVID "China-Plus-One" strategy, through which Chinese manufacturers—particularly INTCO Medical—expanded production into Vietnam while maintaining centralized control of supply, feedstock, and pricing. By contrast, U.S.-produced medical gloves price at about \$0.061 per glove, based on 2024–2025 export data [3]. This sustained price gap—roughly two-to-three times lower foreign prices—demonstrates persistent undercutting of U.S. producers and justifies the proposed tariff.

At current sub-optimal output, U.S. manufacturers face unit costs over \$0.06 per glove—levels that barely cover materials and overhead. Even at an efficient scale, U.S. production costs would decline but still remain higher than subsidized import prices artificially set by Asian competitors [26]. A \$0.045 specific duty would lift landed import prices to approximately \$0.060–\$0.065 per glove, restoring price stability, allowing domestic producers to expand to an efficient scale, and ensuring that market competition is based on productivity rather than foreign cost distortions.

However, because higher-grade gloves such as surgical, sterile, and clean-room variants are classified under the same HTS codes as standard medical gloves, a flat per-glove duty alone would not fully correct for foreign price distortions in those higher-value categories. Imports of these specialized products often enter the U.S. market at two-to-three times the average value per glove, yet they face the same underpricing pressures driven by subsidized feedstocks and state-backed overcapacity. To restore fair competition across all product classes, an additional 150% ad valorem tariff is warranted. The ad valorem component ensures proportional protection for more expensive gloves while maintaining price parity for lower-value medical and examination gloves, creating a balanced and economically neutral tariff structure.

The tariff would be straightforward to administer: Customs already receives per-unit counts from importers through FDA medical-device declarations, making the duty transparent, objective, and resistant to manipulation. Because China's feedstock advantages and chronic overcapacity are structural rather than cyclical [13], the measure should remain indefinite, subject to five-year reviews to evaluate progress and maintain the investment certainty required for long-term capacity expansion.

To reinforce this pricing correction upstream, a complementary \$15 per kilogram duty on NBR feedstock is also warranted. NBR accounts for nearly half the cost of each nitrile glove [1], and China's subsidized petrochemical sector has driven global NBR prices far below sustainable levels [18]. Applying a parallel tariff at the feedstock level would prevent Chinese cost distortions from determining U.S. production economics, ensuring that domestic manufacturers can compete on efficiency rather than on subsidized raw-material inputs.

<sup>\*2025 =</sup> January-July average

### **VII. HTS Coverage and Product Scope**

#### **Finished Gloves**

HTS Code	Description	
4015.12.10.10	Surgical gloves of natural-rubber latex	
4015.12.10.20	Surgical gloves other than latex (nitrile / neoprene)	
4015.12.90.00	Other medical, surgical, dental, or veterinary gloves	
4015.19.11.11	Disposable gloves of nitrile butadiene rubber	
4015.19.11.50	Disposable gloves of other synthetic rubbers	
4015.19.51.00	Other rubber gloves, not disposable	

#### **Feedstocks**

HTS Code	Description
4002.51.00	Acrylonitrile-butadiene rubber (NBR), other than latex
4002.59.00	Chloroprene (neoprene) rubber
4002.91.00	Latex of acrylonitrile-butadiene rubber
4002.99 / 4002.99.90	Other synthetic rubber and mixtures thereof

## **VIII. Integration with Domestic Policy Tools**

A stable tariff complements existing federal initiatives. The Centers for Medicare and Medicaid Services' (CMS) proposed payment adjustment for domestic PPE estimated a \$0.13 per-glove cost gap [27]; the combined tariff of \$0.045 per glove plus a 150% ad valorem rate narrows that gap enough for reimbursement to cover it. Federal agencies currently seeking foreign-source waivers under the Make PPE in America Act could instead commit to multi-year contracts with U.S. manufacturers, securing a growing domestic share—the "safety-valve" target envisioned by the 2021 IBx plan.

Completing any unfinished U.S. nitrile-glove and NBR plants should be a national priority. Once pricing is stabilized by the tariff, these projects should be able to attract private capital and tap federal industrial financing—particularly through DoD's Office of Strategic Capital. The cost of securing our domestic supply chain represents a fraction of pandemic PPE overspending and would yield permanent supply security. It is estimated that \$100 billion to \$150 billion was overspent on PPE [28].

#### IX. Clean-Room and Pharmaceutical Gloves

Clean-room nitrile gloves made to ISO Class 4–6 standards are essential for semiconductor, defense-electronics, and pharmaceutical manufacturing. FDA-cleared sterile versions fall under 4015.12.90.00; non-medical variants under 4015.19.11.11. Including both ensures coverage across the full biomanufacturing and health-security ecosystem. Because sterile pharma facilities produce vaccines and critical drugs, these gloves are no less strategic than those used in clinical medicine.

