Enhanced Drug Distribution Security – Drug Supply Chain Security Act (DSCSA) Implementation Updates

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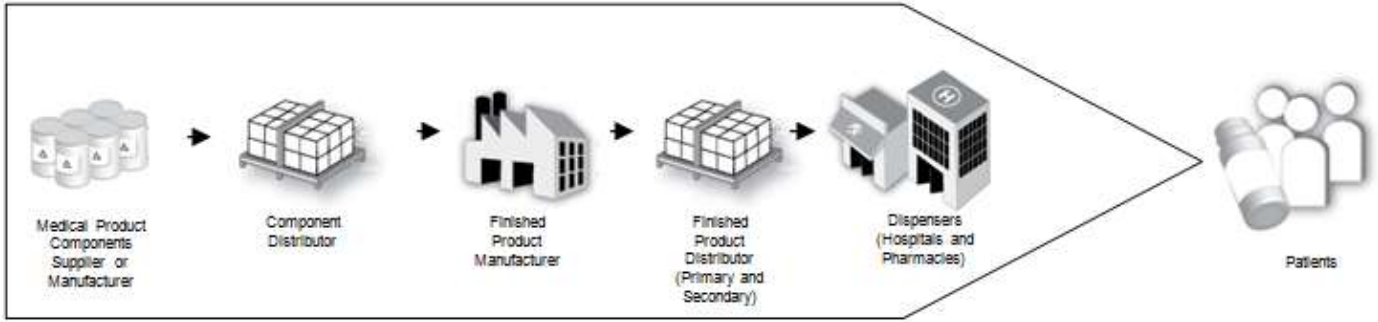
CDER | US FDA

CDER Compliance Conference – January 14, 2021

Learning Objectives

- Provide an overview of key supply chain security requirements under the Drug Supply Chain Security Act (DSCSA) for the distribution of prescription drugs
- Describe implementation updates for trading partners in the pharmaceutical supply chain (manufacturers, repackagers, wholesale distributors and dispensers)

Pharmaceutical Supply Chain



Maintaining integrity from manufacturer to patient(s)

- Who touches the product?
- Where are the vulnerabilities?
- What are the threats?

Protect the product → **Protect the patient**

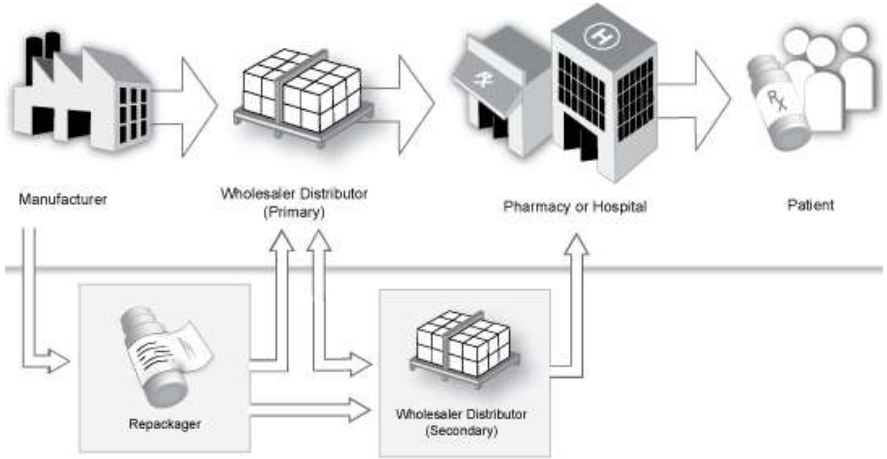
Threats to the Pharmaceutical Supply Chain

Illegitimate product

Counterfeit, diverted, stolen, intentionally adulterated, subject to a fraudulent transaction, or otherwise unfit for distribution that would result in serious adverse health consequences or death to humans

Unscrupulous players

- Distribute illegitimate product
- Don't maintain quality of the product
- Don't maintain security or integrity of the supply chain (examples: are not authorized or do business with entities that are not authorized)



Weakness in the drug supply chain can be anywhere

Counterfeit version of Symtuza in the U.S.

Symtuza tablets (Janssen/Johnson & Johnson)

- Symtuza (darunavir/cobicistat/emtricitabine/ tenofovir alafenamide) is indicated for the treatment of HIV in adults and adolescents aged 12 or over.
- Three pharmacies involved bought counterfeit versions from distributors that had not been authorized by Janssen.
- Janssen Symtuza should be purchased from ***authorized distributors*** to ensure authentic and safe drugs are received.
- HIV patients that receive a counterfeit are at risk of treatment failure.


