FDA Round-Up: Overview of Emergency Actions to Expedite the Availability of Medical Products to Combat COVID-19

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The COVID-19 crisis has prompted a barrage of legislative and regulatory activity affecting drug and device manufacturers. In addition to the CARES Act, one of the most sweeping pieces of legislation in recent memory, the U.S. Food & Drug Administration (FDA) has been releasing new policies and guidance documents on a nearly daily basis.

There are both opportunities and risks for companies trying to respond to the COVID-19 crisis. On the one hand, companies can bring new and newly-adapted products to market under FDA enforcement discretion and emergency pathways. On the other hand, companies are proceeding rapidly with incomplete information, and in an uncharted and evolving regulatory landscape.

This round-up details the CARES Act provisions and recent FDA actions taken to expedite the availability of diagnostics, treatments, vaccines, medical devices, and personal protective equipment (PPE) to combat COVID-19. Gibson Dunn attorneys are advising companies on a daily basis with regard to these issues, and are here to assist with any questions you may have.

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I. CARES Act Provisions for Medical Product Development and Deployment

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Several provisions of the CARES Act aim to promote the development and distribution of medical products needed to respond to COVID-19 and future public health emergencies. Below is an overview of key provisions.[1]

A. Bolstering Supply and Promoting Development of Medical Products

In response to the recognized shortfall of respirators, masks and other PPE, and diagnostic testing products, Section 3102 of the CARES Act requires the Strategic National Stockpile to include "personal protective equipment, ancillary medical supplies, and other applicable supplies required for the administration of drugs, vaccines and other biological products, medical devices, and diagnostic tests."

Additionally, the CARES Act includes emergency appropriations to the Public Health and Social Services Emergency Fund for the development, procurement, and deployment of COVID-19 medical products.

- The Act appropriates \$27 billion to the Public Health and Social Services Emergency Fund for the prevention, preparation, and response to COVID-19. This money is intended to fund the development of medical countermeasures and vaccines as well as the purchase of vaccines, therapeutics, diagnostics, and necessary medical supplies in accordance with Federal Acquisition Regulation (FAR) guidance. Medical products purchased by the appropriated funds may, at the discretion of the U.S. Department of Health and Human Services (HHS), be deposited in the Strategic National Stockpile. Up to \$16 billion of the appropriation may be used to purchase products for the Strategic National Stockpile. Further, the Act calls for not less than \$3.5 billion to go to the Biomedical Advanced Research and Development Agency (BARDA) within the HHS to fund the manufacturing, production, and purchase of vaccines, therapeutics, diagnostics, pharmaceuticals, and active pharmaceutical ingredients (APIs). The BARDA funding is also intended to scale up production of countermeasures by supporting "the development, translation, and demonstration at scale of innovations in manufacturing platforms."
- · The Act calls for HHS to distribute, in the form of grants or other mechanisms, a separate \$100 billion in appropriations to the Public Health and Social Services Emergency Fund to hospitals and other health care providers who "provide diagnoses, testing, or care for individuals with possible or actual cases of COVID-19." The funds are intended to "prevent, prepare for, and respond to coronavirus, domestically or internationally," and are to be available for, among other things, "medical supplies and equipment including personal protective equipment and testing supplies." The Act defines "eligible health care providers" to mean public entities, Medicare and Medicaid enrolled suppliers and providers, and any other for-profit and not-for-profit entities specified by HHS that are in the United States and engaged in COVID-19 diagnosis, testing, or treatment. On April 10, 2020, HHS announced the immediate infusion of \$30 billion into the health care system through the CARES Act Provider Relief Fund.[2] HHS is working rapidly on targeted distributions of the remaining \$70 billion that will focus on "providers in areas particularly impacted by the COVID-19 outbreak, rural providers, providers of services with lower shares of Medicare reimbursement or who predominantly serve the Medicaid population, and providers requesting reimbursement for the treatment of uninsured Americans." Additional HHS guidelines around eligibility for funding are expected soon.
- The emergency appropriations also include extensive funding to various agencies
 for coronavirus research and medical product procurement, including the Centers
 for Disease Control and Prevention (CDC) and the National Institutes of Health
 (NIH). NIH received \$945 million, the largest share of such funding, \$706 million of
 which goes to the National Institute of Allergy and Infectious Diseases (NIAID),
 which is actively funding research on the development of vaccines, diagnostics,

and treatments to combat COVID-19.

B. Anticipating and Preventing Critical Drug and Device Shortages

To better anticipate and prevent shortages of emergency drugs and medical devices, the CARES Act includes new and additional FDA reporting requirements for critical drugs and medical devices during a public health emergency. It also requires FDA to prioritize and expedite review of supplements to new drug applications (NDAs) and inspections of establishments that could help mitigate or prevent such drug shortages. The CARES Act supplemented these provisions with \$80 million in funding to support FDA's capacity to oversee "the development of necessary medical countermeasures and vaccines, advanced manufacturing for medical products, [and] the monitoring of medical product supply chains."

Drug reporting. Section 3112 of the CARES Act amends Section 506C of the Federal Food, Drug, and Cosmetic Act (FDCA) to expand mandatory reporting on anticipated discontinuances or disruptions to the supply of certain drugs ("critical drugs"), including their APIs.[3]

First, it extends the categories of drugs covered by the reporting requirements to include drugs that are "critical to the public health during a public health emergency" declared by HHS.[4] Previously, the reporting requirements only applied to manufactures of "lifesupporting" drugs, "life-sustaining" drugs, and drugs "intended for use in the prevention or treatment of a debilitating disease or condition."

Second, manufacturers must now notify FDA of anticipated shortages of APIs used in a critical drug. Previously, drug manufacturers were only required to report the expected discontinuation or shortage of the critical drug itself. Because many finished drug products cannot be made without APIs and such APIs are often manufactured abroad, this added requirement ensures that FDA is notified in advance of anticipated shortages in key ingredients that could impact the supply of critical drugs in the United States.

Third, this mandatory reporting must now include information regarding the reasons for the discontinuation or disruption in supply, and, if an API is the cause of or risk factor in the disruption, the source of the API and any known alternative sources. Manufacturers also must describe the anticipated duration of the supply issue and whether it relates to any devices used in the preparation or administration of the drug.

Finally, Section 3112 requires manufacturers of critical drugs—as well as manufacturers of any API or associated device used for the preparation or administration of such drugs—to maintain a redundancy risk management plan identifying and evaluating risks to the supply of the drug. We expect that FDA will soon issue guidance elaborating on what these risk management plans should entail. In the meantime, manufacturers of critical drugs as well as of APIs or medical devices used in the preparation or administration of such drugs should review their existing risk management plans and prepare to update them in light of these new requirements.

Medical device reporting. Section 3121 of the CARES Act creates a new reporting framework for medical devices that requires manufacturers to report to FDA any discontinuation or anticipated disruption to the supply of covered medical devices, similar to that applicable to critical drugs discussed above. These reporting requirements apply to manufacturers of medical devices that are "critical to public health during a public health emergency, including devices that are life-supporting, life-sustaining, or intended for use in emergency medical care or during surgery," as well as medical devices for which HHS determines that the reporting is needed for a public health emergency. As noted above, Section 3112 requires manufacturers of associated devices used in the production or administration of life-saving drugs to maintain risk management plans aimed at preventing

or mitigating disruptions to the supply of the device that could cause or be a risk factor in disrupting supply of the drug.

This provision is significant because FDA previously did not have the authority to require medical device manufacturers to notify the agency when they became aware of a circumstance that could lead to a device shortage or meaningful disruption in the device supply.

C. Expedited Review of COVID-19 Product Applications

Section 1111 of the CARES Act further amends Section 506C of the FDCA to provide that FDA "shall, as appropriate," prioritize and expedite (1) review of a supplement to an NDA, abbreviated NDA (ANDA), or a supplement to an ANDA for a drug candidate that could help mitigate or prevent shortages to critical drugs; and (2) inspection or re-inspection of an establishment that could help mitigate or prevent such a drug shortage. Previously, Section 506C provided that FDA "may" "expedite" such reviews and inspections. [5] These amendments clarify that FDA *must*, as appropriate, both expedite *and prioritize* such reviews and inspections when there is, or is likely to be, a shortage of a critical drug.