### X. Economic and Strategic Impact

The proposed combined tariff would raise glove prices from an average import level of \$0.028 to the current domestic production price of roughly \$0.060 per glove—an increase of only about \$3 per box of 100 gloves—negligible in hospital budgets and far below the extreme price swings of 2020–21 that will inevitably recur in the next health crisis if domestic supply is not secured. Moreover, with economies of scale, domestic producers are likely to reach production costs of \$0.035–\$0.04 per glove in the long-term, further diminishing the marginal cost increases.

The benefits of the tariff are substantial: the tariff would enable a competitive domestic industry capable of meeting a growing share of U.S. demand and ensuring reliable supply chains for medical facilities. The up-front tariff cost is minimal compared to pandemic-era emergency spending and would generate thousands of skilled manufacturing jobs nationwide. Reestablishing NBR feedstock capacity would further strengthen supply-chain resilience, supporting not only healthcare but also defense, automotive, and chemical-safety industries.

#### XI. Recommended Determination and Action

**Finding:** Imports of nitrile medical and related clean-room gloves and their associated NBR feedstocks—under HTS 4015.12.10.10, 4015.12.10.20, 4015.12.90.00, 4015.19.11.11, 4015.19.11.50, 4015.19.51.00, 4002.51.00, 4002.59.00, 4002.91.00, 4002.99, and 4002.99.90—threaten U.S. national security by sustaining dependence on foreign sources for critical medical devices and raw materials.

#### **Recommended Trade Action:**

- 1. Impose a combined tariff of \$0.045 per glove plus a 150% ad valorem rate on imported nitrile gloves (HTS 4015 series) and a corresponding duty of approximately \$15 per kilogram on imported nitrile-butadiene rubber (HTS 4002 series).
- Maintain these duties indefinitely, subject to five-year reviews to assess effectiveness and ensure continued domestic investment certainty.
- 3. Reform HTS Code unit measurement for nitrile gloves. The current "dozen pairs" Customs measurement unit is administratively impractical, as gloves are sold individually or by the case (1,000 gloves). The Department of Commerce, in coordination with U.S. Customs and Border Protection (CBP), should petition the U.S. International Trade Commission (USITC) to revise the tariff unit of quantity to "by unit (glove)." CBP should issue interim guidance for per-glove duty collection within 30 days of this determination to ensure tariff administration aligns with commercial practices.
- 4. Implement product differentiation through a two-phase tariff structure.
  - O Phase 1 (Immediate): Apply the combined tariff rate of \$0.045 per glove plus 150% ad valorem to existing 8-digit HTS codes covering medical, surgical, and clean-room gloves.

O Phase 2 (By 2027): Following USITC Section 484(f) approval, differentiate tariff levels by mil thickness, sterilization, and specialized specifications (e.g., clean-room ISO, chemotherapy ASTM, industrial use). The proposed tiered structure would establish eight categories with varying tariff rates ranging from \$0.045-\$0.130 per glove plus 100-185% ad valorem, to take effect upon approval.

#### **Additional Recommended Government Action:**

#### 5. Enhance Made-in-USA Enforcement and Strengthen CBP Oversight

- O The Departments of Commerce, Justice, and Homeland Security (CBP) should jointly enforce domestic-origin integrity for medical gloves and feedstocks through enhanced customs enforcement measures:
- Mandatory forensic testing of glove materials and NBR chemical composition to verify origin authenticity and prevent transshipment.
- O Comprehensive supply-chain documentation requirements for all importers, including mandatory source declarations for NBR feedstock and intermediate materials.
- O For related-party imports, CBP should have authority to reject declared values and apply comparable market prices or constructed value (cost + 15-25% profit), shifting the burden of proof to importers.
- O Penalties: Civil fines, 100% inspection of suspect shipments, and criminal referrals for willful violations.
- O These steps will close loopholes in country-of-origin reporting, prevent transfer-pricing manipulation, and ensure tariff and procurement benefits accrue solely to compliant U.S. producers.

#### 6. Invoke the Defense Production Act (DPA) to Expand U.S. NBR and Glove Manufacturing

- The Administration should use DPA Title III authorities to accelerate the completion and expansion of U.S. nitrileqlove and NBR feedstock facilities.
- O Deploy Industrial Base Expansion (IBx) and DPA contracts to increase capacity and modernize production technology.
- O Direct the Department of Defense (DoD) to coordinate with Commerce and HHS to identify and address critical bottlenecks in medical-grade NBR and glove manufacturing.
- O Federal investments of \$2.5-4 billion in equipment and \$5-7 billion in loan guarantees, supplemented by \$500-800 million per year in limited-term production incentives, can activate the existing 10-12 billion domestic glove capacity immediately.
- O This action advances the goal of a fully sovereign PPE supply chain, providing stable, secure, and competitively priced access to gloves and feedstocks for U.S. healthcare and defense sectors.

#### 7. Establish Federal Purchase Commitments to Anchor Domestic Demand

- Implement 10-year offtake agreements for U.S. manufacturers to supply the Strategic National Stockpile and federal agencies, ensuring predictable demand.
- Minimum federal purchase quarantees:
  - Years 1–2: 5 billion gloves annually (@ \$0.10–\$0.15 per glove)

- Years 3-5: 10 billion gloves annually
- Years 6-10: 15 billion gloves annually, with rolling stock rotation to prevent expiration.
- O These purchase commitments would stabilize production, generate 100,000 U.S. jobs, and provide a foundation for expansion to 75–100 billion gloves annually, meeting 63–83% of U.S. demand while enabling 20–45 billion exports to allies.

#### 8. Invest in Research and Development for Domestic Competitiveness

U	Direct the Department of Energy, National Institute of Standards and Technology (NIST), and National Science Foundation (NSF) to prioritize R&D programs for:
0	Automation and advanced robotics in glove manufacturing,
0	Quality control innovations,
0	Energy efficiency and waste reduction, and
0	Development of new sustainable NBR materials.
0	Federal R&D support—\$250-350 million over 5 years—would reduce long-term costs, enhance efficiency, and

#### 9. Mandate Domestic Procurement Preferences for PPE

Ο	Expand the Make PPE in America Act to cover all federal agencies, with the DoD serving as lead coordinator fo
	federal PPE procurement to ensure national-security resilience.

strengthen U.S. technological leadership in PPE and feedstock manufacturing.

- Extend the Berry Amendment to include gloves and other PPE, mandating 100% domestic sourcing for DoD, VA, and DHS purchases—guaranteeing 5.5 billion gloves per year in stable demand.
- O Strengthen the Buy American Act by raising domestic-content requirements from 55% to 75% and eliminating price-based waivers except in declared emergencies.
- Increase the federal procurement price preference from 20% to 50% for domestically produced gloves and PPE.

Financial return on investment of 25-50 times through avoided pandemic costs and allied export revenue.

O These measures will lock in sustained federal demand, reinforce industrial resilience, and prevent the recurrence of pandemic-era shortages.

#### 10. Summary Impact

0	Immediate activation of 10-12 billion existing domestic capacity,
0	Achievable 75-100 billion production within 7-10 years (63-83% U.S. share; 23-30% global),
0	Creation of 100,000 U.S. jobs, \$25–40 billion annual GDP, and \$1.7–2.7 billion in tax revenues,

#### XII. Conclusion

The COVID-19 pandemic exposed how dangerously dependent the United States had become on foreign sources for even the simplest protective equipment. That vulnerability remains. Without decisive action, the next crisis—whether medical, industrial, or geopolitical—will again find U.S. hospitals and defense facilities remaining reliant on overseas suppliers.

A combined tariff of \$0.045 per glove plus a 150% ad valorem rate on medical and clean-room gloves, together with a \$15-per-kilogram tariff on NBR feedstock, is a minimal and targeted remedy. It would reestablish sustainable pricing, catalyze investment, and ensure that American doctors, soldiers, and patients have access to safe, U.S.-made gloves in any emergency. The cost is measured in cents; the benefit is measured in national resilience and security.

This action is fully consistent with Section 232 precedent, which recognizes that secure domestic capacity for essential materials—such as steel and aluminum—is itself a matter of national security. Nitrile gloves and their NBR feedstocks clearly meet that standard: they are indispensable to healthcare, defense, and industrial safety, yet the United States remains almost entirely dependent on subsidized foreign suppliers.

In tandem with these tariffs, stronger enforcement, long-term federal purchase commitments, and domestic procurement preferences will be essential to sustain U.S. production and prevent a repeat of pandemic-era shortages.

Commerce should determine that these imports threaten to impair U.S. national security and recommend immediate implementation of the tariffs described herein to restore self-reliance across the full nitrile-glove supply chain.

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Coalition for a Prosperous America Comments on the Section 232 National Security Investigation of Imports of Medical Devices



## **Section 232 National Security Investigation of Medical Syringe Imports**

Comments of the Coalition for a Prosperous America (CPA)

October 17, 2025

## **Introduction and Executive Summary**

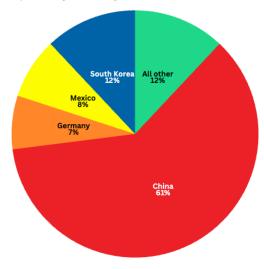
The Coalition for a Prosperous America (CPA) supports decisive action under Section 232 of the Trade Expansion Act of 1962 to address the growing national security threat posed by the United States' overreliance on imported medical syringes. This dependency—dominated by low-priced imports from the People's Republic of China—represents a critical vulnerability in the nation's healthcare and defense supply chain.