Offices of the United States Attorneys
United States Department of Justice
THE UNITED STATES ATTORNEY'S OFFICE
EASTERN DISTRICT of VIRGINIA
FOR IMMEDIATE RELEASE
Friday, January 18, 2019
Medical Company Executive Sentenced for Smuggling $18 Million in Misbranded Pharmaceuticals into United States
6 Canadians arrested in U.S. extradition
for allegedly selling fake cancer drugs
CanadaDrugs.com founder, 5 others accused of
counterfeit drugs to doctors in U.S.
Karen Pauls · National Reporter · CBC
June 19, 2017
Friday, April 13, 2018
Drug Firm Admits Selling Counterfeit and
anded Prescription Drugs Throughout the United
ates
FDA News Release
Second Turkish man sentenced for smuggling counterfeit cancer drugs
Other business partner in drug wholesaling scheme was sentenced in October 2014
Eastern District of Virginia
Friday, May 9, 2014
egal Drug Company Gallant Pharma And Co-Founder Sentenced
Counterfeit Version of Avastin in U.S. Distribution
Statement Update Issued: July 10, 2012
Protecting the supply chain ultimately protects patients!

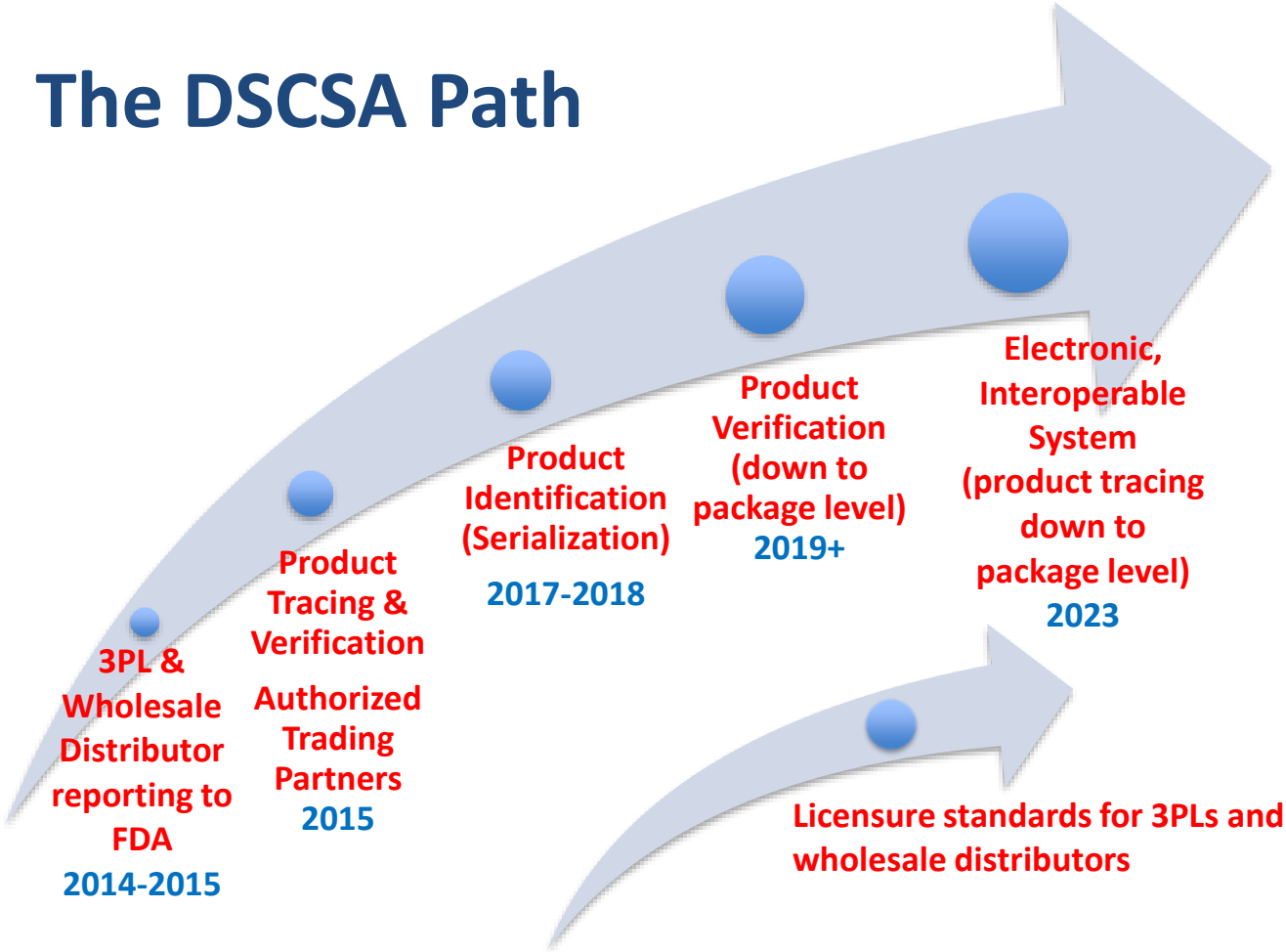
DSCSA Goals

1. Implement an interoperable, electronic system for tracing of products at the package level by 2023

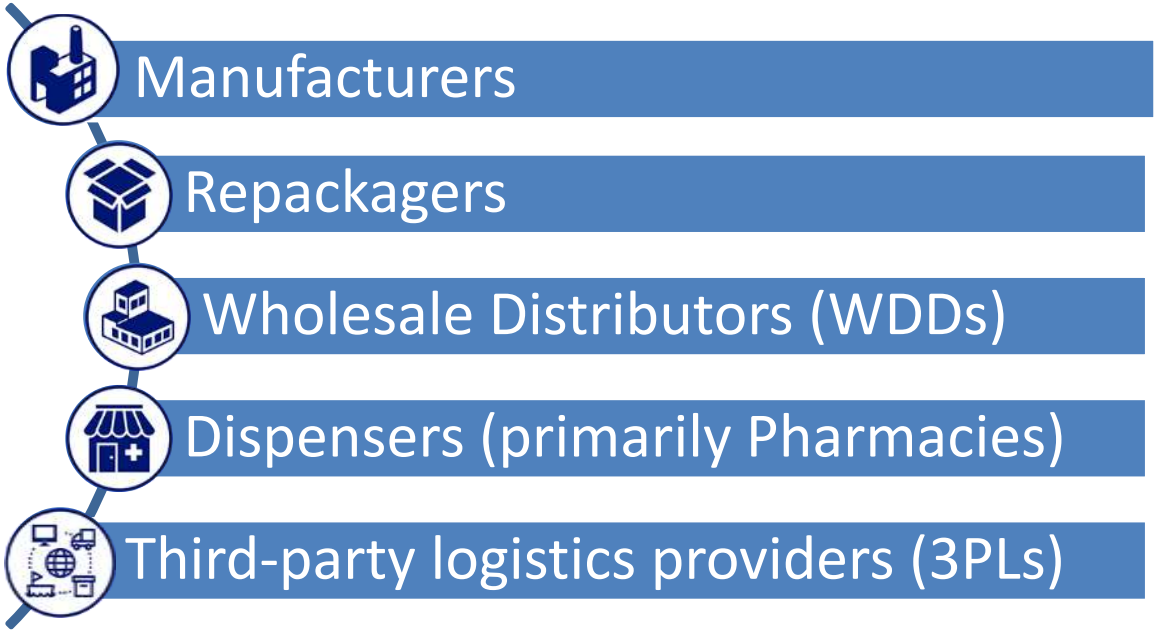
- Enable secure tracing of product at the package level
- Use product identifiers to verify product at the package level
- Enable prompt response to suspect and illegitimate products when found
- Improve efficiency of recalls

2. Establish national standards for licensure for wholesale distributors and third-party logistics providers (3PLs)

The DSCSA Path



Trading Partners under DSCSA



Products

- What's covered:
  - Prescription drug in finished dosage form for administration to a patient without further manufacturing (such as capsules, tablets, lyophilized products before reconstitution)
- What's not covered:
  - Blood or blood components intended for transfusion
  - Radioactive drugs or biologics
  - Imaging drugs
  - Certain IV products
  - Medical gas
  - Homeopathic drugs
  - Lawfully compounded drugs

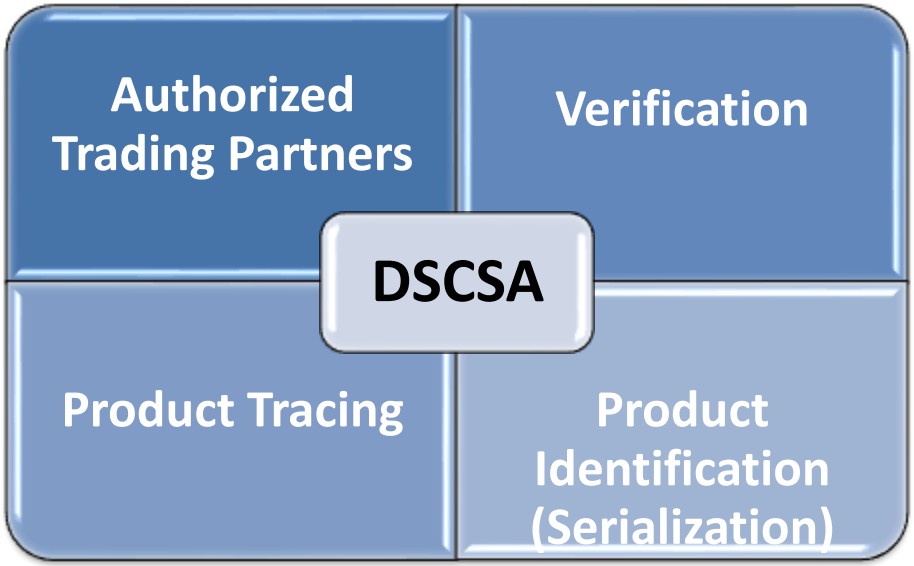
Refer to the definition for "product" in section 581(13) of the FD&C Act for specific information regarding exceptions.

Transactions

- Involve transfers of product where a *change of ownership* occurs
- Excludes:
  - Intracompany distributions
  - Distribution among hospitals under common control
  - Public health emergencies
  - Dispensed pursuant to a prescription
  - Product sample distribution
  - Blood and blood components for transfusion
  - Minimal quantities by a licensed pharmacy to a licensed practitioner
  - Certain activities by charitable organizations
  - Distributions pursuant to a merger or sale
  - Certain combination products
  - Certain medical kits
  - Certain IV products
  - Medical gas distribution
  - Approved animal drugs

Refer to the definition for "transaction" in section 581(24) of the FD&C Act for specific information regarding exclusions.

Key Requirements*



*The requirements under section 582 of the FD&C Act apply to manufacturers, repackagers, wholesale distributors, and dispensers (pharmacies).

Trading Partners must be *Authorized*

Manufacturers and Repackagers	WDDs and 3PLs	Dispensers (Pharmacies)
• Have valid registration with FDA • Check FDA's drug establishment current registration site database (DECRS)	• Have valid State or Federal license and compliance with reporting requirements • Check FDA's WDD/3PL database	• Have valid State license • Check respective state authorities

Guidance: Authorized Trading Partners

Identifying Trading Partners under DSCSA

Assists industry and State and local governments in understanding the applicability of DSCSA requirements to entities in the drug supply chain and activities that require licensure and annual reporting, as well as other requirements related to being an authorized trading partner

Specific clarifications -

- Manufacturers: Manufacturing establishments, application holders, co-licensed partners, affiliates
- Repackagers: Does not include a pharmacy solely engaged in packaging/labeling for an identified patient after receipt of a valid Rx
- Wholesale Distributors: Differences in the definition of wholesale distribution in the Prescription Drug Marketing Act (PDMA) and DSCSA, some entities are now 3PLs
- 3PLs: What is considered as “other logistic services” and brokers, solution providers, common carriers are generally not considered as 3PLs
- Dispensers: No product tracing requirements if product is dispensed to a patient or if it is a dispenser to dispenser sale to fulfill a specific patient need

Challenge Question #1

Key supply chain security requirements under DSCSA include which of the following?

A. Product Tracing

B. Verification

C. Authorized Trading Partner

D. Product Identification

E. All of the above

Product Tracing Requirement

Receive	When buying, only accept prescription drugs with product tracing information: (1) Transaction Information (TI) (2) Transaction History (TH) (3) Transaction Statement (TS)
Provide	Generate and provide product tracing information with each transaction if you sell a prescription drug to another trading partner.
Respond	Respond to a request for information in the event of a recall or to investigate a suspect or illegitimate product.
Store	Store product tracing information you receive in paper or electronic format for at least 6 years.
Return	Return product to the trading partner that you bought the drug from.

Product Tracing Requirement

Receive	When buying, only accept prescription drugs with product tracing information: (1) Transaction Information (TI) (2) Transaction History (TH) (3) Transaction Statement (TS)
Provide	Generate and provide product tracing information with each transaction if you sell a prescription drug to a trading partner.
Respond	Respond to a request for information in the event of a recall or to investigate a suspect or illegitimate produc
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CURRENTLY LOT-LEVEL AND IN PAPER OR ELECTRONIC FORMATS

IN 2023, CHANGES TO PACKAGE-LEVEL TRACING AND ALL ELECTRONIC

Guidances: Standards for Product Tracing

DSCSA Standards for the Interoperable Exchange of Information for Product Tracing…

- Use or build on current systems and processes to comply
- Paper- or electronic-based until 2023 when it will be required to be electronic
- Examples of methods that could be used for data exchange

Standardization of Data and Documentation Practices for Product Tracing

- How to standardize the data contained in product tracing information (TI, TH, TS)
- Data elements that should be including in product tracing information, including situations where it is permitted by law for certain data to be omitted (e.g., dispenser sales to fulfill a specific patient need, drop shipments to a dispenser, or grandfathered product)
- Use of third-party agreements

Investigate and properly handle suspect and illegitimate products

Suspect Product: ***reason to believe*** that product potentially is:

- counterfeit, diverted, stolen
- subject of fraudulent transaction
- intentionally adulterated or appears otherwise unfit for distribution such that the product would result in serious adverse health consequences or death to humans

Illegitimate Product: ***credible evidence*** shows that the product is:

- counterfeit, diverted, stolen
- subject of fraudulent transaction
- intentionally adulterated or appears otherwise unfit for distribution such that the product would result in serious adverse health consequences or death to humans

Identifying suspect product: Examples of what to look for…

Verification Requirements

Quarantine and Investigate	Suspect prescription drugs to determine if illegitimate
Investigation	- Must include validating applicable transaction information and transaction history - Once product is serialized, trading partners will need to verify lot number and product identifier
Notify	If the product is illegitimate, notify FDA and certain immediate trading partners within 24 hours
Respond	If the product is illegitimate, work with manufacturer to take steps to prevent it from reaching patients
Store	Store records of investigation of suspect product and the disposition of illegitimate product for at least 6 years

Guidances: Verification Requirements

DSCSA Implementation: Identification of Suspect Product and Notification

Scenarios that increase risk of suspect product entering the supply chain:

- recommendations on how to identify and make determination of suspect product
- process to notify FDA and terminate notifications about illegitimate product (Form FDA 3911)

Definitions of Suspect Product and Illegitimate Product for Verification Requirements under DSCSA

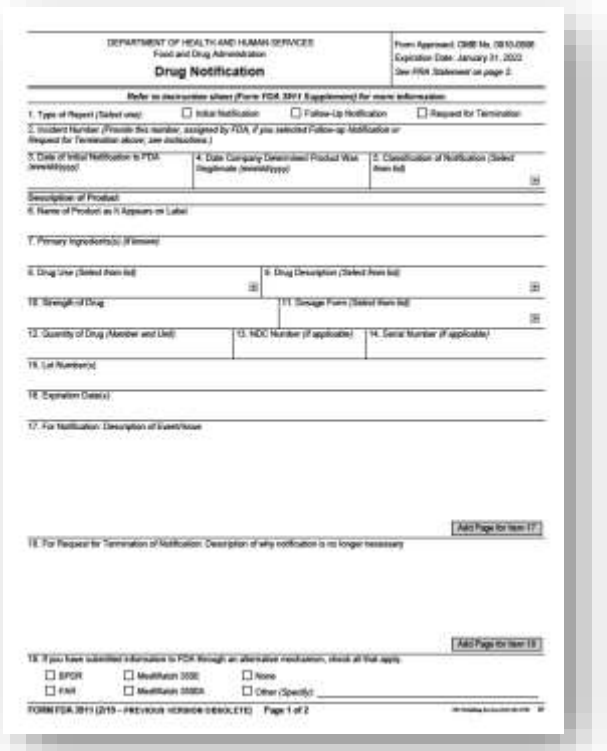
FDA interpretations of terms with in the definitions:

- counterfeit, diverted, subject of fraudulent transaction, unfit for distributions
- aids in determining when to report an illegitimate product to FDA

Verification Systems under DSCSA…

- Recommendations for robust verification system for the determination, quarantine, and investigation of suspect products, and quarantine, notification, and disposition of illegitimate products
- Recommendations for how trading partners submit cleared product notifications and respond to verifications requests
- Addresses verification of saleable returns at the package level for product identifiers on packages and homogenous cases

Notify FDA if you have Illegitimate Product



DEPARTMENT OF HEALTH AND HUMAN SERVICES
Food and Drug Administration

Drug Notification

Notify FDA within 24 hours using Form FDA 3911

Notify other trading partners within 24 hours

Request notification termination using Form FDA 3911

https://www.accessdata.fda.gov/scripts/cder/email/drugnotification.cfm

Product Identifier Requirements (Serialization)

Manufacturers/Repackagers (November 2018)

- Encode product identifiers on prescription drug packages
- Determine smallest individual saleable unit
- Verification requirements changes once products are serialized with product identifier

Product Identifier

- National Drug Code (NDC)
- Serial Number
- Lot Number
- Expiration Date

Human and machine readable formats

Machine readable barcodes:

- 2D data matrix for packages
- Linear or 2D data matrix for homogenous cases

Packages Without Product Identifiers

Excluded Products	Not all prescription drugs are required to have a product identifier and are excluded.
Grandfathered	Some products will be in the supply chain before the product identifier requirement took effect.
Waiver, Exception or Exemption	Some products were granted a waiver, exception or exemption from the product identifier requirement.

If you are unsure whether a product should have a product identifier, verify with the manufacturer or repackager.

Guidance: Product Identifier Requirements

Product Identifiers under DSCSA, Questions and Answers

- FDA contacts for barcode-related questions
- Recommendations for standardizing both the human-readable and machine-readable format of the information that is contained in the product identifier
- Submission of label changes under DSCSA
- FDA's interpretation of product identifier requirements under DSCSA as they relate to linear barcode requirements under 21 CFR 201.25
- Examples of when the product identifier and/or the linear barcode are required on product packages

Challenge Question #2

Which of the following statements is NOT true about DSCSA requirements?

A. Product tracing involves providing the transaction information, transaction history and transaction statement with each sale of product.

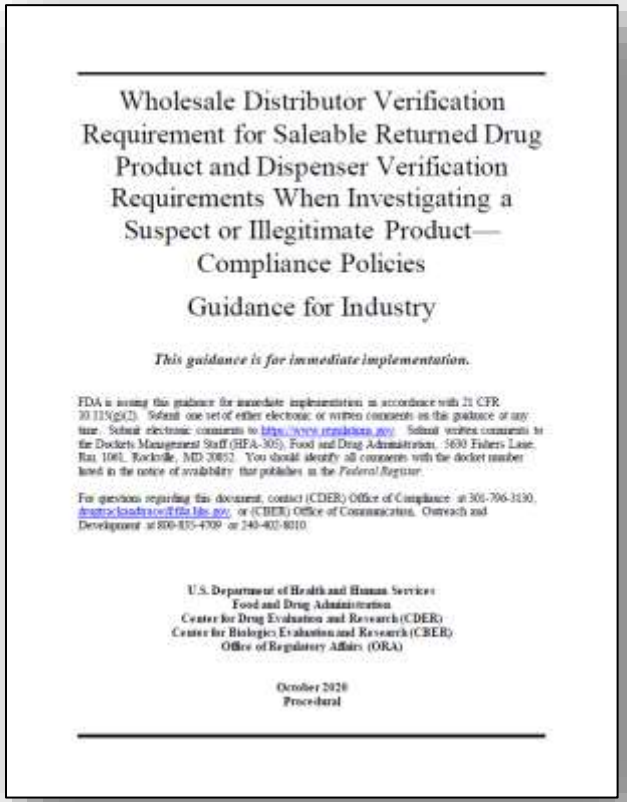
B. Verification includes quarantine and investigation of suspect product and quarantine and disposition of illegitimate product.

C. When a trading partner identifies illegitimate product, it must notify FDA and other immediate trading partners within 24 hours of making the determination.

D. Trading partners can notify FDA of illegitimate product using the Form FDA 3911 for Drug Notifications.

E. For products under DSCSA, it is optional to encode packages with a product identifier (a 2D data matrix barcode that includes the NDC, serial number, lot number and expiration date).

New Compliance Policies



Wholesale Distributor Verification Requirement for Saleable Returned Drug Product and Dispenser Verification Requirements When Investigating a Suspect or Illegitimate Product—Compliance Policies

Guidance for Industry

This guidance is for immediate implementation.

FDA is issuing this guidance for immediate implementation in accordance with 21 CFR 10.115(g)(2). Submit one set of either electronic or written comments on this guidance at any time. Submit electronic comments to https://www.regulations.gov. Submit written comments to the Dockets Management Staff (HFA-305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852. You should identify all comments with the docket number listed in the notice of availability that publishes in the *Federal Register*.

For questions regarding this document, contact (CDER) Office of Compliance at 301-796-3130, druginfoadvice@fda.hhs.gov, or (CBER) Office of Communication, Outreach and Development at 800-835-4709 or 240-402-8010.