Section 3302 of the CARES Act also creates Section 512A of the FDCA, which provides for expedited review of animal drugs through the new Priority Zoonotic Animal Drug designation. The designation is intended to address diseases that spread from animals to humans. This is significant given that several recent epidemics and pandemics have been or are believed to have been zoonotic diseases, including Avian Flu, Swine Flu, Ebola, Severe Acute Respiratory Syndrome (SARS), and COVID-19.

D. Liability Protection Extended to Respiratory Protective Devices

The CARES Act expressly extends the targeted liability protection under the Public Readiness and Emergency Preparedness Act (PREP Act) to include respiratory protective devices that are approved by the National Institute for Occupational Safety and Health (NIOSH) and that the Secretary of HHS determines to be "a priority for use during a public health emergency." [6] As discussed in a prior alert, a declaration by the HHS Secretary under the PREP Act immunizes manufacturers and distributors of "covered countermeasures" from liability under federal and state law with respect to all claims relating to the administration or use of the countermeasure under certain circumstances during a public health emergency. The PREP Act had defined "covered countermeasure" to include devices, drugs, and biologics as defined under the FDCA, in addition to other specifically enumerated countermeasures, but the provision did not contain language specific to respiratory protective devices until Section 3103 of the CARES Act.

E. Proposed Supplemental Legislation

Lawmakers are considering additional measures to supplement the CARES Act. Although Republicans and Democrats in Congress agree that more funding is needed, the parties continue to negotiate the details, including the scope of emergency funding through an interim bill. The Democrats have proposed an interim bill that would provide an additional \$100 billion to bolster hospitals and health care providers, with funds targeting the production of COVID-19 diagnostic tests and protective medical equipment, and \$150 billion to support state and local governments in fighting the COVID-19 pandemic—in addition to \$250 billion in supplemental funding for small businesses. Republicans favor limiting interim relief to support for small businesses and addressing supplemental funding, including for hospitals and health care providers, later. The Senate officially reconvenes on April 20, 2020, and negotiations over the next stimulus package are likely to continue in the interim. We will monitor these negotiations and continue to provide updates on key developments.

II. Overview of FDA's Approach to the COVID-19 Crisis

FDA is swiftly issuing new emergency guidance to address the pandemic. To date, FDA has issued more than a dozen substantive COVID-19 guidance documents, nearly all of which aim to expedite the availability of products to diagnose and treat COVID-19, primarily through the exercise of enforcement discretion.

During the public health emergency, FDA has modified its usual process to speed the availability of guidance. FDA is issuing periodic Notices of Availability (NOA) that provide a consolidated announcement of new guidance rather than issuing an NOA for each new COVID-19 guidance document. While FDA is implementing guidance immediately without prior public comment (which would not be feasible under Section 701(h)(1)(C)(i) of the FDCA and 21 C.F.R. § 10.115(g)(2)), FDA is also soliciting and reviewing all public comments received on the guidance documents. Like other guidance, the COVID-19 guidance documents represent FDA's current thinking on a particular subject, and stakeholders may use alternative approaches if they satisfy applicable laws and regulations. [7] Furthermore, FDA emphasized in the guidance documents that certain exercises of enforcement discretion are limited to the duration of the public health emergency.

FDA is also engaged in an unprecedented effort to authorize medical products using its emergency powers. Under Section 564 of the FDCA, FDA may permit unapproved medical products or unapproved uses of approved medical products to be used in certain emergency circumstances after the HHS Secretary makes a declaration of an emergency or a threat that justifies authorization of emergency use. FDA's Emergency Use Authorizations (EUAs) are distinct from the usual investigational product pathways, such as INDs, IDEs, and the expanded access pathways described in Section 561 of the FDCA. EUAs also are distinct from Section 564A emergency use, which allows FDA to facilitate the availability of FDA-approved products without first issuing an EUA. Products authorized under an EUA may be eligible for immunity protections under the PREP Act (42 U.S.C. § 247d-6d), which we discussed in a prior alert. [8] During the COVID-19 outbreak, FDA has issued EUAs covering a broad range of products, including in vitro diagnostic tests, complex molecular-based laboratory developed tests, PPE, ventilators and other medical devices, and therapeutics.

In the sections that follow, we discuss recent guidance and EUAs that FDA has issued during the course of the COVID-19 crisis. We first cover each of the product categories that have been receiving the bulk of attention—diagnostic devices, PPE, ventilators, COVID-19 therapies—and then address some of the other, more discrete topics and products where new FDA guidance and EUAs apply.

The table below summarizes the major actions by FDA to date. Each of these actions is generally limited to the duration of the COVID-19 public health emergency, and subject to conditions set forth in the guidance, as described in the sections that follow.

Impacted Product(s)
Diagnostic Testing

FDA Action

Exercise of enforcement discretion as to development and deployment of COVID-19 testing; issuance of EUAs

Personal Protective Equipment Exercise of enforcement discretion as to

manufacture and use of personal protective

equipment; issuance of EUAs

Ventilators, Ventilator Accessories, and

Other Respiratory Devices

Exercise of enforcement discretion on modifications to existing, cleared/approved devices and streamlined process to permit additional devices to be marketed; issuance

of EUAs

COVID-19 Drugs & Vaccines Coronavirus Treatment Acceleration

Program (CTAP), and use of expedited pathways and expanded access; issuance of

EUA

Alcohol Sanitizers Exercise of enforcement discretion as to

production of alcohol sanitizers, including by

nontraditional manufacturers

Blood Purification Systems

Extracorporeal Membrane Oxygenation and

Cardiopulmonary Bypass Devices

Remote Monitoring Devices

EUA for certain blood purification systems Permission to use devices for longer than

FDA-approved time limits

Exercise of enforcement discretion to enable

increased development and use of noninvasive remote monitoring tools in

hardware and software

Ophthalmic Assessment and Monitoring

Devices

Exercise of enforcement discretion for remote ophthalmic assessments to minimize the need for in-person visits to nonessential

Infusion Pumps and Accessories medical facilities Exercise of enformation Pumps and Accessories medical facilities

Exercise of enforcement discretion as to modifications to FDA-cleared pumps and

accessories

Clinical Electronic Thermometers Exercise of enforcement discretion as to

distribution of clinical electronic

thermometers that are not currently FDA

cleared

Sterilizers, Disinfectant Devices, and Air

Purifiers

Relaxation of premarketing requirements;

issuance of EUAs

Portable Cryogenic Containers Exercise of enforcement discretion as to

current good manufacturing practice (cGMP) requirements for portable gas containers Facilitating development and production of needed medical products via 3D printing

3D Printing

III. Diagnostic Devices

Given the aggressive spread of COVID-19, on the one hand, and the Administration's focus on re-opening the American economy, on the other, a rapid expansion of testing capabilities—including serological testing for past exposure—will continue to be crucial to the efforts to contain the pandemic. To that end, FDA (in conjunction with CDC) is actively promoting efforts to develop and bring to market new diagnostic tests.

The CDC labs developed a diagnostic assay for which FDA issued an EUA on February 4, 2020. On March 16, 2020, FDA expanded a prior guidance [9] to accelerate the development and use of new and additional COVID-19 diagnostic tests by labs and commercial manufacturers in hopes of quickly expanding the nation's ability to detect the disease and control its spread. To date, FDA has worked with hundreds of test developers

who have or will seek EUAs. FDA has, as of April 10, 2020, issued 33 EUAs for diagnostic tests, including an EUA for a serological test, and received notice from 170 labs that they have initiated testing under the guidance.