In 2024, China accounted for approximately 60 percent of total U.S. syringe import volume but only 10 percent of import value (figure 1).

Figure 1.

## China Accounts for 61% of U.S. Imported Syringes by Volume...

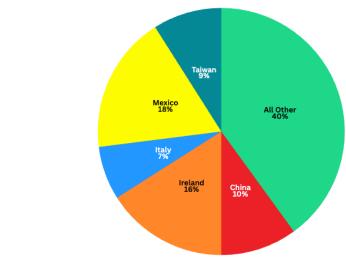
U.S. Merchandise Imports, by Quantity, 2024



Source: GTT • HTS items queried were 9018.31-32 The 2024 total units imported was 3.7 billion units.

## ...But Represents Only 10% of the Value

U.S. Merchandise Imports, 2024



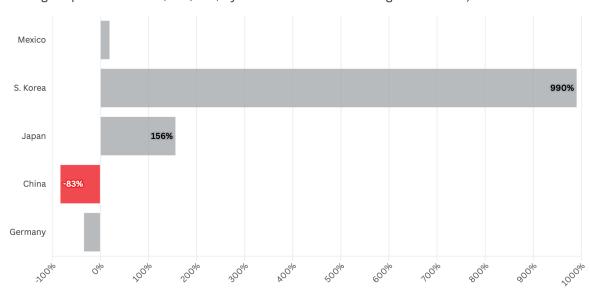
Source: GTT • Based off \$2.2 bn

Based on official 2024 trade data, the average import price of Chinese syringes was approximately \$0.10 per unit, compared to the global average import price of \$0.59 — meaning Chinese syringes were priced approximately 83% below competitor levels (figure 2).

Figure 2.

Chinese Syringes Remain Priced 83% Below World Prices

Average Import Unit Prices (USD/unit) by Select Countries vs. Average World Price, 2024



Source: Official Statistics of the Department of Commerce

This extreme pricing gap is not the result of superior efficiency but of state-subsidized overcapacity, government-backed dumping, and deliberate underpricing designed to capture foreign markets. The result is a fragile and distorted marketplace in which U.S. producers are displaced, allied capacity (i.e. Canada, Mexico, Japan, and the EU) is weakened, and the entire American healthcare system becomes dependent on a single foreign adversary for one of its most essential medical tools.

National security is directly implicated. Syringes are indispensable to vaccine deployment, chronic disease management, emergency medicine, and battlefield care. A breakdown in syringe supply would paralyze public health response and military readiness. The COVID-19 pandemic exposed the perils of global medical-supply concentration, and yet, five years later, syringe imports from China continue to rise unchecked.

CPA urges the Department of Commerce to find that syringe imports threaten to impair the national security of the United States and to recommend the imposition of a specific per-unit tariff on Chinese-origin syringes equal to  $100\% \times 100\%$  the average landed cost per syringe, which we conservatively estimate at \$0.58/ unit, which is based off the weighted average landed cost across all countries.

This measure would neutralize China's artificial cost advantage and restore fair market conditions. Additional supporting steps—such as procurement preferences, strategic stockpiling, and tighter enforcement of origin rules—should accompany the tariff.

At the same time, it is essential that syringes manufactured in USMCA countries remain exempt from these duties to preserve North American integration and incentivize near-shoring. A robust inclusion process should accompany this effort—allowing Commerce to tailor tariff applications product-by-product and to respond quickly to circumvention risks, particularly those involving maquiladora-based component routing from China.

Our submission addresses the criteria enumerated in 15 C.F.R. §705.4, with emphasis on:

- (iv) import concentration risk;
- (v) and (vi) predatory pricing and subsidies;
- (vii) export restrictions and supply weaponization;
- (viii) domestic production feasibility; and
- (ix) trade-policy remedies necessary to secure supply.

Together these factors reveal that syringe imports, as currently structured, pose a clear and escalating threat to U.S. national security. Syringes exemplify a broader class of high-volume, low-margin medical devices—such as IV sets, catheters, and diagnostic disposables—that are foundational to both emergency preparedness and routine patient care. Lessons drawn from syringe supply chain vulnerabilities should inform national policy across these categories, especially in aligning Section 232 remedies with trusted regional sourcing under USMCA.

## (i) Current and Projected Demand for Medical Syringes

U.S. demand for medical syringes exceeds 8 billion units annually and continues to grow.<sup>2</sup> Drivers include expanding vaccination programs, the rise in biologic drug therapies, insulin-dependent diabetes care, and aging populations requiring regular injections. Federal health agencies—including HHS and ASPR—project continued growth of 2–3 percent annually for basic injection devices and as much as 10 percent for prefilled and safety syringes.

