

# **FDA Medical Device Inspections**

**FDA Small Business  
Regulatory Education for Industry (REdI)  
San Francisco, CA  
May 16, 2018**

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# Poll Question

**How many times has your facility been inspected by the FDA?**

- A. Never**
- B. Once**
- C. 2-5 times**
- D. More than 5 times**

# Learning Objectives

1. Understand ORA's role within FDA
2. Learn how to prepare for your next inspection
3. Review the Quality System Inspection Technique
4. Discuss common problems seen during inspections
5. Learn what happens after the inspection

# FDA Organization

## Center for Devices and Radiological Health (CDRH)

- Responsibilities include:
  - Premarket review
  - Postmarket surveillance
  - Policymaking and guidance development
  - Public communication and education

## Office of Regulatory Affairs (ORA)

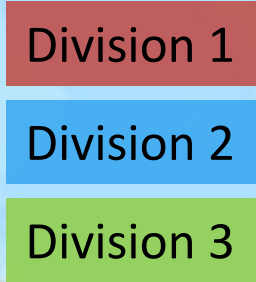
- Responsible for field activities such as:
  - Establishment inspections
  - Conducting investigations
  - Sample analyses
  - Import operations

# ORA Organization

- **May 2017:** Reorganized from geographic to programmatic management model
- Seven new programs:
  1. Bioresearch Monitoring
  2. Biological Products
  3. Human and Animal Food
  - 4. Medical Devices and Radiological Health**
  5. Pharmaceutical Quality
  6. Tobacco
  7. Imports

**FDA**

**FDA**



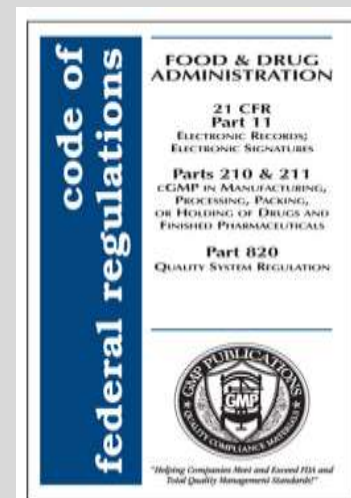
# Inspectional Objectives

- **FD&C Act:** Distribution of adulterated products in interstate commerce is prohibited
- **Adulterated:** Not manufactured in accordance with good manufacturing practices (GMPs)
- **Medical device GMPs:** 21 CFR 820

**Primary Objective:** Assess compliance with 21 CFR 820

# Inspectional Objectives (cont'd)

- Other regulations covered as applicable:
  - **21 CFR 803:** Medical Device Reporting
  - **21 CFR 806:** Corrections and Removals
  - **21 CFR 807:** Registration and Listing
  - **21 CFR 801:** Labeling
    - Includes Unique Device Identification





# Inspectional Objectives (cont'd)

- Other regulations covered as applicable:
  - **21 CFR 821:** Medical Device Tracking
  - **21 CFR 11:** Electronic Records
  - **21 CFR 1000-1050:** Electronic Product Radiation Control (EPRC)
  - **21 CFR 4:** cGMPs for Combination Products

# Risk-Based Site Selection Process

- MDUFA inspections (*e.g.*, PMA)
- Initial inspections
- Class III > II > I device manufacturers
- Compliance follow-up
- For-cause inspections:
  - Consumer complaint / whistleblower
  - High recall / MDR frequency

# Inspection Pre-announcement

- **Purpose:** Facilitate the inspection
- **Eligibility:** Routine and PMA inspections
- Call five days in advance:
  - Set date/time
  - Inspection scope
  - Size of team
  - May request procedures

# Prior to the Inspection: Investigator

- Review previous EIRs/FDA 483s
- FDA 483 responses
- Registration and listings
- 510(k)s and PMAs
- MDRs and recalls
- Relevant standards
- Procedures provided during preannouncement