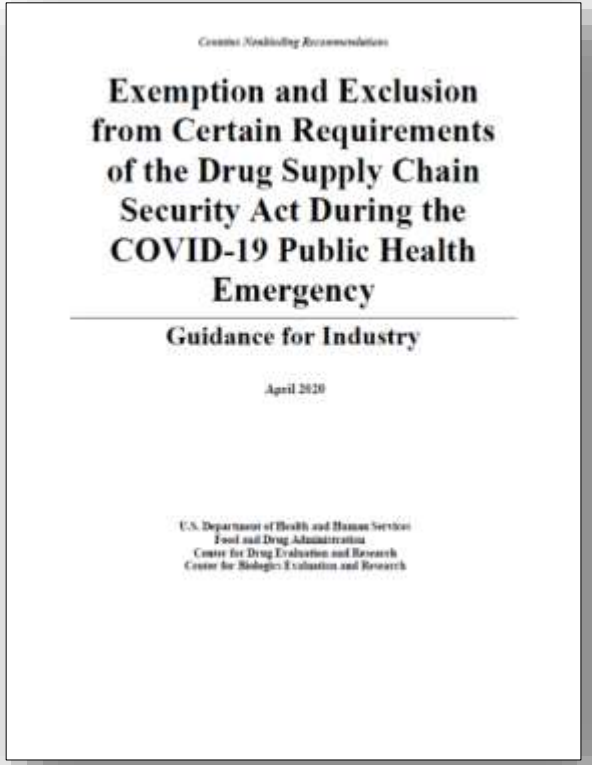
U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)
Center for Biologics Evaluation and Research (CBER)
Office of Regulatory Affairs (ORA)

October 2020
Procedural

- Published October 2020
- Provides **three** additional years to comply with these requirements
- Aligns with statutory requirements for all trading partners effective November 27, 2023, for secure, interoperable, electronic tracing of products at the package level

Exemption and Exclusion During COVID-19

- Published April 2020
- Exemption from certain product tracing and product identifier requirements
- Exclusion from wholesale distribution
- Distribution of “covered COVID-19 products” and other products affected by public health emergency
- Compliance policy of authorized trading partner requirements



Exemption and Exclusion from Certain Requirements of the Drug Supply Chain Security Act During the COVID-19 Public Health Emergency