In emergency scenarios, the demand spike is exponential. During the COVID-19 vaccine rollout, the United States required an estimated 850 million syringes in a single year to meet vaccination goals.<sup>3</sup> National preparedness planning assumes a similar or greater surge requirement in the event of a pandemic or bioterror attack. Syringes are not stockpiled in large quantities due to shelf-life limitations; therefore, domestic surge capacity is critical to national health security.

## (ii) Domestic Production Capacity

The United States retains substantial syringe production capability, concentrated among a handful of large-scale manufacturers operating plants in Nebraska, Connecticut, and Utah, as well as several smaller producers. These facilities employ tens of thousands of American workers and produce billions of units annually. Yet, years of import underpricing have depressed margins and disincentivized expansion.

Recent investments—spurred by pandemic-era public-private partnerships—demonstrate that U.S. capacity can scale rapidly when policy conditions are favorable. In 2021, a Biomedical Advanced Research and Development Authority (BARDA)-funded expansion in Nebraska increased syringe output by hundreds of millions of units within a year.<sup>5</sup> Additional expansions in 2024 added new lines for prefilled flush and hypodermic syringes. However, without stable pricing and enforcement against dumped imports, these facilities face difficulty justifying further capital expenditures.

In short, U.S. syringe manufacturing capacity exists and can grow, but it requires predictable market conditions shielded from predatory pricing. Domestic producers have proven their readiness and technical capability; what remains is the need for clear trade protection to sustain investment.

## (iii) Role of Foreign Supply Chains

Global syringe supply chains are heavily concentrated in China and India for commodity-grade syringes, while higher-value products (e.g., auto-disable or safety syringes) are primarily made in the United States, Europe, and Japan. China's dominance stems from low-cost feedstock, cheap labor, but largely from government subsidies, namely state-backed credit and export rebates. By contrast, U.S. producers face properly stringent regulatory, labor, and environmental standards that reflect higher quality but also higher cost.

This imbalance erodes North American integration under the USMCA. While Mexico and Canada support regional assembly and sterilization, China's documented use of Mexico as a transshipment vehicle to enter the U.S. market suggest that Chinese exporters could route syringe subassemblies through Mexican maquiladora zones to exploit duty-free reentry under USMCA.<sup>7</sup>

For example, following the imposition of 100% ad valorem tariffs on Chinese-origin syringes in September 2024, U.S. imports from China declined sharply—from approximately 162.7 million units in September to just 14.1 million units by July 2025, a drop of more than 148 million units or 91%. During the same period, imports from Mexico—tariff-free under USMCA—rose from 33.1 million to 39.9 million units, an increase of nearly 6.8 million units or 20%. This shift underscores how sourcing has rapidly moved away from China, with Mexico emerging as a key alternative supplier.

This divergence raises concerns about rerouted supply chains and underscores the need for strict origin verification in the form of end-to-end traceability of medical-device components, and apply Section 232 or 301 measures to any Chinese inputs circumventing North American rules of origin. Without vigilant enforcement, Chinese-origin components can enter the U.S. market disguised as North American products—undermining the intent of trade policy.

At the same time, USMCA-compliant syringes must remain exempt from duties to preserve the North American supply-chain integration and incentivize near-shoring, while Commerce establishes a robust product-by-product inclusion process allowing future tariff additions or rate adjustments where specific tariffs are appropriate to address predatory pricing. In addition, China must be prevented from exploiting USMCA rules of origin or maquiladora processing to reenter the U.S. market duty-free through transshipment or component assembly in Mexico.

## (iv) Import Concentration Risks

China's share of U.S. syringe imports—over 60 percent by volume—represents a dangerous concentration.<sup>8</sup> The next largest supplier, Mexico, accounted for 8 percent in 2024. This level of dependence on China poses critical risks to public health and defense readiness.

The COVID-19 crisis revealed how import dependence and supply bottlenecks can cripple response. In 2020–2021, the U.S. faced delays of up to 12 weeks for syringe shipments from Asia due to port closures and freight shortages. But we have not learned our lesson and the same vulnerabilities remain today. If China were to restrict exports during a geopolitical confrontation or pandemic, U.S. hospitals and emergency agencies would exhaust existing inventories within weeks.

GAO has documented that the United States faced significant shortfalls in critical medical supplies during the COVID-19 pandemic, due in large part to foreign sourcing dependencies. While not specific to syringes, these findings underscore the risks of inadequate domestic production in times of crisis. 10 Section 232 was designed precisely to mitigate such strategic exposure by protecting and rebuilding long-term domestic capacity. Dependence on China for basic medical instruments presents a systemic threat to national resilience.

