

FDA Update

Tim Stenzel, Director
Don St. Pierre, Deputy Director

Office of In Vitro Diagnostics and Radiological Health (OIR/OHT7)

IVD Roundtable

June 15, 2021



Mission, Vision, & Shared Values

CDRH Mission

"...to protect and promote the public health..."

CDRH Vision

"Patients in the U.S. have access to high-quality, safe, and effective medical devices of public health importance first in the world..."

CDRH Shared Values

Public Health Focus

Science-Based Decisions

Our People

Innovation

Transparency

Honesty and Integrity

Accountability





- Premarket Pre-submissions, Breakthrough
 Designations, CLIA Waiver Reviews and complexity
 determinations, 510(k), De Novo, PMA, EUA, IDE,
 and HDE
- Relevant Guidance Documents
- Third Party Review Program
- Surveillance
- Compliance
- Community Outreach

OHT7: Office of In Vitro Diagnostics & Radiological Health (OIR)



Office Director: Timothy Stenzel

Deputy Director New Product Evaluation: **Donald St. Pierre**Deputy Director Patient Safety & Product Quality: Vacant
Deputy Director Radiological Health: **Robert Ochs**Deputy Director Personalized Medicine: **Wendy Rubinstein**Associate Director for Regulatory Programs: **Toby Lowe**Associate Director Strategic Initiatives: Vacant
Associate Director for Regulatory Counsel: **Scott McFarland**

Associate Director for Medical Affairs: Sara Brenner
Chief Medical Officer for Radiological Health: Donald Miller
Associate Director for Operations: Michelle Sutter
OIR Immediate Office Staff:

Stacey Borenstein, Jennifer Campbell, Daniel Edelman, Dina Jerebitski, Rebecca Keenan, Marina Kondratovich, Ryan Lubert, Zivana Tezak, Vacant

Division of Chemistry and Toxicology Devices (DCTD)

Director – Kellie Kelm

Deputy – Marianela Perez-Torres

Division of Immunology and Hematology Devices (DIHD)

Director – Lea Carrington Deputy – Takeesha Taylor-Bell Division of Microbiology Devices (DMD)

Director – Uwe Scherf
Deputy – Kristian Roth (Acting)

Division of Molecular Genetics and Pathology (DMGP)

Director – Reena Philip Deputy – Donna Roscoe

Division of Mammography Quality
Standards (DMQS)

Director – David Lee Deputy – Preetham Sudhaker Division of Program Operations and Management (DPOM)

Director – Rob Sauer Deputy – Vacant Division of Radiological Health (DRH)

Director – Thalia Mills Deputy – Michael O'Hara Deputy – LCDR David Dar (Acting)



We're
Constantly
Working on
COVID Testing
Options

FDA continues to work with test developers to make more coronavirus tests available to more people



COVID-19 Testing Authorization Milestones





1st Diagnostic Authorization (CDC) Jul 2020

1st Screening Authorization (LabCorp)



- 1st OTC
 Home
 Collection
 (LabCorp)
- 1st OTC At Home (Ellume)

Mar 2021

1st Serial Screening (Abbott, BD, Quidel)

Growing US Testing Menu

COVID-19 Highlights since November 2020:

