

Regulatory Trends, Insights, and Impact



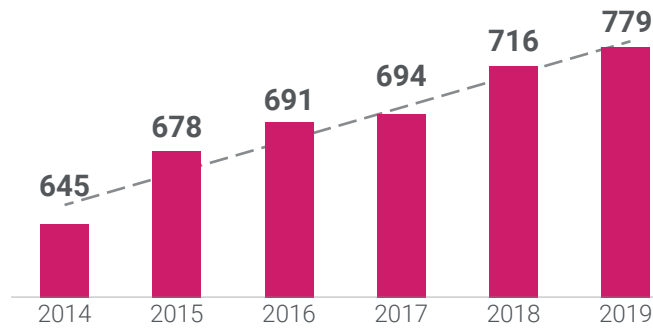
Globalization is leading to a paradigm shift in compliance and increased scrutiny on data and product quality

FDA Form 483 Observations

FDA enforcement continues to increase

Total number of observations issued by FDA (for drugs)*

*As published in the FDA Inspection Observation Summaries.



70%

of all Form 483 observations are related to **Data Integrity**

The impact and challenges around data integrity



43% of lab leaders say data integrity is one of the **key pain points** in their labs

This data comes from Pharma Lab Leaders[#]

[#]2019 Frost & Sullivan global survey of pharma laboratory leaders.



54% of lab leaders cite **data integrity** as being **very important** to their work



70% of lab leaders say **improving documentation** of the sample chain of custody and data integrity is a **key strategy** for **advancing drugs** through the pipeline quicker

Warning letters

The number of drug GMP warning letters issued globally each year continues to climb

Impact of warning letters

“
Forced to delay the launch of a new product by two years.”

According to an article in The Wall Street Journal

“
One bad 483 cost our company \$5 M.”

Former VP of Quality

“
Loss of business ranging from \$270–600 M.”

According to a case study by McKinsey & Company

“
Time and resource allocation to fix the compliance and quality-related issues cost upwards of \$200 M.”

According to an article in The Wall Street Journal

“
Forget about actual warning letters. The cost of us receiving a moderately bad 483 is roughly \$250,000.”

Head of Manufacturing of Biopharma Company

Impact of consent decrees

A typical consent decree lasts three to five years and can result in significant financial loss

> \$100 M

Spent on consultants and third-party auditors

> \$100 M

Revenue loss due to product shortages

> \$500 M

Costs to companies in fines, penalties, remediation expenses, and lost sales

~ 625 products

Recalled since 2011

Impact of consent decree data from: www.lachmanconsultants.com

Stock prices fall dramatically and companies immediately become takeover targets for other firms at a significantly reduced overall cost

Pharma company

Facilities in Puerto Rico and New Jersey

Impact

Sites remain open with third-party oversight

Cost/Penalties

- \$500 M disgorgement penalty and potential for a maximum of \$175 M in additional penalties if timelines were missed (did not occur)
- \$40 M in lost sales due to termination of certain product lines
- Approval of popular antihistamine drug delayed by one year; loss of revenue not determined

Pharma company

Facilities in New York and Pennsylvania

Impact

Sites remain open with third-party oversight; one plant is decommissioned and sold

Cost/Penalties

- \$30 M disgorgement penalty and \$26 M in other fees and costs
- \$267 M in fines paid in 2001
- Closure of two plants

Generic pharma company

Facilities in U.S. and India

Impact

The company relinquishes 180-day marketing exclusivity for three generic drug applications

Cost/Penalties

- Company to withdraw applications with data integrity issues
- Up to \$10 M/year penalty if drugs distributed from consent decree sites
- Up to \$30 M/year penalty if additional untrue statements were made to FDA

To learn how to mitigate data integrity challenges, please visit: [Data Integrity Resource Center](#)

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Published in the USA, April 22, 2021
5994-3229EN