## (v) Foreign Subsidies and Predatory Trade Practices

Chinese syringe producers operate in a coordinated industrial policy environment that includes VAT export rebates, preferential credit from state banks, and local subsidies in coastal provinces that are home to syringe exporters. While the government does not explicitly publish syringe-specific subsidies, such support is consistent with China's broader playbook in strategic sectors—including petrochemical inputs, land concessions, and tax rebates—that have been well documented by the OECD and WTO in related industries.<sup>11</sup> These tools enable Chinese exporters to sustain ultra-low pricing that is not explained by labor cost or production efficiency alone.

These supports allow Chinese firms to sustain export prices at roughly 83 percent below average global prices. Even with freight and tariff costs, Chinese syringes arrive in U.S. ports at roughly \$0.10 each—17% of the average landed price from other sources. <sup>12</sup> This is not market competition; it is a deliberate campaign of price suppression aimed at displacing competitors.

Left unchecked, these subsidies do more than distort trade—they entrench U.S. dependence on a foreign adversary for a critical medical input, leaving hospitals and defense agencies exposed in any supply disruption.

The OECD and WTO have repeatedly cited Chinese state intervention as a distortion in medical-device markets.<sup>13</sup> Similar patterns in steel, solar panels, and PPE have produced chronic global overcapacity and forced U.S. plant closures. The same trajectory is now underway in syringes unless corrective action is taken.

## (vi) Economic Impact of Artificially Suppressed Prices

The downstream effect of Chinese dumping is severe. Domestic producers lose volume and revenue, and some exit the market entirely. Industry stakeholders have raised concerns that nominal syringe prices in the U.S. declined significantly from 2019 to 2023—despite rising input costs—driven in large part by China's low-priced exports.

The 100 percent ad valorem tariff imposed on September 27, 2024 raised Chinese prices only marginally—from approximately \$0.10 to \$0.14 per unit—suggesting that Chinese syringe exporters may be partially absorbing tariff costs, potentially through subsidies or industrial policy support. Despite the tariff, Chinese prices remain well below the \$0.30–\$0.50 levels typical of U.S. and European producers, enabling continued price undercutting that risks further erosion of domestic and allied market share.

The same cost-cutting that enables China's low syringe prices has also driven a collapse in product quality. The FDA issued multiple advisories in 2023–2024 warning of brittle or leaky Chinese syringes, including recalls for products labeled "for single use only" that failed sterility testing. If Inferior quality tied to cost-cutting undermines clinical safety and national readiness. No warfighter or healthcare provider can rely on a compromised device.

This dual impact—economic injury and safety risk—illustrates how suppressed prices directly impair national security, satisfying the §705.4(v)-(vi) criteria for action.

#### (vii) Potential for Export Restrictions and Supply Weaponization

Beijing's pattern of weaponizing trade is well documented. China has used export controls on rare earths (2010), PPE (2020), and critical minerals (2023) to exert geopolitical pressure.<sup>15</sup> During the COVID-19 outbreak, Chinese authorities restricted exports of masks and respirators—even those produced in China by American companies.<sup>16</sup> Officials threatened further restrictions on medical supplies to the U.S. in response to diplomatic disputes.

Syringes could easily be next. China views medical manufacturing as a pillar of its "Health Silk Road" strategy, integrating health supply chains into broader Belt and Road influence.<sup>17</sup> In a conflict scenario—especially over Taiwan—China could weaponize syringe exports to create domestic chaos in the U.S., disrupting vaccination campaigns, chronic disease management, or emergency response.

Even short of outright bans, China could deploy "gray zone" tactics such as licensing delays, quota manipulation, or sudden safety inspections to throttle shipments. The U.S. must assume that dependency on Chinese medical supplies equates to vulnerability to coercion.<sup>18</sup>

## (viii) Feasibility of Domestic Capacity Expansion

Domestic expansion is eminently feasible. The U.S. possesses the technical expertise, regulatory framework, and workforce to produce all essential syringe types domestically.

Key enablers include:

- Established industrial base capable of rapid scaling;
- Proven public-private models (e.g., BARDA partnerships) that cut ramp-up time by 50%; and
- Availability of raw materials—polypropylene and stainless steel—within North America.

Since 2020, over \$2.5 billion has been invested in U.S. medical-device manufacturing expansions according to multiple industry sources. Roughly half of this has gone toward syringes, needles, and blood-collection devices. Industry leaders have demonstrated the ability to add hundreds of millions of units of capacity annually with modest government support.

The limiting factor is price distortion from dumped imports. Without corrective tariffs, domestic production will remain uncompetitive. Once sustainable pricing is restored, private capital will flow to U.S. facilities, enabling near-total domestic self-sufficiency within five years.