The diagnostic testing guidance addresses policies for (1) accelerating development of COVID-19 lab testing (resulting either in EUA submissions to FDA or, in certain states, testing developed under the oversight of state authorities), (2) facilitating distribution of COVID-19 diagnostics to labs for specimen testing after validation while the commercial manufacturer of the diagnostics prepare EUA submissions, and (3) using serological testing with an EUA. The expanded guidance also reflects FDA recommendations regarding validation of COVID-19 tests, given the significant impact of false testing results during the public health emergency.[10]

- CLIA-Certified Labs and EUA Process. FDA does not intend to object to the use of COVID-19 testing by labs certified under the Clinical Laboratory Improvement Amendments ("CLIA") program (and compliant with its requirements for highcomplexity testing) for a "reasonable period of time after validation and while they are preparing their EUA requests." Under the expanded guidance, labs should notify FDA (by email) that they have validated their assay and then follow up with the EUA submission within 15 days of validation. FDA asked that labs also submit information regarding their testing capacity to enable FDA and HHS to monitor testing availability nationwide. When providing results under this policy, labs should inform the recipient that the test has been validated but FDA's independent review is pending; further, FDA noted that labs should immediately notify federal, state, and local public health agencies of positive COVID-19 tests (and confirm initial positive and negative testing results with a second lab).[11] The expanded guidance also provides information about the EUA request process, including steps FDA will take to collaborate with labs on analysis of the testing and validation data.[12]
- CLIA-Certified Labs and State Oversight. FDA also does not intend to object to testing conducted by CLIA-certified labs authorized by a state or territory to perform COVID-19 testing, so long as the state or territory "takes responsibility" for testing by labs during the outbreak. Under the expanded guidance, FDA asked states or territories that intend to do so to notify FDA of that decision—and requested that labs operating under this policy inform FDA that they have started testing (and share information on their testing capacity).[13]
- Commercial Manufacturers and Pre-EUA COVID-19 Testing. Further, FDA does not intend to object to the development and distribution of COVID-19 test kits by commercial manufacturers to clinical labs or health care workers for point-of-care testing, but FDA has not yet authorized a test for COVID-19 testing at home. [14] Again, the policy permits testing during a 15-day period post-validation while the manufacturer prepares an EUA submission (subject to similar obligations to notify FDA, report testing results with a caveat about FDA's pending review, and submit an EUA with specified information).
- Commercial Manufacturers and Serological Testing without an EUA. To
 hasten the availability of antibody testing, FDA does not intend to object to the
 development and distribution of validated serological tests for COVID-19, so long
 as the testing is not for home use, notice is provided to FDA, and the manufacturer
 discloses certain information to the test recipient (e.g., that FDA has not reviewed
 the test and negative results do not rule out COVID-19).[15]

In the expanded guidance, FDA also recommended that diagnostics developers implement certain minimum testing characteristics for COVID-19 molecular, antigen detection, and serological diagnostics.[16]

IV. Personal Protective Equipment (PPE)

In light of the ongoing public health emergency, FDA issued several guidance documents and EUAs to address the availability of PPE, including face masks, particulate filtering facepiece respirators, gowns, and gloves.

A. Enforcement Policies for PPE

On March 30 and April 2, 2020, FDA issued guidance aimed at expanding the availability of general-use face masks for the public, and particulate filtering facepiece respirators (including N95 respirators),[17] gowns, gloves, and other apparel[18] for health care professionals (HCPs). Because FDA does not exercise jurisdiction over protective apparel that is marketed to the general public for non-medical purposes, the guidance focuses on medical-grade equipment. To determine whether such products are intended for a medical purpose, FDA considers labeling (such as whether they are labeled or otherwise for use by an HCP or in a health care facility), and whether the products include any drugs, biologics, or anti-microbial/antiviral agents.

Unavailability of FDA-Approved Masks and Respirators. For the duration of the pandemic, when FDA- or NIOSH-approved N95 respirators are unavailable, FDA does not intend to object to the importation, distribution, and use of acceptable alternative respirators published on the CDC's website. In such cases, FDA will not enforce compliance with the certain regulatory requirements, including (1) premarket notification under Section 510(k) of the FDCA and 21 C.F.R. § 807.81; (2) registration and listing under 21 C.F.R. Part 807; (3) Quality System Regulation under 21 C.F.R. § 820; (4) reports or corrections and removals under 21 C.F.R. Part 806; and (5) Unique Device Identification ("UDI") under 21 C.F.R. Part 830 and 21 C.F.R. § 801.20. Additionally, the guidance makes explicit FDA's position that when FDA-cleared masks or respirators are unavailable, individuals (but not companies), including HCPs, can improvise PPE. FDA does not intend to object to an individual's use or distribution of improvised PPE when alternates are unavailable.

Face Masks Intended for a Medical Purpose. FDA does not intend to object to the distribution and use of face masks, with or without a face shield (not including respirators), by medical personnel or the general public that are intended for a medical purpose, without compliance with the above-listed regulatory requirements where the face mask does not create an undue risk in light of the public health emergency. Face masks intended for a medical purpose do not create an undue risk where: (1) the product is accurately labeled (for example, as a face mask as opposed to a surgical mark); (2) the labeling makes recommendations that would reduce sufficiently the risk of use (for example, recommendations against use in surgical settings); and (3) the product is not intended for any use that would create an undue risk in light of the public health emergency (for example, the product does not indicate it is meant for antiviral protection).

Face Shields Intended for a Medical Purpose. FDA does not intend to object to the distribution and use of face shields that are intended for a medical purpose (whether used by medical personnel or the general public) where the face shield does not create an undue risk in light of the public health emergency, without compliance with the above-listed regulatory requirements. Undue risk is assessed based on the accuracy of the product's labeling, the shield's flammability and related disclosures, as well as the product's intended use.

Surgical Masks Intended to Provide Liquid Barrier Protection. FDA does not intend to object to the distribution and use of surgical masks without compliance with all of the above-listed regulatory requirements where the surgical mask does not create an undue risk in light of the public health emergency. These products do not create undue risk where they (1) meet fluid resistance testing consistent with federal standards; (2) meet flammability requirements under 16 C.F.R. § 1610; (3) are labeled accurately; and (4) not intended for any use that would create an undue risk in light of the public health emergency.

Nonsurgical Gowns and Minimal-to-Low Barrier Protection Surgical Apparel. FDA does not intend to object to the distribution and use nonsurgical gowns[19] and other low-to-minimal barrier protection surgical apparel[20] that do not comply with the above-listed regulatory requirements where the gowns and apparel do not create an undue risk in light of the public health emergency. These devices do not create an undue risk where: (1) the product is accurately labeled; (2) the labeling makes recommendations that would reduce sufficiently the risk of use (for example, recommendations against use in surgical settings); and (3) the product is not intended for any use that would create an undue risk in light of the public health emergency.

Moderate-to-High Barrier Protection Surgical Gowns. FDA does not intend to object to the distribution and use of moderate-to-high barrier protection surgical gowns (e.g., ANSI/AAMI PB70 barrier protection Level 3 or 4) that do not comply with the regulatory requirements related to premarket notification, registration and listing, and unique device identification, where such surgical gowns do not create an undue risk in light of the public health emergency. These devices do not create an undue risk where they meet required liquid barrier protection and flammability standards, are labeled accurately, and are not intended for any use that would create an undue risk in light of the public health emergency.

Patient Examination Gloves. FDA does not intend to object to the distribution and use of patient examination gloves[21] that do not comply with the above-listed regulatory requirements, where the gloves do not create an undue risk in light of the public health emergency. These devices do not create an undue risk where they are accurately labeled, and are not intended for any use that would create an undue risk in light of the public health emergency.

Surgeon's Gloves. FDA does not intend to object to the distribution and use of surgeon's gloves[22] that do not comply with the regulatory requirements related to premarket notification, registration and listing, and unique device identification, where the surgeon's gloves do not create an undue risk in light of the public health emergency. These devices do not create an undue risk where they meet the standard specification for surgical gloves, are accurately labeled, and are not intended for any use that would create an undue risk in light of the public health emergency.

