

Chaos: No Standard Testing Rules, **Product Recalls**, and Lab Shopping/Hemp Loophole

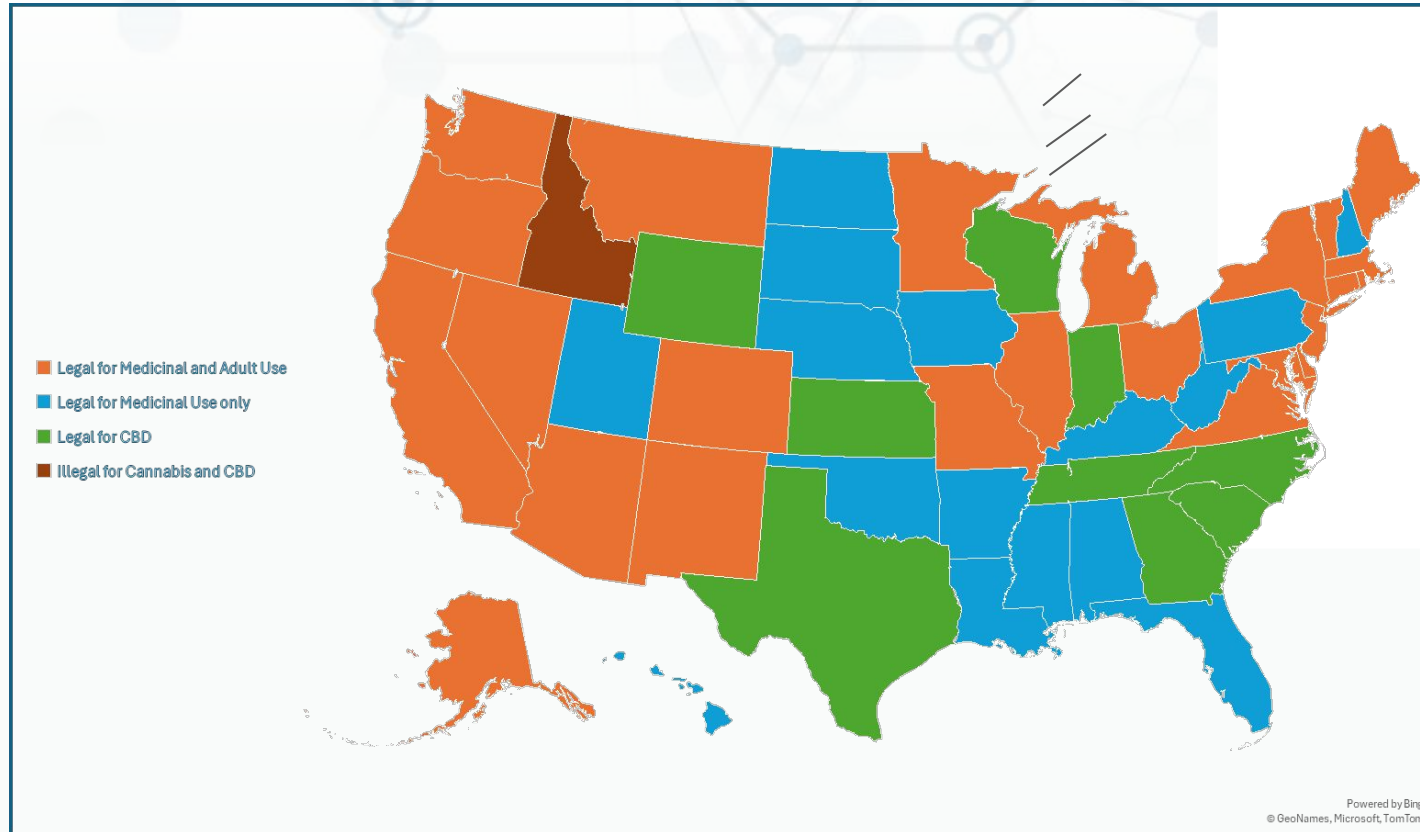
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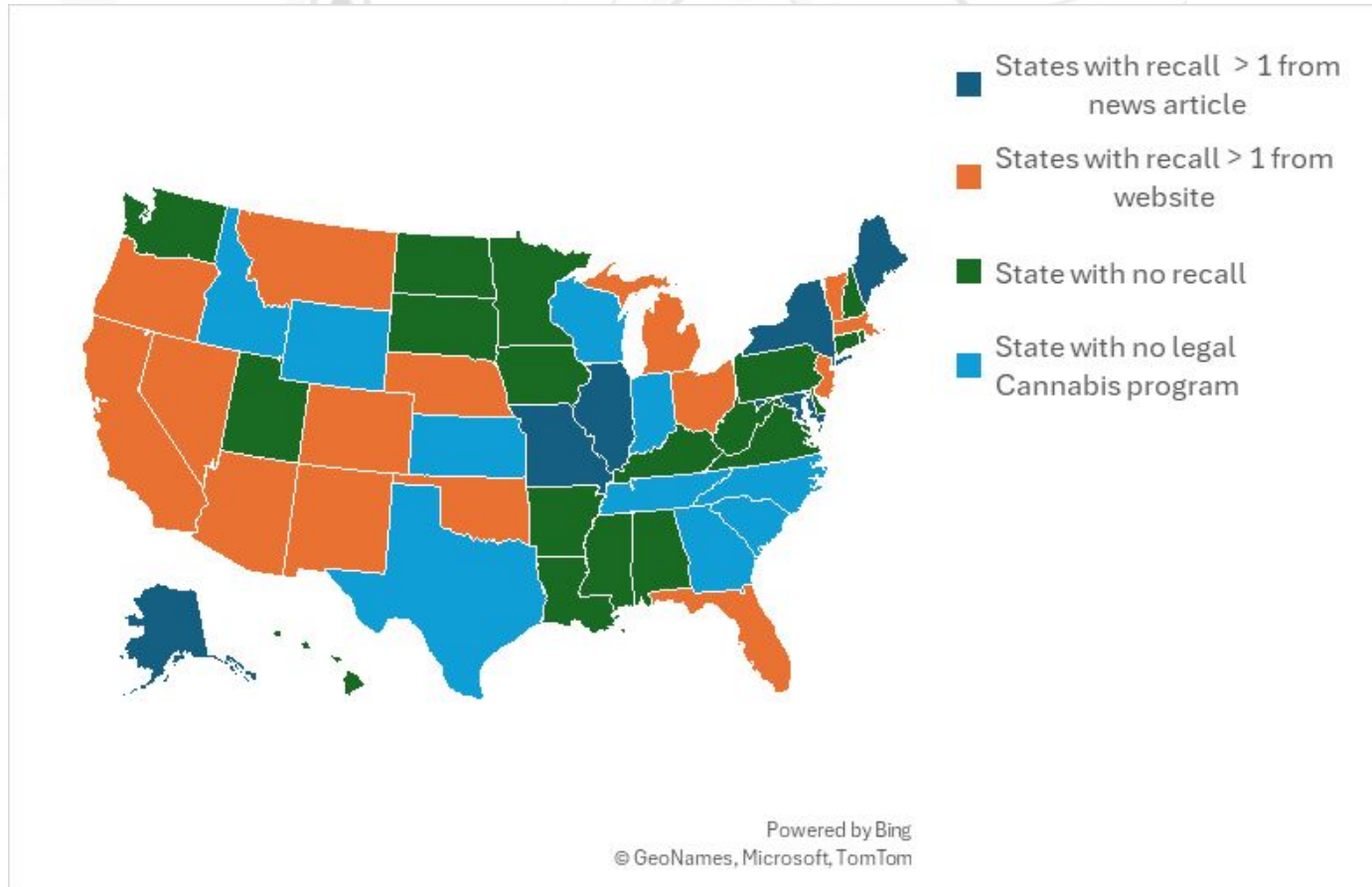
Learning Objectives

- **Product recall information availability & quality varied**
- **Reasons for product recalls were numerous**
- **Many specific contaminants caused product recalls**

Cannabis Testing Regulations by State



State Cannabis Recalls



FDA Product Recalls

What is the purpose of FDA food and pharmaceutical product recalls?

- **Safeguard public health**
by addressing contamination or product mislabeling
to ensure consumer safety and drug efficacy

FDA Food & Pharmaceutical Recalls

Date	Brand Name	Product Description	Product Type	Recall Reason Description
3/8/24	Trader Joe's	50% Less Salt Roasted & Salted Whole Cashews	<u>Food & