

# Welcome To Today's Program

Thanks for joining us!  
We'll get started in a few minutes

**Today's Topic:**  
**Medical Device Sterilization Town Hall:**  
**Sterilization Short Topics and Open Q&A**

**October 30, 2024**

# Medical Device Sterilization Town Hall:

## Sterilization Short Topics and Open Q&A

# Today's Panelists



## CDR Tamara Rosbury, PhD

Health Scientist / EtO Incident Response

Office of Readiness and Response  
Office of Strategic Partnerships and Technology Innovation



## Lisa Simone, PhD

Senior Health Scientist / EtO Incident Lead

Office of Readiness and Response  
Office of Strategic Partnerships and Technology Innovation



## Ryan Ortega, PhD

Regulatory Advisor

Regulatory Policy and Combination Products Staff  
Office of Product Evaluation and Quality



## Ruth Bediakoh

Consumer Safety Officer

Office of Training and Education  
Office of Communication, Information Disclosure,  
Training and Education (OCITE)



Center for Devices and Radiological Health  
U.S. Food and Drug Administration

# Today's Panelists, continued



**Kelly Wilkicki, MPP**

Senior Advisor for Innovation

Office of Equity and Innovative Development  
Office of Strategic Partnerships and Technology Innovation



**Shani Haugen, PhD**

Assistant Director

Office of Health Technology 3  
Office of Product Evaluation and Quality



**Mary Wen, PhD**

Deputy Division Director

Office of Regulatory Programs  
Office of Product Evaluation and Quality



**Center for Devices and Radiological Health  
U.S. Food and Drug Administration**

**CDR Tamara Rosbury, PhD**

Health Scientist / EtO Incident Response

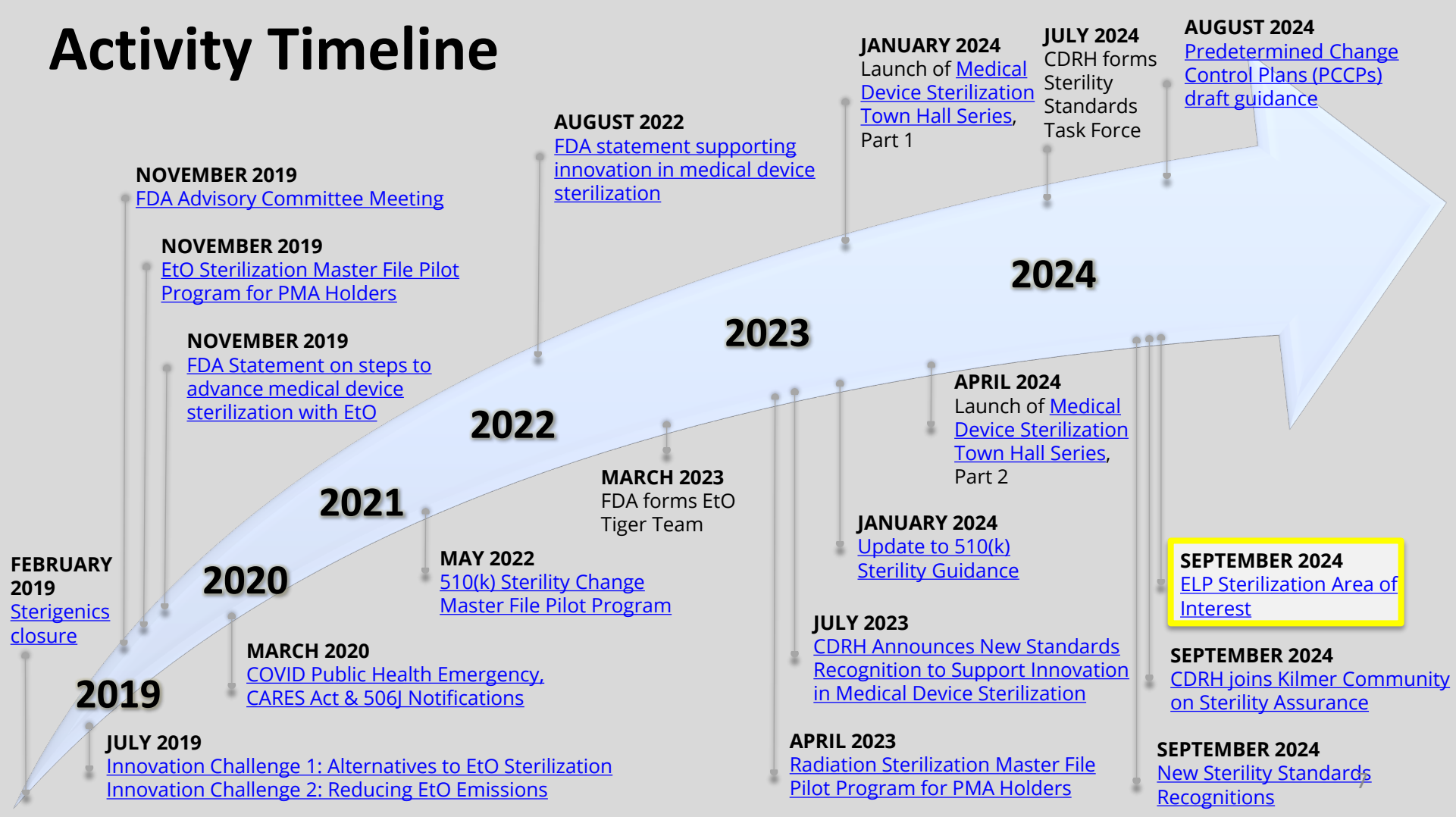
Office of Readiness and Response

Office of Strategic Partnerships and Technology Innovation



# What we heard from you last time

# Activity Timeline



2019

2020

2021

2022

2023

2024

JULY 2019

[Innovation Challenge 1: Alternatives to EtO Sterilization](#)  
[Innovation Challenge 2: Reducing EtO Emissions](#)

FEBRUARY 2019  
[Sterigenics closure](#)

NOVEMBER 2019

[FDA Advisory Committee Meeting](#)

NOVEMBER 2019

[EtO Sterilization Master File Pilot Program for PMA Holders](#)

NOVEMBER 2019

[FDA Statement on steps to advance medical device sterilization with EtO](#)

MARCH 2020

[COVID Public Health Emergency, CARES Act & 506j Notifications](#)

MAY 2022