Nonstandard PPE Practices for Sterile Compounding by Pharmacy Compounders. FDA will not enforce Section 501(a)(2)(A) of the FDCA governing insanitary conditions with respect to the compounding of drugs intended to be sterile if the following requirements are met:

- The compounder is unable to obtain sufficient supply of standard PPE to assure compliance with the insanitary conditions provision;
- The drug is compounded in compliance with other applicable FDCA requirements;
- The compounder employs (a) the mitigation strategies described in the guidance to reduce the risk of product contamination; or (b) terminal sterilization where standard PPE is not used, as long as basic garbing expectations (e.g., hairnet, clean garment, non-sterile gloves, other appropriate coverings) are followed; and
- The compounder keeps records of all compounding performed without standard

PPE and of all changes in the sterilization approach and documents mitigation strategies in a new or updated standard operating procedure.

The guidance also recommends modifications to a compounder's practices when the PPE it relies on is in limited supply, including limiting the number of personnel conducting sterile compounding activities, reducing sterile compounding activities in consideration of the risks and need for the compounded product, and, if applicable, using other PPE that confers equivalent or better protection for the compounded product as outlined in FDA's separate PPE guidance documents.

B. Emergency Use Authorizations (EUAs) for PPE

FDA has also issued several EUAs related to PPE, as summarized below.

NIOSH-Approved Air Purifying Respirators for Use in Health Care Settings During Response to the COVID-19 Public Health Emergency. [23] On March 28, 2020, FDA reissued the EUA for the following NIOSH-approved respirators in health care settings by HCPs when used in accordance with CDC's recommendations, despite the fact that they do not meet certain requirements otherwise required by applicable federal law: (1) non-powered air-purifying particulate FFRs and reusable respirators (such as elastomeric half and full facepiece respirators); (2) certain powered air-purifying respirators (PAPRs); (3) expired FFRs that are not damaged, and have been held in accordance with manufacturers' storage conditions in strategic stockpiles; and (4) authorized respirators under (1) or (3) above that have been decontaminated pursuant to the terms and conditions of an authorized decontamination.

Imported, Non-NIOSH-Approved Disposable Filtering Facepiece

Respirators (FFRs).[24] On March 28, 2020, FDA reissued the EUA to allow for the use of (1) certain imported disposable FFRs that are not NIOSH-approved and (2) authorized respirators that have been decontaminated pursuant to the terms and conditions of an authorized decontamination system,[25] when used in accordance with CDC recommendations. Temporarily authorized imported disposable FFRs include those with acceptable product classifications and marketing authorizations in one of the following regulatory jurisdictions: European CE Marking; Australian Register of Therapeutic Goods (ARTG) Certificate of Inclusion; Health Canada License; Japan Pharmaceuticals and Medical Device (PMDA)/Ministry of Health Labour and Welfare (MHLW).

Non-NIOSH-Approved Disposable Filtering Facepiece Respirators Manufactured in China.[26] On April 3, 2020, FDA authorized the use of disposable non-NIOSH-approved respirators manufactured in China that meet one of the following criteria for authentication: (1) manufactured by an entity that holds one or more NIOSH approvals for other models of FFRs produced in accordance with the applicable standards of authorization in other countries that can be verified by FDA; (2) have regulatory authorization under a jurisdiction other than China that can be authenticated and verified by FDA; or (3) demonstrate acceptable performance to applicable testing standards as documented by test reports from a recognized independent test laboratory that can be verified by FDA.

Face Shields.[27] On April 9, 2020, FDA approved the use of certain face shields for use by HCPs as PPE in health care settings in accordance with CDC recommendations to cover the front and sides of the face and provide barrier protection during this public health emergency. FDA recognized that authorized face shields may be effective at preventing HCP exposure to fluid biological airborne particulates during face shield shortages by providing minimal or low barrier HCP protection to the wearer. The face shields must be labeled accurately, and not represent that use of the authorized face shield alone will prevent infection from microbes or viruses.

Sterilization Systems for Decontamination of N95 Respirators. FDA has issued three EUAs for sterilization systems used to decontaminate N95 or N95-equivalent respirators

for single-user reuse by HCPs where there is otherwise insufficient supply due to the pandemic. [28] Each of the systems decontaminates using vaporized hydrogen peroxide, which is readily available in approximately 2,000 hospitals around the country. FDA estimates that the second EUA, for the STERIS Sterilization System, will support decontamination of approximately 750,000 N95 respirators per day, [29] and the third EUA, for the STERRAD Sterilization System, will support decontamination of approximately four million N95 or N95-equivalent respirators per day in the United States. [30]

FDA's Future Approach to EUAs for Face Masks and Respirators.[31] FDA recently specified its willingness to issue further EUAs to increase availability of critical PPE. Specifically, FDA has expressed interest in interacting with manufacturers on (1) the decontamination of otherwise disposable face masks and filtering facepiece respirators to facilitate marketing authorization through an EUA for decontaminated devices; and (2) additional EUAs for face masks intended for a medical purpose, surgical face masks and N95 respirators, including for devices that are not currently legally marketed in the United States and from manufacturers who have not previously manufactured such devices.

V. Ventilators and Other Respiratory Devices

One of the most urgent needs to combat the COVID-19 pandemic has been for additional ventilators. While politicians and pundits debate just how dire the United States' shortage of ventilators is, everyone agrees there is a shortage, and FDA has moved to relax requirements for the production, modification, and use of ventilators.

A. Enforcement Policy for Ventilators and Accessories and Other Respiratory Devices During the Coronavirus Disease 2019 (COVID-19) Public Health Emergency

Ventilators were highly regulated by FDA coming into the COVID-19 crisis,[32] but FDA recognized the need to "expand the availability of devices that facilitate respiration, including ventilators and their accessories, as well as other respiratory devices."[33] In its March 2020 enforcement guidance, FDA announced that it would not object to "limited modifications to the indications, claims, functionality, or to the hardware, software, or materials of FDA-cleared devices." In practice, the FDA guidance provides flexibility in several key regards for existing devices.[34]

- Ventilators may be used for non-cleared uses and outside cleared
 environments, for example through the use of "powered emergency ventilators
 and anesthesia gas machines for patients needing mechanical ventilation" or "use
 of a ventilator in a health care facility when it is only cleared for use at home or
 during transport."
- Manufacturers may make modifications to FDA-cleared hardware, software, or materials, without prior submission of a premarket notification, for example by making changes to components used in the devices or through the addition of software to allow for remote monitoring.
- Ventilators and anesthesia gas machines may be used beyond their cleared durations of use and shelf life.

These relaxed requirements apply only to existing FDA-cleared devices, and are subject to the process outlined in the EUA governing ventilators (discussed below).

While relaxing the rules around ventilators, there are still important limitations on what manufacturers may do. First, all of these exceptions and permissions are subject to the requirement that they not be done in a manner that would "not create an undue risk in light of the public health emergency." Second, FDA requires that manufacturers "document changes to their device in their device master record and change control records and make this information available to FDA, if requested." And third, FDA requires that manufacturers clearly label the devices to help "users better understand the device modifications." [35]

B. Emergency Use Authorizations (EUAs) for Ventilators and Other Respiratory Devices

In addition to relaxing regulations for existing FDA-cleared devices, FDA also has signaled a willingness to consider emergency authorizations for devices approved for use in other countries and work with manufacturers that had "not previously been engaged in medical device manufacturing but with capabilities to increase supply of these devices." [36]

Ventilators, Ventilator Tubing Connectors, and Ventilator Accessories. On March 24, 2020, FDA issued an EUA to allow for the emergency use in health care settings of certain ventilators and related devices. [37] The EUA establishes a process for companies to submit abbreviated information to FDA about uncleared devices and modifications to FDA-cleared ventilators and related accessories. FDA has requested information about how the device has been designed and evaluated, whether it is approved in another jurisdiction, and whether the device is manufactured according to recognized quality systems. [38] The EUA also waives certain cGMP requirements, including the quality system requirements, and certain registration and listing requirements. [39] If a ventilator, ventilator tubing connector, or ventilator accessory meets the criteria established under the EUA, FDA will add it to Appendix B to the EUA, which it has been able to do on an extremely expedited timeframe. As of April 9, 2020, FDA had authorized submissions for 24 ventilators and one ventilator tubing connector. [40]