## Prior to the Inspection: Firm

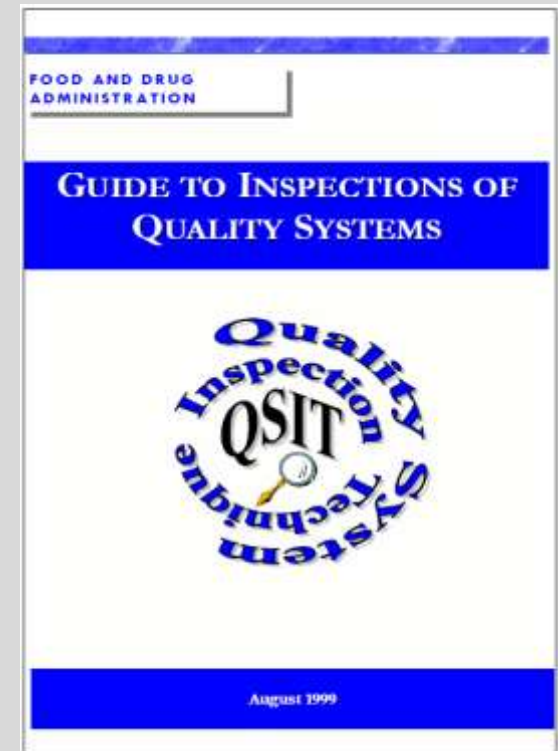
- Necessary documentation available?
- Coordinate inspectional resources:
  - Top management
  - Management representative
  - Subject matter experts (SMEs)
  - Scribes
  - Support staff

# Start of the Inspection

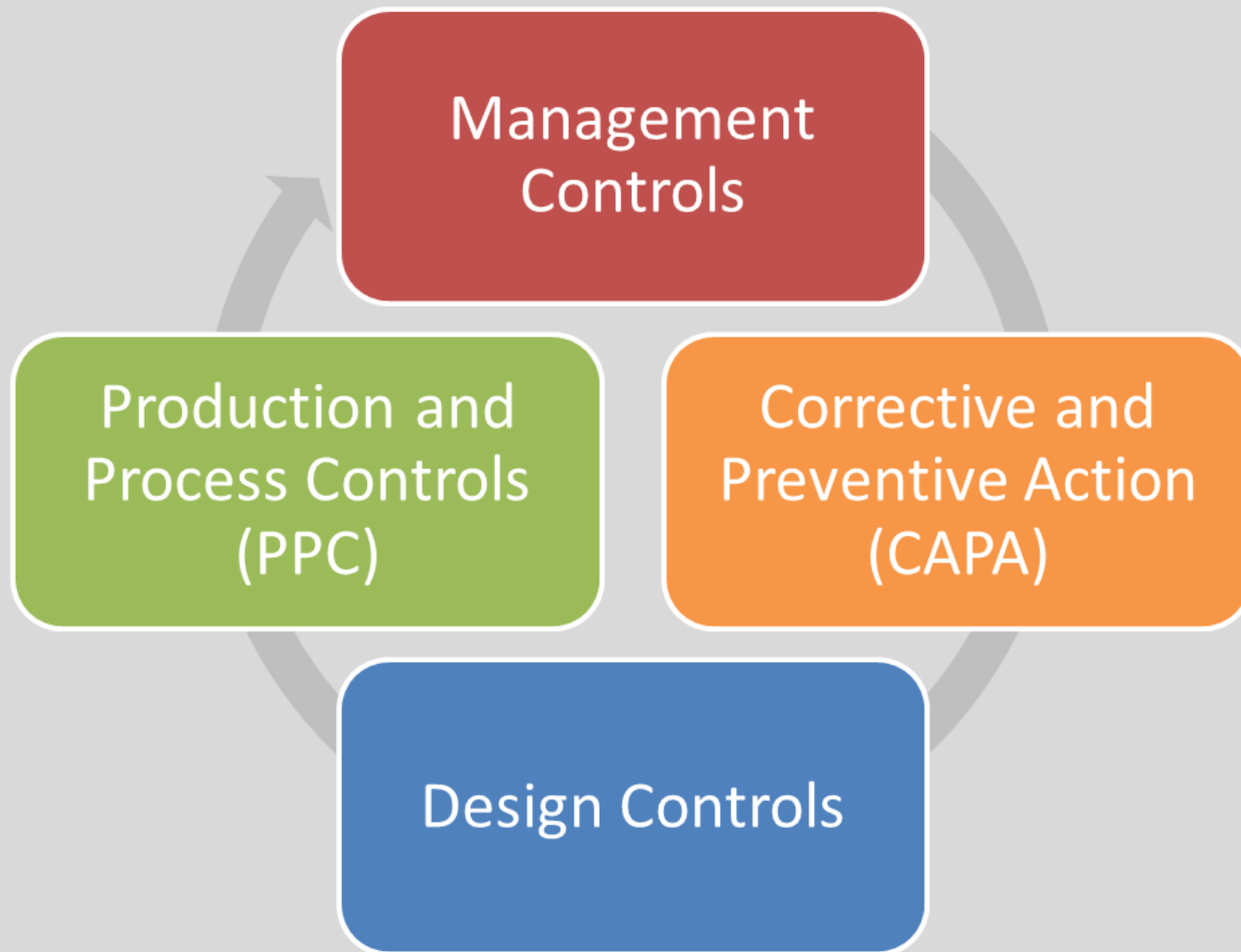
1. Identify top Management Official on site
2. Present credentials
3. Issue an FDA 482, *Notice of Inspection*
4. Conduct an opening meeting
5. Perform an initial facility walkthrough