[510\(k\) Sterility Change Master File Pilot Program](#)

AUGUST 2022

[FDA statement supporting innovation in medical device sterilization](#)

MARCH 2023

FDA forms EtO Tiger Team

APRIL 2023

[Radiation Sterilization Master File Pilot Program for PMA Holders](#)

JULY 2023

[CDRH Announces New Standards Recognition to Support Innovation in Medical Device Sterilization](#)

JANUARY 2024

[Update to 510\(k\) Sterility Guidance](#)

APRIL 2024

Launch of [Medical Device Sterilization Town Hall Series, Part 2](#)

JANUARY 2024

Launch of [Medical Device Sterilization Town Hall Series, Part 1](#)

JULY 2024

CDRH forms Sterility Standards Task Force

AUGUST 2024

[Predetermined Change Control Plans \(PCCPs\) draft guidance](#)

SEPTEMBER 2024

[ELP Sterilization Area of Interest](#)

SEPTEMBER 2024

[CDRH joins Kilmer Community on Sterility Assurance](#)

SEPTEMBER 2024

[New Sterility Standards Recognitions](#)

# Discussion Topics

- Topic 1: Discuss activities CDRH has in place to support medical device innovators including early regulatory assistance, funding opportunities, and knowledge sharing
- Topic 2: Discuss the use of bundling for sterility-related submissions



# **Topic 1: Activities to support medical device innovators**

# What kinds of early regulatory assistance does FDA offer medical device innovators?



**MODERATOR:**

**Lisa Simone, PhD**

Incident Response Lead  
OST, Office of Readiness and Response



**Ruth Bediakoh**

Consumer Safety Officer  
Division of Industry and Consumer  
Education, OCITE



**Ryan Ortega, PhD**

Regulatory Advisor  
OPEQ, Regulatory Policy and Combination Products



# Does CDRH have any funding opportunities to help innovators working in the area of sterilization?



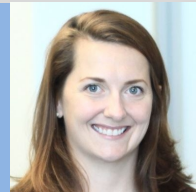
## **Lisa Simone, PhD**

Incident Response Lead  
OST, Office of Readiness and Response



## **Kelly Wilkiki, MPP**

Senior Advisor for Innovation  
OST, Office of Equity and Innovation  
Development








# Small Business Innovation Research (SBIR) Grant Background



## Examples of CDRH's SBIR Research Priorities

**Health and Human Services (HHS)**



-  **\$1.2 Billion**
-  **\$275,000**
-  **\$1.83 Million**
-  **Grants**

**SBIR/STTR**

Funds health, life science, and biomedical discoveries that could impact the lives of patients and their families.