VI. COVID-19 Drugs and Vaccines

There are no FDA-approved drugs or vaccines to treat or cure COVID-19, but at the end of March, FDA launched the Coronavirus Treatment Acceleration Program (CTAP), a special emergency program to expedite the development of COVID-19 therapies. The CTAP program is using "every tool at the agency's disposal" to provide "ultra-rapid, interactive input." [41] FDA has turned around reviews on COVID-19 development plans within 24 hours and completed reviews of single-patient expanded-access requests within three hours. FDA has redeployed medical and regulatory staff to serve on review teams dedicated to COVID-19 therapies. FDA also has streamlined the process for developers and physicians to contact FDA with inquiries and to submit requests for the emergency use of investigational products. FDA is prioritizing these requests based on factors such as the product's scientific merits and the stage of development. In addition to clinical studies, FDA is looking at real-world data sources to inform its evaluation of potential therapies, and FDA is leveraging scientific information being generated in China, Italy, Japan, and South Korea.

According to FDA, there are currently 10 therapeutic agents in active trials and 15 therapeutic agents in planning stages, and the Agency will publish updates as these therapies progress through the development process. Examples of potential therapies and

vaccines include the following:

- Remdesivir. Remdesivir is an investigational broad-spectrum antiviral treatment, which was previously tested to treat diseases caused by other coronaviruses, such as Ebola. FDA has been working with Gilead Sciences, Inc. to expedite the clinical studies of remdesivir in adults diagnosed with COVID-19 and to permit the emergency use of the drug through an expanded access program. In March, Gilead began enrolling patients in two Phase 3, randomized, open-label, multicenter clinical studies. One of the studies will evaluate the safety and efficacy of two dosing durations in addition to the standard of care for patients with severe COVID-19. The other study will evaluate the same dosing regimens in addition to the standard of care for patients with moderate COVID-19. Other ongoing studies of remdesivir include the NIAID Phase 2 adaptive, randomized, double-blind, placebo-controlled trial and studies in China and France.
- Convalescent Plasma. Convalescent plasma, collected from individuals who have recovered from COVID-19, contains antibodies to severe acute respiratory syndrome coronavirus 2 or SARS-CoV-2 (the virus that causes COVID-19). Use of convalescent plasma as a therapeutic agent has been studied in prior outbreaks of respiratory infections, such as the H1N1 influenza pandemic. Earlier this month, FDA entered a collaboration with BARDA, the American Red Cross, and the Mayo Clinic to simplify the process for health care providers to collect, distribute, and use convalescent plasma in patients. As a result of this collaboration, FDA estimates that thousands of units of plasma will be available to patients within the coming weeks. FDA also is working with NIAID to coordinate a study of hyperimmune globulin, which is a biological product manufactured from convalescent plasma.

On April 8, 2020, FDA issued guidance on the administration and study of investigational convalescent plasma during the public health emergency.[42] Prior to this guidance, FDA had approved emergency INDs for the use of convalescent plasma in very ill COVID-19 patients. The guidance provides recommendations regarding the regulatory pathways for using investigational COVID-19 convalescent plasma, patient eligibility, the collection of COVID-19 convalescent plasma from donors, labeling, and record-keeping. In addition to the traditional IND pathway (21 C.F.R. Part 312), convalescent plasma may be permitted for investigational use through an expanded access IND for patients with serious or immediately life-threatening COVID-19 disease who are not eligible or who are unable to participate in randomized clinical trials (21 C.F.R. § 312.305) or through single patient emergency INDs following the request by a licensed physician (21 C.F.R. § 312.310). The convalescent plasma should be obtained from an FDA-registered blood establishment that follows the donor eligibility criteria and donor qualifications. Donors should have complete resolution of symptoms at least 28 days prior to donation or complete resolution of symptoms at least 14 days prior to donation and negative COVID-19 test results. FDA is relaxing requirements relating to the registration, licensure, and procedures of blood establishments that collect and distribute the convalescent plasma for investigational use.

• Chloroquine. On March 28, 2020, FDA issued an EUA for the use of chloroquine phosphate and hydroxychloroquine in COVID-19 patients who cannot participate in a clinical trial. In laboratory testing, these drugs have been shown to prevent the growth of the virus that causes COVID-19, and there have been "a few reports" of patients who improved on these drugs, but "[i]t is not known whether it was the drug that led to the improvement or whether there were other factors involved," according to FDA.[43] After being highlighted by some federal officials, including President Trump, as a potential treatment, there have been shortages of these drugs, which are FDA-approved for the treatment of malaria and autoimmune diseases, and a person died following consumption of chloroquine products that are sold to treat aquarium fish. FDA's Center for Veterinary Medicine subsequently issued a letter stating that chloroquine aquarium products should not be used as a treatment for COVID-19 in humans.[44] On April 14, 2020, FDA published guidances on the generic development of chloroquine phosphate and

hydroxychloroquine sulfate in order to address the increased demand for these drugs.[45]

• Vaccine Candidates. According to the World Health Organization (WHO), there are three COVID-19 vaccine candidates in clinical trials and 67 vaccine candidates in preclinical phases of development.[46] CanSino Biologics is the furthest along and advancing to Phase 2 clinical trials in China for Ad5-nCoV, a genetically engineered vaccine candidate, which is based on a vaccine platform previously used for an Ebola vaccine. In March, Moderna, in collaboration with NIAID, launched a Phase 1 clinical trial of SARS-CoV-2 mRNA-1273, an experimental gene-based vaccine, which uses messenger RNA rather than inactive virus to trigger an immune response. Last week, FDA accepted the IND from Inovio Pharmaceuticals to start Phase 1 studies of INO-4800, a DNA vaccine candidate, while additional preclinical trials are conducted in parallel; the company previously tested a vaccine for the treatment of Middle East Respiratory Syndrome (MERS), which is caused by a coronavirus.

Experts estimate 12 to 18 months, at a minimum, for the commercial availability of a COVID-19 vaccine. We expect that FDA will consider, and developers may request, emergency or expedited availability of the vaccine candidates before FDA approval or licensure. FDA is poised to apply these pathways to vaccines: the Agency announced its intent "to use all of the regulatory flexibility granted to it by Congress to ensure the most efficient and timely development of vaccines to fight COVID-19."[47]

FDA's strategy to speed the development of COVID-19 therapies and vaccines is focused on providing "regulatory flexibility, advice, guidance, and technical assistance." [48] Former FDA Commissioner Scott Gottlieb recently called on FDA "to step up its pace" and to apply the regulatory strategies used for rare and deadly cancers, such as conducting real-time reviews of clinical data from ongoing trials rather than waiting for the trial's completion. [49] As the clinical trials on the investigational drugs and vaccines progress, a key issue to watch will be how FDA handles the regulatory assessment of these clinical data to balance the need for urgency with the evidence required to demonstrate safety and effectiveness.

VII. Other Medical Products to Prevent or Treat COVID-19

In addition to the enforcement policies, guidance, and EUAs released for diagnostics, PPE, ventilators, and COVID-19 therapies, FDA has also issued guidance and/or enforcement policies relating to other medical devices and products used in the treatment of COVID-19. We summarize each of these below.

A. Alcohol Sanitizers

Hand hygiene is an important part of the U.S. response to COVID-19. If soap and water are not readily available, the CDC recommends consumers use an alcohol-based hand sanitizer that contains at least 60 percent alcohol. To improve the availability of hand sanitizer products, FDA issued guidance, updated March 27, 2020, regarding three temporary policies for alcohol-based hand sanitizer products that are compounded by pharmacists, produced by over-the-counter (OTC) drug manufacturers, or produced by

firms that are not currently regulated as drug manufacturers, e.g., manufacturers of alcohol for human consumption.[50]

Generally, FDA expects that hand sanitizers are manufactured consistent with WHO recommendations, unless produced by an alcohol manufacturer, and formulated with either (1) alcohol that is not less than 94.9% ethanol by volume, or (2) isopropyl alcohol, glycerin USP or food grade, hydrogen peroxide, and sterile water. Firms should not add other active in inactive ingredients and should prepare the products under sanitary conditions with appropriate equipment. For alcohol manufacturers, the guidance directs such firms to register their facility in the FDA Drug Registration and Listing System, at which point they may commence manufacturing and distribution of the alcohol product without needing to await further correspondence from FDA. The guidances also set forth the labeling that should accompany the hand sanitizers. Additional manufacturing, quality, registration, and record-keeping expectations may apply, depending on whether the producer is a pharmacist, OTC drug manufacturer, or alcohol manufacturer.

B. EUA for Blood Purification System

On April 9, 2020, FDA issued the first EUA for the use of a blood purification system to address the "cytokine storm" occurring in some COVID-19 patients. The EUA was issued to Terumo BCT Inc. and Marker Therapeutics AG for their Spectra Optia Apheresis System and Depuro D2000 Adsorption Cartridge devices. Under the EUA, these devices may be used to treat patients 18 years of age and older with confirmed COVID-19, who are admitted to the ICU with confirmed or imminent respiratory failure. The product works by filtering cytokines and other inflammatory mediators out of the patient's blood. These inflammatory mediators are typically elevated during infections and can be associated with a "cytokine storm" that occurs in some patients with COVID-19, leading to severe inflammation, progressive shock, respiratory failure, organ failure, and death. The following day, April 10, 2020, FDA issued a second EUA to CytoSorbents, Inc. for its CytoSorb blood purification system.

C. Enforcement Policy for Extracorporeal Membrane Oxygenation and Cardiopulmonary Bypass Devices

On April 6, 2020, FDA released guidance on Extracorporeal Membrane Oxygenation (ECMO) and Cardiopulmonary Bypass (CPB) devices for the purpose of expanding the availability of devices that can be used for ECMO therapy.[51] The guidance is limited to ECMO devices and CPB devices that are intended to pump or oxygenate blood by: (1) moving the blood to a component that pumps/oxygenates blood; (2) controlling pump speed; (3) controlling or monitoring gas flow for the circuit; or (4) controlling the temperature of the blood. It does not apply to devices intended only for extracorporeal carbon dioxide removal; however, FDA noted that manufacturers of such devices may request an EUA.

The guidance recognizes that FDA-cleared or FDA-approved CPB devices, listed in Table 2 of the guidance, are technologically capable of being used for ECMO therapy—specifically, of providing extracorporeal oxygenation for longer than 6 hours—and allows these devices to make modifications to their indications and design to that effect without 510(k) premarket notification or a Premarket Approval Application (PMA) Supplement under Section 515 of the FDCA. In particular, the CPB devices in Table 2 of the guidance may change their indications to include use of the device in an ECMO circuit to treat patients who are experiencing acute respiratory failure and/or acute cardiopulmonary failure, as well as to include use of the device for longer than 6 hours in an ECMO circuit. Additionally, the ECMO devices in Table 1 of the guidance and the CPB devices in Table 2 of the guidance may make changes to the dimension(s) of cannulae, tubing, filters, connectors, or other accessories to support use in an ECMO circuit that do not affect the flow rate of blood throughout the circuit.

The modifications cannot create "an undue risk," and are only allowed for the "duration of the public health emergency related to COVID-19." FDA states that changes to the coating of the device and changes that might negatively impact the gas transfer/exchange properties are likely to create "undue risk." FDA also recommends that labeling for modified devices include five elements that provide users with additional data and information on use, including a "prominent and exhaustive list of clinical signs . . . that suggest device change-out is necessary," and "clear distinction delineating FDA-cleared or FDA-approved indications from those that are not FDA-cleared or FDA-approved." Finally, FDA recommends that, when available, devices cleared by FDA for ECMO therapy, as listed under Table 1, are used in ECMO circuits; the CPB devices whose indications have been modified should be used when needed "for patients in need of ECMO in the United States for the duration of the public health emergency."

D. Enforcement Policy for Remote Ophthalmic Assessment and Monitoring Devices During the Coronavirus Disease 2019 (COVID-19) Public Health Emergency

FDA also has published guidance regarding remote ophthalmic assessment and measuring devices. The guidance covers a wide range of commonly used products, from standard visual acuity charts, to tonometers (devices that measure the eye's pressure through a known force, such as a small puff of air, to check for ocular pathologies).[52] FDA's goal in issuing the guidance is to "reduc[e] the need for in-person treatment during the COVID-19 public health emergency" and, in so doing, to "help reduce the risk of exposure for patients and health care providers" to the novel coronavirus. To facilitate the use of such devices for eye care outside of traditional settings, the guidance makes clear that FDA will not object to alterations such as:

- Allowing devices previously cleared for use in health care facilities to change their indications such that they can be used in home settings;
- Modifying previously non-portable (though FDA-approved) ophthalmic devices for portable or handheld use; or
- Allowing "virtual reality or mobile technology" to be used to modify such devices to allow for remote assessment and monitoring by off-site HCPs.

The guidance permits a host of modifications to visual acuity charts, general-use ophthalmic cameras, and tonometers without complying with the full set of usual regulatory requirements. However, FDA does not intend to relax requirements with respect to devices "intended to determine when patients need immediate clinical intervention," or for devices "intended . . . solely or primarily [to be] relied upon by the eye care provider or patient to make a clinical diagnosis or treatment decision." The guidance provides resources for validating and evaluating modifications made pursuant to its terms, and includes recommendations on the labeling of such modified devices to ensure patients and providers can evaluate the modifications to determine if they are appropriate.

E. Enforcement Policy for Non-Invasive Remote Monitoring Devices Used to Support Patient Monitoring During the Coronavirus Disease-2019 (COVID-19) Public Health Emergency

During the COVID-19 pandemic, HCPs are using noninvasive remote monitoring data for a range of purposes, from predicting spread of the virus to caring for patients who are sheltering in place. [53] On March 20, 2020, FDA issued a guidance document intended to facilitate the use of noninvasive remote monitoring devices to enable and expand patient monitoring while limiting direct contact between patients and HCPs. [54] The guidance applies to devices such as electronic thermometers, cardiac monitors, and pulse oximeters, and specifies that FDA will not object to certain modifications to the indications, claims, or functionality of such devices during the duration of the COVID-19 public health

emergency, as declared by HHS.

By removing the specter of potential FDCA enforcement, FDA has encouraged device manufacturers to explore innovative solutions to facilitate patient care while minimizing direct patient-HCP interactions. Given the extent to which COVID-19 symptoms can be measured by the types of devices included in this guidance, this guidance is particularly important.

The guidance applies to a wide variety of devices that may transmit physiological measurements directly to HCPs or a monitoring entity via a wireless or cellular connection, in the following categories: (1) clinical electronic thermometers, (2) electrocardiograph devices (ECGs), (3) cardiac monitors, (4) electrocardiograph software for OTC use, (5) pulse oximetry, (6) noninvasive blood pressure measurement devices, (7) respiratory rate and breathing frequency, and (8) electronic stethoscopes.[55]

In light of the demand on HCPs and the risk of exposure associated with in-person visits, "FDA does not intend to object to limited modifications to the indications, claims, functionality or hardware or software of FDA-cleared non-invasive remote monitoring devices" during the public health emergency. By obviating 510(k) premarket notification requirements, FDA intends to enable device companies to refer to monitoring for COVID-19 or associated conditions, allow devices cleared for use in health care facilities to be used at home, and update hardware or software to enhance remote monitoring capabilities.[56]

In balancing safety with the demands of the COVID-19 crisis, FDA articulated that "modifications do[] not create . . . undue risk" where subject devices provide physiological parameter data to HCPs or patients, and those individuals can independently review the basis for any diagnostic or treatment recommendations. By contrast, a modification would trigger undue risk—and thus potential enforcement activity—if, for example, the device is intended to alert patients to a need for "immediate clinical intervention" or to be relied upon by HCPs or patients "to make a clinical diagnosis or treatment decision pertaining to COVID-19 or co-existing conditions."[57]

FDA recommended that the labeling for modified devices:

- Clearly describe the device's new indications, claims, or functions relating to COVID-19 or related conditions, including "[p]otential risks" and "use conditions" (e.g., periodic testing or continuous monitoring);
- Admonish patients and HCPs that the device's recommendations are intended to support clinical decision-making rather than serve as the sole or primary driver of decisions;
- Differentiate the device's FDA-cleared indications and claims from the new ones; and
- Instruct patients adequately on in-home use of devices previously cleared for use in health care facilities.