# Quality System Inspection Technique (QSIT)

- Introduced in 1999
- Validated inspection method
- “Top-down” approach
- Target inspectional length is 4 to 5 days



# QSIT: Four-Subsystem Approach





# Routine Inspection Level

- **“Comprehensive” Inspections**
  - All four subsystems
- **“Abbreviated” Inspections**
  - CAPA + Design Controls or CAPA + PPC
  - Can be escalated if warranted

# QSIT: Management Controls Coverage

- Quality policy
- Organizational structure
- Management review
- Quality audits

# Management Controls

- FDA **won't** review:
  - Management review meeting minutes
  - Quality audit reports
- However, FDA **may** review:
  - Data that feeds into management review
  - CAPAs opened as a result of quality audits or management review

# Common *Management Controls* Problems

- **Management review:**
  - Top management not in attendance or informed
  - Not meeting required frequency
  - No sign-up sheet
- **Quality audits:**
  - Inadequate auditor training
  - Scope doesn't cover all applicable QSR elements
  - Auditing one self's work
  - Re-audits on deficient matters not conducted

# QSIT: CAPA Overview

- CAPA is the heart of an effective quality system!
- Squash small problems before they become bigger
- Determines direction for remainder of inspection



# QSIT: CAPA Coverage

- Data analysis (*e.g.*, complaints, nonconforming product)
- CAPA records
- Complaint files and MDRs
- Corrections and Removals

# Common *CAPA* Problems

- Activities are not commensurate with risk:
  - Not opening CAPAs when warranted
  - Timeliness of open CAPAs
- Recurrence of quality problems
  - Inadequate root cause analysis
  - Inadequate corrective action
  - Inadequate verification of effectiveness