- D. **Health Equity:** Advance the development of knowledge, and safe and effective technologies, to meet the needs of diverse patient populations and consumers, including reducing barriers to participate in evidence generation by diverse populations and the use of medical technologies outside a healthcare setting.
- **Health of Women:** Explore unique issues related to the performance of medical devices in women, improve analysis and communication of sex- and gender- specific data to better assure the safe and effective use of medical devices
  - **Human Factors:** Explore methodologies to test and report on usability or user experiences with devices in diverse patient populations and consumers.
  - **Pediatric Medical Device Development:** Increase and accelerate medical device development and labelling for the unique and evolving needs of pediatric and special populations, especially younger sub- populations such as neonates and children. Optimize or develop infrastructure that supports safe innovation and development of medical devices designed, evaluated, and labelled for pediatric and special populations.
- E. **Sterilization:** Encourage the development of new approaches to medical device sterilization with a focus on identifying alternatives to ethylene oxide (EtO) sterilization methods, and/or development of strategies to reduce EtO emissions.

# How to apply for an SBIR Grant:



## Required Application Instructions

It is critical that applicants follow the SBIR/STTR (B) Instructions in the [How to Apply – Application Guide](#), except where instructed to do otherwise (in this NOFO or in a Notice from the [NIH Guide for Grants and Contracts](#)).

Conformance to all requirements (both in the [How to Apply – Application Guide](#) and the NOFO) is required and strictly enforced. Applicants must read and follow all application instructions in the [How to Apply – Application Guide](#) as well as any program-specific instructions noted in Section IV. When the program-specific instructions deviate from those in the [How to Apply – Application Guide](#), follow the program-specific instructions.

**Applications that do not comply with these instructions may be delayed or not accepted for review.**

There are several options available to submit your application through Grants.gov to NIH and Department of Health and Human Services partners. You **must** use one of these submission options to access the application forms for this opportunity.

1. Use the NIH ASSIST system to prepare, submit and track your application online.

Apply Online Using ASSIST

2. Use an institutional system-to-system (S2S) solution to prepare and submit your application to Grants.gov and [eRA Commons](#) to track your application. Check with your institutional officials regarding availability.
3. Use [Grants.gov](#) Workspace to prepare and submit your application and [eRA Commons](#) to track your application.

PHS 2024-2 Omnibus Solicitation of the NIH, CDC and FDA for  
Small Business Innovation Research Grant Applications

# Recent FDA SBIR Grantees



1

Prime Award ID	Recipient Name	Obligations
R44FD007584	TRIPLE RING TECHNOLOGIES INC	\$661,773.00
R44FD007588	SONATA SCIENTIFIC LLC	\$591,000.00
R43FD007588	SONATA SCIENTIFIC LLC	\$200,000.00
R43FD007709	ADVANCED COOLING TECHNOLOGIES IN	\$199,997.00
R43FD007805	TRIPLE RING TECHNOLOGIES INC	\$199,443.00

[SBIR results 1 \(USASpending.gov\)](#)

[SBIR results 2 \(USASpending.gov\)](#)

[SBIR results 3 \(USASpending.gov\)](#)

2

**Project Grant** FAIN R44FD007588 In Progress (10 months remain)

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**Awarding Agency**  
Department of Health and Human Services (HHS)

**Recipient**  
**SONATA SCIENTIFIC LLC**  
41 EAGLE RD  
STE 1  
DANBURY, CT 06810-8802  
UNITED STATES  
Congressional District: CT-05

**Assistance Listings (CFDA Programs)**  
93.103 - FOOD AND DRUG ADMINISTRATION RESEARCH  
[VIEW MORE INFO ABOUT THIS PROGRAM](#)

**Dates**  
Start Date: Sep 20, 2022  
End Date: Aug 31, 2025

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**\$ Award Amounts**

**\$586,882**  
Outlayed Amount

**Description**

REDUCED ETO EMISSIONS TO SAFEGUARD BIOMEDICAL SUPPLY CHAINS - SUMMARY/ABSTRACT THE OVERARCHING GOAL OF THIS PROJECT IS TO PROTECT THE NATION'S SUPPLY CHAIN OF CRITICAL MEDICAL DEVICES THAT ARE STERILIZED USING ...

3

**Project Grant** FAIN R44FD007584 In Progress (10 months remain)

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**Awarding Agency**  
Department of Health and Human Services (HHS)

**Recipient**  
**TRIPLE RING TECHNOLOGIES INC**  
39655 EUREKA DR  
NEWARK, CA 94560-4806  
UNITED STATES  
Congressional District: CA-17

**Assistance Listings (CFDA Programs)**  
93.103 - FOOD AND DRUG ADMINISTRATION RESEARCH  
[VIEW MORE INFO ABOUT THIS PROGRAM](#)

**Dates**  
Start Date: Sep 27, 2022  
End Date: Aug 31, 2025

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**\$ Award Amounts**

**\$250,244**  
Outlayed Amount

**Description**

VIRTUAL DOSE MAPPING FOR RADIATION STERILIZATION - PROJECT SUMMARY THIS GRANT IS IN RESPONSE TO PA-22-176, AN OMNIBUS CALL FROM NIH, FDA, AND CDC. THEREIN THE FDA EXPRESSES THE NEED TO DEVELOP COMPUTER MODELLIN...

# How might industry help FDA staff learn about challenges the device innovators face?

**MODERATOR:**

**Lisa Simone, PhD**

Incident Response Lead  
OST, Office of Readiness and Response



**Shani Haugen, PhD**

Assistant Director  
OPEQ, Renal, Gastrointestinal, Obesity and  
Transplant Devices



**Ryan Ortega, PhD**

Regulatory Advisor  
OPEQ, Regulatory Policy and Combination Products



# **Topic 2: Bundling for Sterility-related submissions**



# What is bundling and how might it be used to reduce regulatory burden?



**MODERATOR:**

**Ryan Ortega, PhD**

Regulatory Advisor

OPEQ, Regulatory Policy and Combination Products



**Mary Wen, PhD**

Deputy Division Director

OPEQ/ORP, Division of Submission Support



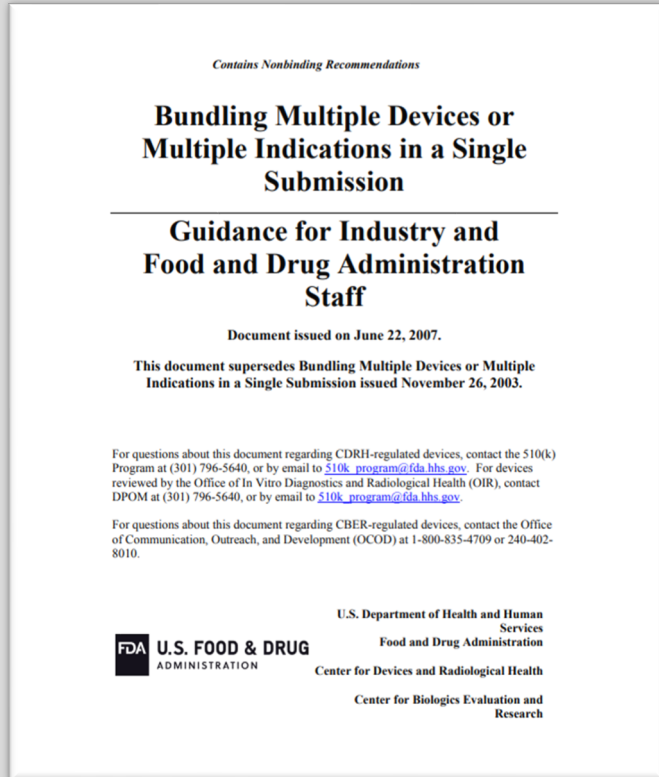
**Shani Haugen, PhD**

Assistant Director

OPEQ, Renal, Gastrointestinal, Obesity and  
Transplant Devices



# FDA Bundling Guidance



This guidance is intended to assist industry and FDA staff in understanding when bundling may be appropriate.