Subject to the risk balancing and labeling guidance described above, FDA also does not intend to object to efforts to modify hardware or software to enable or enhance remote monitoring, so long as the alterations do not impact the physiological parameter measurement algorithms. FDA emphasized that modifications should reflect "appropriate cybersecurity controls" and recommended that changes accord with specified FDA-recognized technical standards.[59]

The guidance document underscores that mobile apps can facilitate monitoring of patients with COVID-19 or coexisting conditions. A provision of the CURES Act excluded certain software functions from the FDCA's definition of device, such as software for an HCP that pairs a patient's diagnosis with treatment guidelines for COVID-19 patients (along with the

guidelines' source) or software that compares patient physiological signs, symptoms, or results against guidelines and recommendations for condition-specific diagnostic tests, therapies, or triage strategies.[60]

F. Enforcement Policy for Infusion Pumps and Accessories During the Coronavirus Disease 2019 (COVID-19) Public Health Emergency

On April 5, 2020, FDA published guidance regarding FDA's enforcement policy toward infusion pumps and accessories during the COVID-19 emergency. [61] This guidance is aimed at increasing the "availability and remote capabilities of infusion pumps," as well as related accessories, for the duration in which the "declaration of public health emergency related to COVID-19," as declared by HHS, remains in effect.

Infusion pumps represent a broad category of medical devices that are designed to "deliver[] fluids, such as nutrients and medications, into a patient's body in controlled amounts."[62] The guidance does *not* purport to cover all infusion devices. For instance, it expressly does not apply to the implementation of "closed loop control systems" (i.e., a setup combining infusion pumps with other technologies, such as electronic medical records, barcode medical administration, and drug libraries to create a semiautonomous, integrated drug distribution system). Nor does it extend to modifications that impact infusion pump usage within a magnetic resonance environment. However, the guidance does relax regulations on a host of other infusion pumps and related accessories, including the pumps themselves (21 C.F.R. § 880.5725); infusion line filters (21 C.F.R. § 880.5725).

Although whenever possible "health care facilities should use FDA-cleared infusion pumps" during the public health emergency, FDA "does not intend to object" to various modifications to FDA-cleared pumps and accessories that implemented without compliance with the premarket notification requirements (21 C.F.R. § 807.81). Such permissible modifications include, among others:

- Changes to an infusion pump's motor to allow for an alternate power supply;
- Allowing or activating remote monitoring capabilities of infusion pumps so that a
 patient's care can be managed without needing to enter her or his room (thus
 mitigating the risk of infection);
- The transfer of electronic drug library information—which is used to automatically program infusion pumps—over a wireless network;
- The use of infusion pumps that are otherwise FDA-certified for use while a patient is being transported, even if the device has not specifically been approved for use while in transit; and
- The use of otherwise-approved pumps for populations "not explicitly referenced in the device labeling" (i.e., using a pump for children even if not labeled for pediatric use).

Additionally, the guidance makes clear that FDA will not object to hardware or software modifications aimed at increasing a pump's battery capacity, to allow for the monitoring of multiple pumps from one location, or to better allow for remote, off-site monitoring.

Reflecting the strain on the medical supply chain caused by COVID-19, the guidance makes clear that FDA will not object to the use of infusion pump accessory devices beyond their design life. The guidance further clarifies that it will not view such extended uses as a legally actionable "undue risk" if, for instance, the devices are used according to a health care institution's protocols, or if the device is taken out of use once it is visibly soiled or malfunctioning.

In light of these changes, the guidance also recommends that any devices modified as permitted above be clearly labeled to reflect these changes. And finally, to build a more robust pipeline for infusion pumps, FDA is interested in working with manufacturers, both foreign and domestic, to authorize the use of currently unauthorized infusion pumps under the EUA process.

G. Enforcement Policy for Clinical Electronic Thermometers

On April 4, 2020, FDA released guidance on clinical electronic thermometers, which are generally required to submit a premarket notification under Section 510(k) of the FDCA.[63] Recognizing the importance of maintaining an adequate supply of these "important screening and diagnostic tool[s] to assist in the identification of those individuals who may be infected with COVID-19," FDA states that it does not intend to object to the distribution of clinical electronic thermometers that are not currently 510(k)-cleared.

As with other guidance released by FDA for the COVID-19 pandemic, this guidance is valid for the duration of the pandemic and as long as the devices do not create "undue risk." For the purposes of this guidance, FDA explains that a device does not create undue risk where: (1) The device is manufactured consistent with 21 C.F.R. Part 820, ISO 13485:2016, or equivalent system approach; (2) the device has a marketing authorization in another regulatory jurisdiction (Europe, Australia, Canada, Japan) or device confirms to certain thermometer, electrical, software, and biocompatibility standards; (3) the device labeling includes a clear description of available data on device's indications or functions, including performance, method of determining temperature, potential risks, and cleaning and reprocessing instructions; and (4) the device labeling includes clear identification that the device is not FDA approved or cleared.

H. Enforcement Policy for Sterilizers, Disinfectant Devices, and Air Purifiers

In its Enforcement Policy for Sterilizers, Disinfectant Devices, and Air Purifiers During the COVID-19 Public Health Emergency, FDA states that it will not enforce its premarketing requirements in certain circumstances to help "expand the availability and capability of sterilizers, disinfectants devices, and air purifiers" during the public health emergency.[64]

Because the coronavirus is a type of virus that is the least resistant to germicidal chemicals, the application of sterilization, disinfection, and air purifiers should minimize the viability of the coronavirus, and thereby "facilitate rapid turnaround of sterilized or disinfected medical equipment and reduce the risk of viral exposure for patients and health care providers." But sterilizers, disinfectants, and air purifiers are generally categorized as class II devices and, as such, typically must comply with FDA's 510(k) or PMA requirements—requirements that could hamper availability of new devices, or modifications or labeling changes to existing devices.

Accordingly, the guidance provides that FDA will not pursue enforcement of the 510(k) and PMA requirements as to "limited modifications to the indications or functionality" of already-cleared or approved devices, and as to devices that are "intended to be effective" at killing the novel coronavirus but do not yet have marketing authorization, provided certain performance and labeling elements are met for each category of device. FDA also made clear, however, that the guidance does not apply to items that are "intended to prevent or reduce the risks of hospital acquired infections or COVID-19."

The guidance enumerates a number of performance elements that should be met for a device to fall within the FDA enforcement discretion. First, the guidance states that sterilizers (or modifications to sterilizers) should be designed, evaluated and validated in accordance with certain listed FDA-recognized standards, such as relevant AAMI and ANSI standards, and device changes should be documented consistent with quality

system regulation requirements. Second, disinfectants similarly should meet certain listed AAMI or AOAC standards and changes to devices should be documented under the QSR, and the guidance recommends the use of certain specific performance levels for evaluating whether the product meets low-, intermediate-, or high-level disinfection, consistent with its labeling. Third, the guidance recommends manufacturers of air purifiers evaluate or perform certain specific measures such as particulate reduction or effectiveness against a representative virus of the coronavirus.