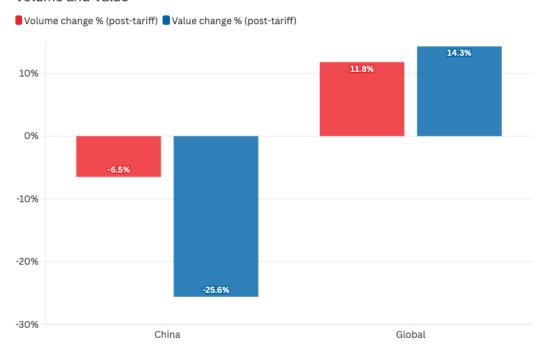
## (ix) Impact of Current Trade Policy and Recommended Tariff Remedy

The September 2024 100% tariff increase under Section 301 was a step in the right direction but does not neutralize China's dumping advantage. U.S. import data under the 100 percent ad valorem tariff show that while Chinese invoice values fell, shipment volumes remained largely unchanged. Figure 3 illustrates how Chinese values contracted sharply to compete with rising global syringe imports. Despite the tariff, Chinese syringes reportedly remain four to five times cheaper than domestic prices.

Figure 3.

## 100% Ad Valorem Tariffs Compressed Prices, but Not Shipments

Change in U.S. Syringe Imports From August 2024-July 2025 (post-tariff), by Volume and Value



Since ad valorem tariffs can be neutralized by ultra-cheap subsidized Chinese pricing, a more surgical instrument is required: a specific per-unit tariff.

#### **Proposed Remedy**

Impose a specific duty on Chinese-origin syringes equal to 100 percent of the average landed cost per syringe. This specific duty is more effective than an ad valorem rate because it anchors the tariff to the landed cost of sustainable, market-based production rather than to China's artificially low declared prices.

The average landed cost across suppliers is approximately \$0.58/unit per unit, suggesting a fixed specific tariff of \$0.58 per syringe—bringing the landed price of Chinese imports from roughly \$0.10 to around \$0.68 per unit.

#### This rate would:

- **Eliminate China's 90% artificial price advantage** and align Chinese syringe prices more closely with the true global market range;
- Prevent circumvention through under-invoicing or falsified customs values, since the per-unit tariff is unaffected by declared prices; and
- Stabilize the U.S. market and support new domestic investment, ensuring that American and allied manufacturers can compete on equal terms.

At the same time, USMCA-compliant goods must be categorically exempted from these duties to reward trusted sourcing and prevent collateral damage to regional integration. Commerce should also prioritize a transparent, product-specific inclusion framework to assess where targeted tariffs are appropriate and prevent transshipped Chinese components from reentering the U.S. market through maquiladora operations or nominal transformations.

Unlike ad valorem tariffs—which China has repeatedly offset through invoice compression and state subsidies—a specific per-unit tariff creates a firm price floor that reflects real production costs. This approach mirrors proven remedies used successfully in other sectors where ultra-low-value imports undermined domestic production, including steel nails, aluminum extrusions, and solar cells.

CPA further recommends that USMCA-compliant syringes remain exempt to preserve regional supply-chain integration and incentivize near-shoring, while Commerce establishes a robust product-by-product inclusion process allowing future tariff additions or rate adjustments where specific tariffs are appropriate to address predatory pricing and dumping. At the same time, we urge the Administration to ensure China cannot exploit USMCA rules of origin or maquiladora processing to reenter the U.S. market duty-free through transshipment or component assembly in Mexico.

#### **Complementary Measures**

Strategic Procurement and Stockpiling: In addition to tariffs, the U.S. government should expand and modernize the
Strategic National Stockpile (SNS) to better support not only emergency preparedness but also day-to-day patient care.
Syringes and other core medical consumables are essential during both pandemic surges and routine clinical operations.
Expanding the scope of devices maintained in the SNS, improving inventory transparency, and partnering with industry on

lifecycle planning would help stabilize domestic supply chains, reduce procurement volatility, and ensure consistent availability across healthcare settings. Syringes exemplify the broader category of medical inputs whose uninterrupted availability is vital to steady-state operations, not just crisis response. A forward-leaning SNS strategy would also reinforce the importance of maintaining North American sourcing advantages under USMCA, especially for other high-volume, low-margin medical essentials that benefit from predictable demand and trusted regional supply chains.

- Subsidy Monitoring: Commerce and USTR should initiate investigations into Chinese provincial subsidy schemes and energycost offsets.
- 3. **Import Quotas:** If tariffs fail to curb import concentration, a quantitative cap (e.g., limiting any single source country to 30% of total imports) should be imposed.
- 4. **Allied Country Cooperation:** Coordinate with trusted allies under the USMCA and G7 to maintain diversified, transparent syringe supply chains.

Together, these measures will rebuild U.S. self-sufficiency and insulate healthcare from foreign coercion.

## (x) Potential for Foreign Control or Exploitation of Supply Chains

Chinese firms have begun acquiring stakes in overseas contract manufacturers and distributors to bypass tariffs and maintain access to Western markets. In North America, Chinese component makers supply plunger tips, barrels, and cannulas through intermediaries in Mexico and Canada. Without strict origin verification, these semi-finished goods reenter the U.S. tariff-free under USMCA.

Such arrangements create opportunities for data infiltration, counterfeit labeling, and quality manipulation. Enhanced customs tracing, including digital certificates of origin and on-site audits, is required to prevent exploitation.

## (xi) Ability to Weaponize Foreign-Built Medical Devices

While most syringes are mechanical in design, a new generation of "smart syringes"—integrating electronic dose trackers, wireless connectivity, or data interfaces—is emerging in global medical markets. <sup>19</sup> China has been investing heavily in these devices through state-backed digital health initiatives and export promotion programs under its *Health Silk Road* strategy. These "connected" medical delivery systems often utilize proprietary firmware, cloud synchronization, or Bluetooth Low Energy (BLE) protocols for dose verification and patient monitoring.

Such connectivity, while offering clinical benefits, introduces new vectors of cyber vulnerability. A syringe or injection device with networked functionality could be remotely accessed, modified, or disabled if embedded software or cloud infrastructure is controlled by

foreign suppliers. Cybersecurity researchers have already demonstrated the ability to manipulate firmware on connected medical devices—including insulin pumps and infusion systems—by exploiting unsecured wireless interfaces. If similar vulnerabilities exist in devices built by firms subject to China's 2017 National Intelligence Law, which requires corporate cooperation with state security agencies, the risk extends beyond patient data theft to potential sabotage of treatment delivery at scale.

In a national emergency or conflict scenario, China could weaponize connected medical devices by transmitting malicious firmware updates, withholding software support, or introducing latent "kill switch" functions. This could disable automated injection systems used in hospitals, military field operations, or public health campaigns. Moreover, as U.S. healthcare increasingly integrates digital drug administration and inventory tracking, foreign-built medical devices linked to offshore data servers could be exploited to map U.S. medical infrastructure, interfere with vaccine logistics, or compromise patient-level health data.

The Commerce Department has already recognized analogous risks in other critical sectors. In 2025, the Department warned that networked vehicles with Chinese-controlled telematics and over-the-air (OTA) systems could be deemed "cyber-vulnerable under national security standards", as adversarial control of firmware or data channels could disrupt logistics or defense operations.

The same logic applies to digitally enabled medical devices, which form part of the critical healthcare delivery infrastructure.

Therefore, Commerce should:

- Classify smart and connected medical injection systems as critical infrastructure, subject to trusted-supplier requirements and cybersecurity audits;
- Mandate domestic or allied-country sourcing for any devices incorporating connectivity, embedded firmware, or cloud data interfaces; and
- Establish export-origin disclosure standards for all network-capable medical consumables entering U.S. supply chains.

These steps would ensure that the transition toward digital health technologies strengthens, rather than weakens, the resilience of the U.S. medical industrial base. A proactive Section 232 finding that addresses cyber-physical risk in "smart syringes" would align with the broader interagency effort to secure connected critical infrastructure from adversarial control.

#### (xii) Other Relevant Factors

A secure syringe supply chain underpins public trust. Shortages or failures—especially if linked to a foreign adversary—would undermine confidence in public-health programs and erode morale during crises. Furthermore, the U.S. defense health system relies on continuous access to sterile injection devices for troop immunizations and field medicine. Dependence on a foreign adversary for such basic components is incompatible with defense-readiness principles outlined in the 2022 National Defense Industrial Strategy.

Syringes are representative of many other essential, low-cost devices that face similar vulnerabilities in pricing, supply concentration, and origin circumvention. A resilient policy framework should extend protections and incentives beyond syringes to a broader set of baseline care products—reinforcing the logic of USMCA-aligned integration across all such categories.

## **Remedy Requested**

The Coalition for a Prosperous America respectfully requests that the Department of Commerce recommend to the President that:

- A specific per-unit tariff be imposed on Chinese-origin syringes under HTS 9018.31 and 9018.32, set at 100% × the average landed cost \$0.58/ unit per syringe;
- 2. Trusted partners (e.g. Canada, Mexico, Japan, the EU, Japan, etc.) be excluded from this tariff;
- 3. Federal agencies adopt procurement preferences for domestically made syringes and needles; and
- 4. Commerce establish a Subsidy Monitoring Task Force to track Chinese state support in medical-device sectors.

These remedies will neutralize China's cost advantage, protect the domestic industrial base, and ensure the United States maintains control over a vital component of public and national health security.

Respectfully submitted,

#### **Jon Toomey**

President, Coalition for a Prosperous America *October 17. 2025* 

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