# What are the general principles for bundling?



**MODERATOR:**

**Ryan Ortega, PhD**

Regulatory Advisor

OPEQ, Regulatory Policy and Combination Products



**Mary Wen, PhD**

Deputy Division Director

OPEQ/ORP, Division of Submission Support



**Shani Haugen, PhD**

Assistant Director

OPEQ, Renal, Gastrointestinal, Obesity and  
Transplant Devices



# What are some sterilization related examples of bundling?



**MODERATOR:**

**Ryan Ortega, PhD**

Regulatory Advisor

OPEQ, Regulatory Policy and Combination Products



**Mary Wen, PhD**

Deputy Division Director

OPEQ/ORP, Division of Submission Support



**Shani Haugen, PhD**

Assistant Director

OPEQ, Renal, Gastrointestinal, Obesity and  
Transplant Devices



# Resources

Slide Number	Cited Resource	URL
6	Verbal reference to ISO 14937:2009 Sterilization of health care products	<a href="http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfstandards/detail.cfm?standard_identification_no=36991">www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfstandards/detail.cfm?standard_identification_no=36991</a>
7	Sterigenics closure	<a href="http://www.epa.gov/il/sterigenics-willowbrook-facility">www.epa.gov/il/sterigenics-willowbrook-facility</a>
7	Innovation Challenge 1: Alternatives to EtO Sterilization	<a href="http://www.fda.gov/medical-devices/general-hospital-devices-and-supplies/fda-innovation-challenge-1-identify-new-sterilization-methods-and-technologies">www.fda.gov/medical-devices/general-hospital-devices-and-supplies/fda-innovation-challenge-1-identify-new-sterilization-methods-and-technologies</a>
7	Innovation Challenge 2: Reducing EtO Emissions	<a href="http://www.fda.gov/medical-devices/general-hospital-devices-and-supplies/fda-innovation-challenge-2-reduce-ethylene-oxide-emissions">www.fda.gov/medical-devices/general-hospital-devices-and-supplies/fda-innovation-challenge-2-reduce-ethylene-oxide-emissions</a>
7	FDA Advisory Committee Meeting	<a href="http://www.fda.gov/advisory-committees/advisory-committee-calendar/november-6-7-2019-general-hospital-and-personal-use-devices-panel-medical-devices-advisory-committee">www.fda.gov/advisory-committees/advisory-committee-calendar/november-6-7-2019-general-hospital-and-personal-use-devices-panel-medical-devices-advisory-committee</a>
7	EtO Sterilization Master File Pilot Program for PMA Holders	<a href="http://www.federalregister.gov/documents/2019/11/26/2019-25631/center-for-devices-and-radiological-health-ethylene-oxide-sterilization-master-file-pilot-program">www.federalregister.gov/documents/2019/11/26/2019-25631/center-for-devices-and-radiological-health-ethylene-oxide-sterilization-master-file-pilot-program</a>
7	FDA Statement on steps to advance medical device sterilization with EtO	<a href="http://www.fda.gov/news-events/press-announcements/statement-new-steps-advance-innovation-medical-device-sterilization-ethylene-oxide">www.fda.gov/news-events/press-announcements/statement-new-steps-advance-innovation-medical-device-sterilization-ethylene-oxide</a>
7	COVID Public Health Emergency, CARES Act & 506J Notifications	<a href="http://www.fda.gov/medical-devices/medical-device-safety/medical-device-supply-chain-and-shortages">www.fda.gov/medical-devices/medical-device-safety/medical-device-supply-chain-and-shortages</a>
7	FDA statement supporting innovation in medical device sterilization	<a href="http://public4.pagefreezer.com/content/FDA/07-09-2023T11:58/https://www.fda.gov/news-events/press-announcements/fda-continues-efforts-support-innovation-medical-device-sterilization">public4.pagefreezer.com/content/FDA/07-09-2023T11:58/https://www.fda.gov/news-events/press-announcements/fda-continues-efforts-support-innovation-medical-device-sterilization</a>