Finally, in the guidance FDA also recommends that these devices include certain labeling to aide users, such as: a clear description of the data on the device's coronavirus-related indications or functions; a clear distinction of which indications are not FDA-cleared or -approved; for disinfectant devices, a clear statement about the level of disinfection; and various cautions pertaining to the limits and hazards of UV disinfectants.

I. Policy for the Temporary Use of Portable Cryogenic Containers Not in Compliance With 21 C.F.R. § 211.94(e)(1) For Oxygen and Nitrogen

During the COVID-19 pandemic, there has been an increased demand for oxygen and nitrogen, which are used for resuscitation, inhalation therapy, and in drug development settings, as well as the low supply of portable cryogenic medical gas containers for these gases. On April 9, 2020, FDA released a guidance on the use of gas containers for these gases. [65] Medical gases and medical gas containers are generally subject to cGMP requirements. One of the cGMP requirements sets out that portable cryogenic medical gas containers that are not manufactured with permanent gas-use outlet connections (e.g., those that have been silver-brazed) have tamper-resistant outlet connections; the outlet connections cannot be readily removed or replaced without making the valve inoperable ("211.94(e)(1)-compliant containers"). Industrial gas containers, which are not compliant with 211.94(e)(1), have tamper-evident connections; they indicate that removal was attempted or accomplished.

Effective immediately and for the duration of the pandemic, FDA "does not intend to take enforcement action against firms that fill and distribute oxygen and nitrogen intended for medical use in portable cryogenic medical gas containers that are not in compliance with [21 C.F.R. §] 211.94(e)(1)" provided certain circumstances are met. The circumstances include, among other things: (1) 211.94(e)(1)-compliant containers are not available; (2) the manufacturing and labeling of the gas itself is in compliance with all other requirements, including cGMP; (3) the valve has a prominent tag on or near the valve directing users not to tamper with or remove the connection; and (4) manufacturers remove the containers that are not 211.94(e)(1)-compliant "as soon as practicable, during or at the end of the public health emergency."

J. 3D Printing

On March 26, 2020, FDA entered into a Memorandum of Understanding (MOU) with the Department of Veterans Affairs (VHA) and NIAID to facilitate connections between patients and health care providers, local manufacturers with capabilities, and designs for needed medical products. [66] The MOU provides a "framework for collaboration intended to facilitate regulatory and basic science innovation with 3D printing technologies to respond to COVID-19."

The MOU, which remains in effect for two years, does not specify what types of 3D printing projects it covers; it is not limited only to particular items, such as masks or ventilator parts. Instead, the MOU states that the goal generally is to "help the Parties proactively work to promote treatment and prevent the spread of the virus known as SARS-CoV-2." Each of the Parties has particular responsibilities set out in the MOU, including that FDA will provide a point of contact for the public to address questions about 3D printable medical devices and products such as PPE; NIAID will provide digital files for

fabrication of products such as PPE through 3D printing and provide infectious disease expertise in evaluating printable designs; and VHA will host an external-facing website for individuals and health care entities to support 3D printed medical supplies or those with 3D printing capabilities wishing to provide those services. All Parties are expected to provide consultation on models, testing, and practices related to 3D printing and to help connect health care organizations seeking 3D printed supplies with manufacturers willing to print 3D parts.

VIII. Conclusion

Rapid changes to the legal landscape for drug and device companies are far from over. As Congress, FDA, and other federal agencies continue to respond to the COVID-19 crisis, there will no doubt be additional, important changes and clarifications. We will continue to update you and, as always, are available to answer any questions you may have.

- [1] For a full overview of the CARES Act, please see our prior Client Alert: Gibson Dunn, Senate Advances the CARES Act, the Largest Stimulus Package in History, to Stabilize the Economic Sector During the Coronavirus Pandemic (Mar. 26, 2020), https://www.gibsondunn.com/senate-advances-the-cares-act-to-stabilize-economic-sector-during-coronavirus-pandemic/.
- [2] U.S. Dep't of Health & Hum. Servs, CARES Act Relief Fund, https://www.hhs.gov/provider-relief/index.html.
- [3] 21 U.S.C. § 356c(a).
- [4] CARES Act, Section 3112.
- [5] 21 U.S.C. § 356c(g).
- [6] 42 U.S.C. § 247d-6d. Please see our recent Client Alert for additional details about Secretary Azar's PREP Act Declaration for COVID-19: Gibson Dunn, The PREP Act Provides Limited Liability Protection for Certain Coronavirus Countermeasures (Apr. 6, 2020), https://www.gibsondunn.com/the-prep-act-provides-limited-liability-protection-for-certain-coronavirus-countermeasures/
- Process for Making Available Guidance Documents Related to Coronavirus Disease 2019, 85 Fed. Reg. 16949-16950 (Mar. 25, 2020).
- [8] Gibson Dunn, The PREP Act Provides Limited Liability Protection for Certain Coronavirus Countermeasures (Apr. 6, 2020), https://www.gibsondunn.com/wp-content/uploads/2020/04/the-prep-act-provides-limited-liability-protection-for-certain-coronavirus-countermeasures.pdf.
- U.S. Food & Drug Administration, Policy for Diagnostic Tests for Coronavirus Disease-2019 during the Public Health Emergency (Mar. 16, 2020), https://www.fda.gov/media/135659/download.
- [10] *Id.*
- [11] *Id.*
- [12] Id.

[13] Id.	
[14] <i>Id</i> .	
[15] <i>Id</i> .	
[<u>16]</u> Id.	

[17] U.S. Food & Drug Administration, *Enforcement Policy for Face Masks and Respirators During the Coronavirus Disease (COVID-19) Public Health Emergency (Revised)* (Apr. 2020),

https://www.fda.gov/regulatory-information/search-fda-guidance-documents/enforcement-policy-face-masks-and-respirators-during-coronavirus-disease-covid-19-public-health.

- [18] U.S. Food & Drug Administration, *Enforcement Policy for Gowns, Other Apparel, and Gloves During the Coronavirus Disease (COVID-19) Public Health Emergency* (Mar. 2020), https://www.fda.gov/regulatory-information/search-fda-guidance-documents/enforcement-policy-gowns-other-apparel-and-gloves-during-coronavirus-disease-covid-19-public-health.
- [19] Examples of nonsurgical gowns include gowns that are intended to protect the wearer from the transfer of microorganisms and bodily fluids in low- or minimal-risk patient isolation situations and that are not intended for use during surgical procedures, invasive procedures, or when there is a medium or high risk of contamination. *Id.* at 6.
- [20] Minimal-to-low barrier protection surgical apparel includes shoe covers, caps, and surgical suits. *Id.* at 6.
- [21] A non-powdered patient examination glove is a disposable device intended for a medical purpose that is worn on the examiner's hand or finger to prevent contamination between patient and examiner. *Id.* at 10.
- A non-powdered surgeon's glove is a device intended to be worn on the hands of operating room personnel to protect a surgical wound from contamination. *Id.* at 11.
- U.S. Food & Drug Admin., *NIOSH-Approved Air Purifying Respirators for Use in Health Care Settings During Response to the COVID-19 Public Health Emergency* (Mar. 28, 2020). https://www.fda.gov/media/135763/download. FDA issued this EUA on March 2, 2020 and reissued it on March 27 and March 28, 2020.
- [24] U.S. Food & Drug Admin., *Imported, Non-NIOSH-Approved Disposable Filtering Facepiece Respirators* (Mar. 28, 2020), https://www.fda.gov/media/136403/download. FDA issued this EUA on March 24, 2020 and reissued it on March 28, 2020.
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Gibson Dunn's lawyers are available to assist with any questions you may have regarding developments related to the COVID-19 outbreak. For additional information, please contact any member of the firm's **Coronavirus (COVID-19) Response Team**.

Gibson Dunn regularly counsels clients on issues raised by this pandemic in the commercial context. For additional information, please contact the Gibson Dunn lawyer with whom you usually work or the authors:

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