Guidance for Industry

April 2020

Effective
November 27, 2023

Enhanced Drug Distribution Security

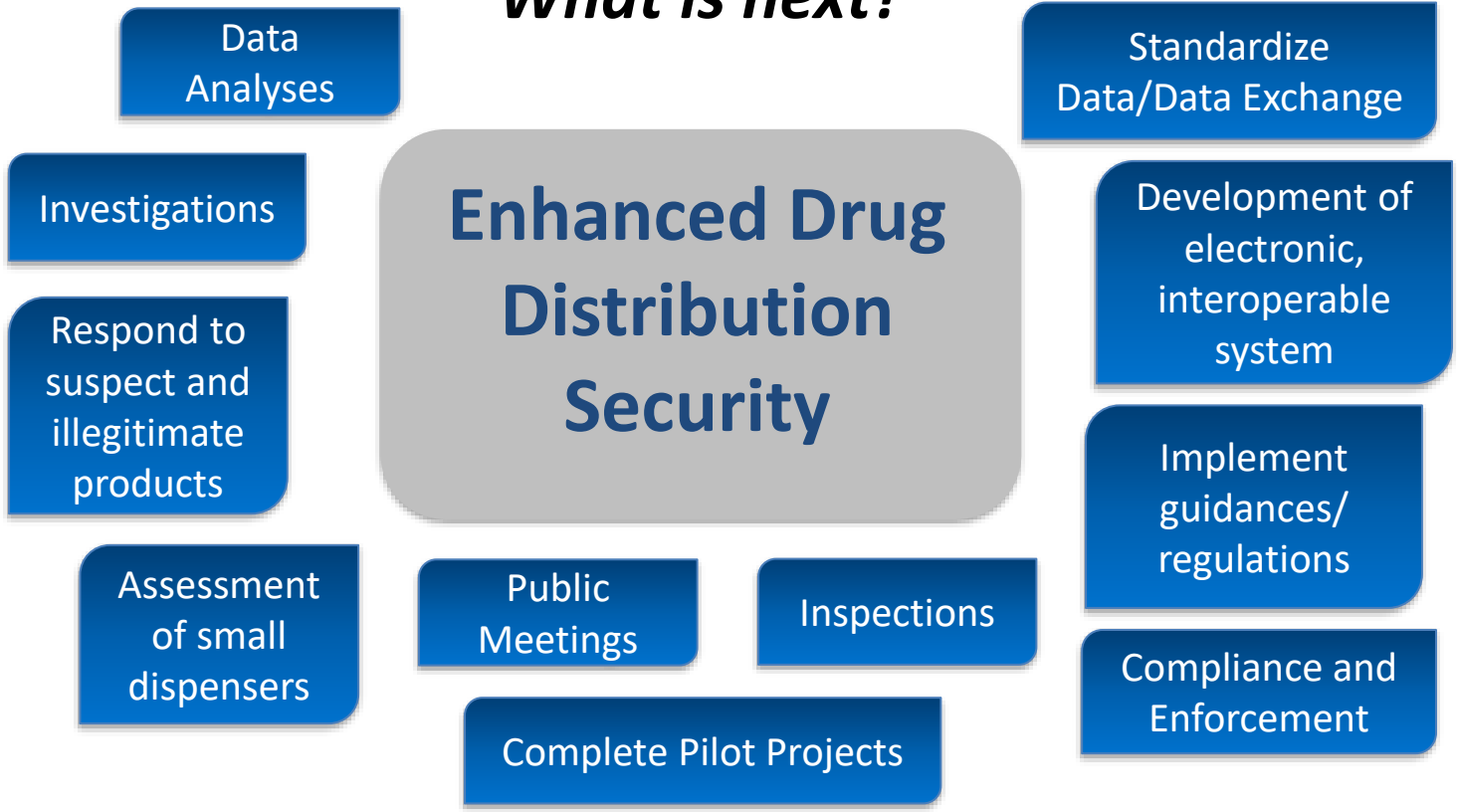
Electronic

Interoperable

System across the pharmaceutical distribution supply chain

www.fda.gov

What is next?


Data Analyses
Standardize Data/Data Exchange
Investigations
Enhanced Drug Distribution Security
Development of electronic, interoperable system
Respond to suspect and illegitimate products
Implement guidances/ regulations
Assessment of small dispensers
Public Meetings
Inspections
Compliance and Enforcement
Complete Pilot Projects

FDA Resources

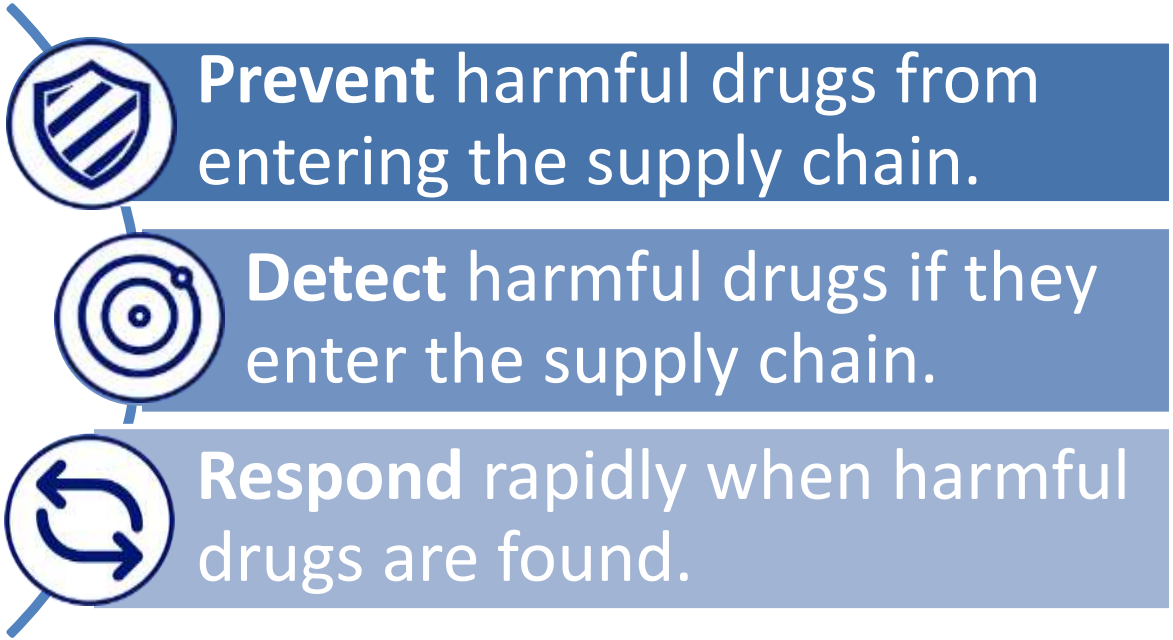
- DSCSA main webpage

  https://www.fda.gov/Drugs/DrugSafety/DrugIntegrityandSupplyChainSecurity/DrugSupplyChainSecurityAct/default.htm

- DSCSA regulatory documents (i.e., regulations, guidances, federal register notices, pilot programs)

  https://www.fda.gov/Drugs/DrugSafety/DrugIntegrityandSupplyChainSecurity/DrugSupplyChainSecurityAct/ucm424963.htm

How DSCSA Protects Patients



Questions?

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