# Resources

Slide Number	Cited Resource	URL
7	510(k) Sterility Change Master File Pilot Program	<a href="https://www.federalregister.gov/documents/2022/05/20/2022-10925/medical-devices-510k-sterility-change-master-file-pilot-program">www.federalregister.gov/documents/2022/05/20/2022-10925/medical-devices-510k-sterility-change-master-file-pilot-program</a>
7	Radiation Sterilization Master File Pilot Program for PMA Holders	<a href="https://www.fda.gov/medical-devices/medical-devices-news-and-events/cdrh-announces-radiation-sterilization-master-file-pilot-program">www.fda.gov/medical-devices/medical-devices-news-and-events/cdrh-announces-radiation-sterilization-master-file-pilot-program</a>
7	CDRH Announces New Standards Recognition to Support Innovation in Medical Device Sterilization	<a href="https://public4.pagefreezer.com/content/FDA/05-11-2023T15:04/https://www.fda.gov/medical-devices/medical-devices-news-and-events/cdrh-announces-new-standards-recognition-support-innovation-medical-device-sterilization">public4.pagefreezer.com/content/FDA/05-11-2023T15:04/https://www.fda.gov/medical-devices/medical-devices-news-and-events/cdrh-announces-new-standards-recognition-support-innovation-medical-device-sterilization</a>
7	Update to 510(k) Sterility Guidance	<a href="https://www.fda.gov/regulatory-information/search-fda-guidance-documents/submission-and-review-sterility-information-premarket-notification-510k-submissions-devices-labeled">www.fda.gov/regulatory-information/search-fda-guidance-documents/submission-and-review-sterility-information-premarket-notification-510k-submissions-devices-labeled</a>
7	FDA Medical Device Sterilization Town Hall Series, Parts 1 and 2	<a href="https://www.fda.gov/medical-devices/general-hospital-devices-and-supplies/sterilization-medical-devices#town-halls">www.fda.gov/medical-devices/general-hospital-devices-and-supplies/sterilization-medical-devices#town-halls</a>
7	Predetermined Change Control Plans (PCCPs) draft guidance	<a href="https://www.fda.gov/media/180978/download">www.fda.gov/media/180978/download</a>
7	New Sterility Standards Recognitions	<a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfstandards/results.cfm?start_search=1&amp;effectivedatefrom=09/09/2024&amp;effectivedateto=09/10/2024">www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfstandards/results.cfm?start_search=1&amp;effectivedatefrom=09/09/2024&amp;effectivedateto=09/10/2024</a>
7	CDRH joins Kilmer Community on Sterility Assurance	<a href="https://www.fda.gov/about-fda/cdrh-strategic-priorities-and-updates/collaborative-communities-addressing-health-care-challenges-together#cdrhparticipation">www.fda.gov/about-fda/cdrh-strategic-priorities-and-updates/collaborative-communities-addressing-health-care-challenges-together#cdrhparticipation</a>
7, 15	ELP Sterilization Area of Interest	<a href="https://www.fda.gov/science-research/fda-stem-outreach-education-and-engagement/experiential-learning-program-elp-areas-interest#reprocessing">www.fda.gov/science-research/fda-stem-outreach-education-and-engagement/experiential-learning-program-elp-areas-interest#reprocessing</a>

# Resources

Slide Number	Cited Resource	URL
12	SBIR Grant Participating Agencies	<a href="http://www.sbir.gov/participating-agencies">www.sbir.gov/participating-agencies</a>
12	HHS Program Descriptions	<a href="http://seed.nih.gov/sites/default/files/HHS_Program_Descriptions.pdf">seed.nih.gov/sites/default/files/HHS_Program_Descriptions.pdf</a>
13	SBIR Funding Opportunity Solicitation	<a href="http://grants.nih.gov/grants/guide/pa-files/PA-24-245.html">grants.nih.gov/grants/guide/pa-files/PA-24-245.html</a>
14	SBIR results 1 (USASpending.gov)	<a href="http://www.usaspending.gov/search/?hash=a604f777ace1c95a148b233a15e49026">www.usaspending.gov/search/?hash=a604f777ace1c95a148b233a15e49026</a>
14	SBIR results 2 (USASpending.gov)	<a href="http://www.usaspending.gov/award/ASST_NON_R44FD007588_7524">www.usaspending.gov/award/ASST_NON_R44FD007588_7524</a>
14	SBIR results 3 (USASpending.gov)	<a href="http://www.usaspending.gov/award/ASST_NON_R44FD007584_7524">www.usaspending.gov/award/ASST_NON_R44FD007584_7524</a>
15	Verbal reference to the Experiential Learning Program	<a href="http://www.fda.gov/science-research/fda-stem-outreach-education-and-engagement/cdrhs-experiential-learning-program-elp">www.fda.gov/science-research/fda-stem-outreach-education-and-engagement/cdrhs-experiential-learning-program-elp</a>
18	FDA Bundling Guidance	<a href="http://www.fda.gov/regulatory-information/search-fda-guidance-documents/bundling-multiple-devices-or-multiple-indications-single-submissions">www.fda.gov/regulatory-information/search-fda-guidance-documents/bundling-multiple-devices-or-multiple-indications-single-submissions</a>

# Summary

- Discussed activities CDRH has in place to support medical device innovators including early regulatory assistance, funding opportunities, and knowledge sharing
- Discussed the use of bundling for sterility-related submissions





# Next Town Hall



**Date:** Wednesday, November 20, 2024

**Time:** 1:00 – 2:30 PM ET

Potential Topics:

- Recent sterility consensus standards recognitions
- Biocompatibility assessment considerations related to sterilization changes

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See section on our [Sterilization for Medical Devices](#) webpage that includes town hall dates and links to town hall materials.

## Medical Device Sterilization Town Hall Series

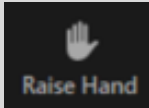
[www.fda.gov/medical-devices/general-hospital-devices-and-supplies/sterilization-medical-devices#town-halls](https://www.fda.gov/medical-devices/general-hospital-devices-and-supplies/sterilization-medical-devices#town-halls)



**U.S. FOOD & DRUG**  
ADMINISTRATION

# Let's Take Your Questions and Comments



- **To ask a question/share a comment:** A black square icon with a white hand symbol and the text "Raise Hand" below it.
  - Raise your hand in Zoom
  - Moderator will announce your name and invite you to speak
  - Unmute yourself when prompted in Zoom to speak
- **When asking a question/sharing a comment:**
  - Keep question/comment as short as possible
  - No questions about specific submissions
- **After question/comment is addressed:**
  - Mute yourself and lower your hand
  - If you have another question/comment - raise your hand again

Additional questions/comments about today's presentation

- Email: [MedicalDeviceSterilization@fda.hhs.gov](mailto:MedicalDeviceSterilization@fda.hhs.gov)

# Thanks for Joining Today!

- **Presentation and Transcript will be available at CDRH Learn**

- [www.fda.gov/Training/CDRHLearn](http://www.fda.gov/Training/CDRHLearn)

- **Additional questions/comments about today's presentation**

- Email:

- [MedicalDeviceSterilization@fda.hhs.gov](mailto:MedicalDeviceSterilization@fda.hhs.gov)

- **Upcoming Town Halls & Webinars**

- [www.fda.gov/CDRHevents](http://www.fda.gov/CDRHevents)



Start Here/The Basics! (Updated 10/3/2024) <a href="#">MDUFA Small Business Program, Registration and Listing</a>	▼
How to Study and Market Your Device - (New module 10/18/24) 510k, De Novo, IDE, PMA, HUD/HDE, Q-Submissions, Standards, Classification	▼
Postmarket Activities (Updated module 10/16/24) Quality System, QMSR, Exporting, Device Recalls, MDR, Inspection - Global Harmonization	▼
In Vitro Diagnostics - (Updated 10/24/24) IVD Development, CLIA, and Virtual Town Hall Series	▼
Unique Device Identification (UDI) System	▼
<b>Specialty Technical Topics - (Updated 10/17/24)</b>	▼
Radiation-Emitting Products	▼
510(k) Third Party Review Program (for Third Party Review Organizations)	▼
Industry Basics Workshop Series	▼



# Next Town Hall



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## Medical Device Sterilization Town Hall Series

[www.fda.gov/medical-devices/general-hospital-devices-and-supplies/sterilization-medical-devices#town-halls](https://www.fda.gov/medical-devices/general-hospital-devices-and-supplies/sterilization-medical-devices#town-halls)