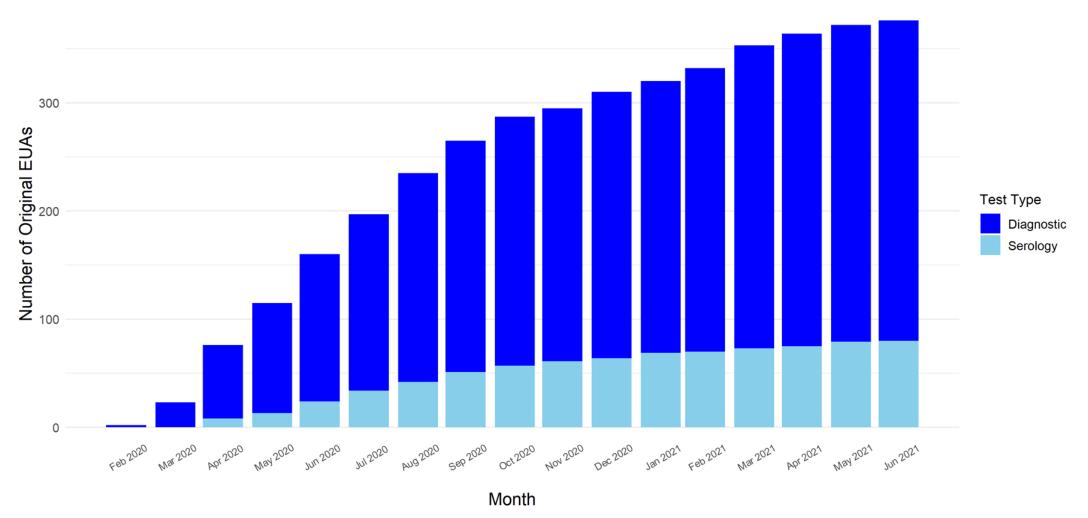


- First Test that Detects Neutralizing Antibodies from Recent or Prior SARS-CoV-2 Infection (GenScript)
- First COVID-19 Test for Self-Testing at Home (Lucira)
- First COVID-19 and Flu Combination Test for use with home-collected samples (Quest)
- First Direct-to-Consumer COVID-19 Test System (LabCorp)
- First Over-the-Counter Fully At-Home Diagnostic Test (Antigen) for COVID-19 (Ellume)
- First NGS test to aid in identifying individuals with an adaptive T cell immune response to SARS-CoV-2 (Adaptive Biotechnologies)
- First Molecular Non-Prescription, At-Home Test (Cue)
- First Over-the-Counter Tests for Serial Screening (Quidel, Abbott)
- First antibody test for use with home collected dried blood spot samples (Symbiotica)

EUA Authorizations



Authorized Original EUAs by Month



Tests Authorized as of June 11, 2021



275

Molecular diagnostic tests

- 25 Pooling
- 40 Asymptomatic single use screening
- 3 Serial screening
- 15 Multi-analyte (i.e., SARS-CoV-2 + Influenza)
- 13 Point-of-care
- 63 Home collection
 - 12 Standalone home collection kits
 - 16 Direct-to-consumer
 - 1 Multi-analyte
 - 11 Saliva home collection
- 5 Standalone saliva collection devices
- 1 Prescription at-home test
- 2 Over-the-counter at-home test

28

Antigen diagnostic tests

- 23 Point-of-care
- 3 Prescription at-home tests
- 5 Over-the-counter (OTC) at-home tests
- 11 Serial Screening

81

Serology and other immune response tests

- 9 Point-of-care
- 1 Neutralizing antibody test
- 14 Semi-quantitative

First COVID-19 Diagnostic Test Granted Marketing Authorization Using Traditional Premarket Review Process





BioFire Respiratory Panel 2.1 (RP2.1), which had an Emergency Use Authorization (EUA), was granted marketing authorization using the De Novo premarket review pathway, a regulatory pathway for low- to moderate-risk devices of a new type.

- With granting of the De Novo, the FDA also revoked the EUA for this device
- This EUA revocation and De Novo authorization do not impact the availability other tests under EUA

SARS-CoV-2 Viral Mutations: Impact on COVID-19 Tests



SARS-CoV-2 Viral Mutations: Impact on COVID-19 Tests



The SARS-CoV-2 virus has mutated over time, resulting in genetic variation in the population of circulating viral strains over the course of the COVID-19 pandemic.

Molecular, antigen, and serology tests are affected by viral mutations differently due to the inherent design differences of each test.

This page provides information regarding the impact of viral mutations on COVID-19 tests, recommendations for clinical laboratory staff and health care providers, and information about certain tests for which the FDA has identified potential impacts on performance due to SARS-CoV-2 genetic mutations. The FDA will update this page as significant new information becomes available.

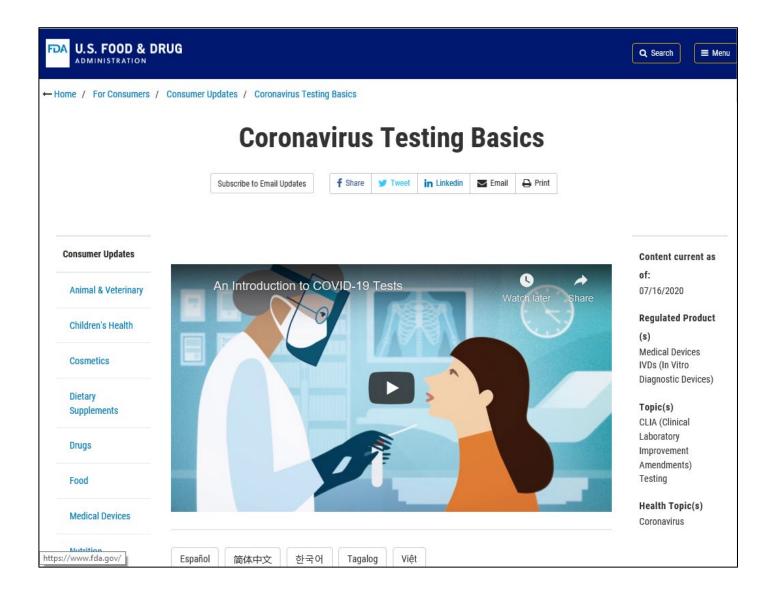
On this page:

- Genetic Variations: Background and Considerations
- General Information for Clinical Laboratory Staff and Healthcare Providers
- Molecular Tests Impacted by SARS-CoV-2 Mutations

- January 8, 2021 FDA Issues Alert Regarding SARS-CoV-2
 Viral Mutation to Health Care Providers and Clinical
 Laboratory Staff
- <u>February 22, 2021 FDA Issues Policies to Guide Medical</u>
 <u>Product Developers Addressing Virus Variants</u>
- March 30, 2021 FDA posts a new web page about the impact of viral mutations on COVID-19 tests
 - This page provides information regarding the impact of viral mutations on COVID-19 tests, recommendations for clinical laboratory staff and health care providers, and information about certain tests for which the FDA has identified potential impacts on performance due to SARS-CoV-2 genetic mutations

Outreach





- >50 Virtual Town Halls (>39,000 participants)
- FAQs on Testing for SARS-CoV-2
- Safety Communications
- Resources for Patients, Healthcare Providers, and Developers
- COVID-19 Diagnostics Mailbox (185,000+ inquiries)
- 2 stakeholder calls to discuss the guidance/policy
- 1 virtual town hall to discuss
 3D Swabs



Lessons Learned from COVID-19

The value of regulatory flexibility

During the pandemic we were able to act quickly and better tailor our oversight to facilitate the availability of critical devices while assuring they are safe and effective due to the flexibility providing to us through our emergency use authorization authorities

The power of engagement

During the pandemic we provided multiple ways for technology developers to work with our scientific, engineering, and clinical experts in real or near-real time

Together, regulatory flexibility and engagement transformed the medical device landscape resulting in ~1300 new devices for COVID-19 in the first year

Increasing Access and Ensuring Reliability of COVID-19 Tests – Now and In the Future





1. U.S. government should invest in the development of truly novel technologies that can be used at POC and at home and for multiple conditions

2. Government should be equipped to independently evaluate the ability of non-laboratorian providers and consumers to use and interpret POC and at-home tests to facilitate validation of and assure confidence in the usability of these products



- 3. Investing in POC and at-home testing technologies now will allow rapid expansion of national testing capacity and patient access when a new public health threat emerges
- 4. Widely available FDA-approved POC and at-home tests could create a wealth of data, if complemented by the development of robust telehealth and application-based technologies with appropriate privacy protections
- 5. To shift the testing landscape, it will also be important to explore and create mechanisms that will allow for reimbursement for prescription athome tests, over-the-counter tests, pooled testing, and screening tests

FDA Grants CLIA Waiver to Allow First Point-of-Care Chlamydia and Gonorrhea Test To Be Used More Widely

- Uses female vaginal swabs or male urine specimens
- Can detect the presence of the bacteria Chlamydia trachomatis and Neisseria gonorrhoeae in approximately 30 min
- More convenient testing with quicker results can help patients get access to the most appropriate treatment



Challenges and Solutions to Workload Impact





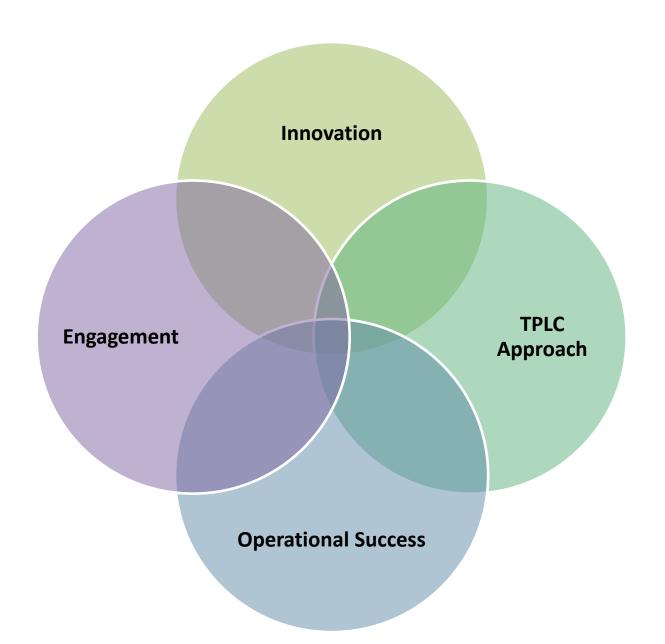
- More than 50% of our staff and managers have been directly involved in CDRH's COVID-19 response, while many others picked up extra non-COVID-19 work to support the response
- Paused submissions have resumed active review as of June 10, 2021
- Lead reviewers will contact sponsors with projected timelines

"Unless IVD pre-submissions are related to COVID-19, companion diagnostics, a breakthrough designation request, or have a significant public health impact, we have been unable to review them. We have tried to utilize all the tools at our disposal."

https://www.fda.gov/news-events/fda-voices/year-pandemic-how-fdas-center-devices-and-radiological-health-prioritizing-its-workload-and-looking

Vision for MDUFA V





- Innovation: Enhance operational success, reduce device development times, and further accelerate patient access to high-quality, innovative, safe and effective devices
- **Engagement:** Enrich engagement with multiple stakeholders across TPLC
- **TPLC Approach:** Evaluate device safety and performance across TPLC
- Operational Success: Optimize FDA infrastructure, staffing, and resources to keep pace with scientific development

Stakeholder Feedback



- Enhance FDA <u>engagement</u> with industry, patients, and physician society stakeholders
- Increase use of <u>real world evidence</u> to support regulatory decision-making across the total product lifecycle
- Focus on <u>device safety</u>, such as through <u>enhanced postmarket</u> <u>surveillance</u>
- Increase <u>investment in digital health</u> technology review

- Continue to advance <u>understanding of</u>
 <u>patient preferences</u> and integration of
 patient experience data into regulatory
 decision-making
- Increase <u>diversity</u> in patient engagement, clinical trials, and RWE
- Incentivize <u>innovation for underserved</u> <u>populations</u>, such as pediatrics and individuals with rare diseases
- Expand <u>Early Payor Feedback Program</u>



Thank You

www.fda.gov