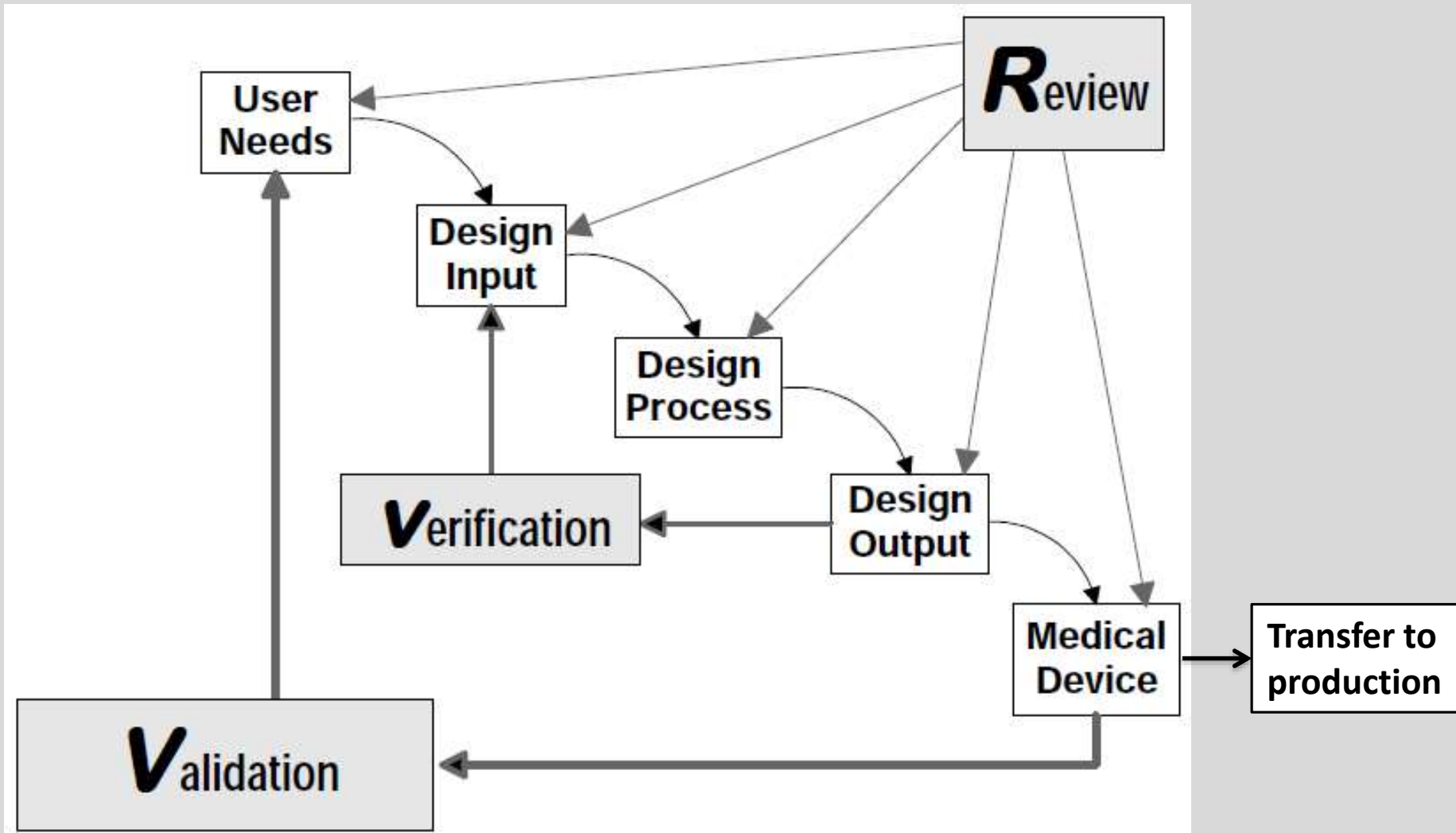


# Common *Complaint Handling* Problems

- Misunderstanding definition of complaint
  - “User error”
- Inadequate investigations
- Not evaluating for MDR reportability



# QSIT: Design Controls Coverage



# Common *Design Controls* Problems

- Ambiguous design inputs
- **Design V&V:**
  - Lack of predetermined acceptance criteria
  - Design changes with no/inadequate V&V
- **Risk Analysis:**
  - Failure to identify all hazards
  - Failure to utilize postmarket data

# QSIT: PPC Coverage

- Select specific manufacturing process based on:
  - CAPA indicators
  - Risk of process to cause device failures
  - Process maturity
  - Use in multiple types of devices
  - FDA inspectional history

## QSIT: PPC Coverage (Cont'd)

- Manufacturing SOPs and training records
- Observe and interview personnel
- Relevant acceptance activities
- Control of nonconforming product
- Calibration and preventive maintenance

# QSIT: PPC Coverage (Cont'd)

- Environmental controls
- Process validation
  - IQ/OQ/PQ
  - Process monitoring
- DHR review
- Purchasing controls

# Common *PPC* Problems

- Process not performed per SOP
- Poor DHR documentation
- Not operating within validated range
- Sampling plans not statistically valid
  - Acceptance activities
  - Process validation

# Common *PPC* Problems (Cont'd)

- **Process Validation**
  - Lack of predefined acceptance criteria
  - No documented rationale for worst-case conditions
  - Results do not align with production SOPs
- **Control of Nonconforming Product**
  - Failure to document
  - Concession without adequate justification

# Expectations During the Inspection

- **Transparency**
  - Communicate our concerns as we see them
  - Provide daily briefings
- **Cooperation**
  - Timely access to records and personnel
  - Be truthful and forthcoming
- ***We are not consultants!***



# Observations vs. Discussion Items

- **Observations**

- Documented on FDA 483
- Publicly available (FOIA)
- Corrective actions reviewed during next inspection

- **Discussion Items**

- Not documented on FDA 483 (in EIR only)
- Corrective actions reviewed during next inspection
- Escalated to observations if not corrected

# Inspection Close-Out Meeting

1. Communicate discussion items
2. Issue FDA 483 to top management
3. Explain annotation process
4. Discuss observations
5. Encourage written FDA 483 response within 15 business days

# FDA 483



| DEPARTMENT OF HEALTH AND HUMAN SERVICES<br>FOOD AND DRUG ADMINISTRATION   |  |
|---|--|
| DISTRICT ADDRESS AND PHONE NUMBER<br>300 River Place, Suite 5900<br>Detroit, MI 48207<br>(313) 393-8100 Fax: (313) 393-8139   |  |
| DATE(S) OF INSPECTION<br>[REDACTED]   |  |
| FET NUMBER<br>[REDACTED]  |  |
| NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED<br>[REDACTED]  |  |
| FIRM NAME<br>[REDACTED]   | STREET ADDRESS<br>[REDACTED]                   |
| CITY, STATE, ZIP CODE, COUNTRY<br>[REDACTED]  | TYPE ESTABLISHMENT INSPECTED<br>Medical Device |
| <p>This document lists observations made by the FDA representative(s) during the inspection of your facility. They are inspectional observations, and do not represent a final Agency determination regarding your compliance. If you have an objection regarding an observation, or have implemented, or plan to implement, corrective action in response to an observation, you may discuss the objection or action with the FDA representative(s) during the inspection or submit this information to FDA at the address above. If you have any questions, please contact FDA at the phone number and address above.</p> |  |
| <p><i>The observations noted in this Form FDA-483 are not an exhaustive listing of objectionable conditions. Under the law, your firm is responsible for conducting internal self-audits to identify and correct any and all violations of the quality system requirements.</i></p>   |  |
| <b>DURING AN INSPECTION OF YOUR FIRM WE OBSERVED:<br/>OBSERVATION 1</b>   |  |

# Annotations



Annotations

Annotations(entered with discussion with firm)

Reference Number 21 CFR 803.42(c)(2)

Citation Short Description

Citation Text

Specifically Text

Select Annotation

- Reported corrected, not verified
- Corrected and verified
- Promised to correct
- Promised to correct by [insert date]
- Promised to correct within [time interval]
- Under consideration
- Annotation Intentionally Left Blank

Previous Next



# After the Inspection

- Investigator writes Establishment Inspection Report (EIR)
- Investigations Branch (IB) endorses EIR and recommends classification:
  - NAI (“No Action Indicated”)
  - VAI (“Voluntary Action Indicated”)
  - OAI (“Official Action Indicated”)

## After the Inspection (cont'd)

- If endorsed NAI or VAI:
  - IB finalizes classification (case “closed”)
- If endorsed OAI:
  - IB forwards EIR to Compliance Branch (CB)
  - CB determines need for regulatory action
  - CB finalizes classification
  - CB schedules follow-up inspection

# Obtaining the EIR

- For routine NAI and VAI inspections...
  - Copy of EIR is sent to firm (FMD-145)
- Otherwise...
  - Firm must make FOIA request
  - There may be a fee
  - May be denied if case is not “closed”

# Summary

1. Understand ORA's role within FDA
2. Learn how to prepare for your next inspection
3. Review the Quality System Inspection Technique
4. Discuss common problems seen during inspections
5. Learn what happens after the inspection



# References

- [Quality System Inspection Technique \(QSIT\)](#)
- [CPGM 7382.845: Inspection of Medical Device Manufacturers](#)
- [Preamble to 21 CFR 820](#)
- [Investigations Operations Manual](#)

# Questions

Please evaluate this session:

[surveymonkey.com/r/DEV-D2S08](https://surveymonkey.com/r/DEV-D2S08)

# Your Call to Action

- **Be prepared for your next FDA inspection**
  - Understand your regulatory obligations
  - Perform thorough, meaningful quality audits
- **Let's communicate and cooperate to promote more efficient inspections**
  - Less burden on manufacturers
  - Better use of FDA resources

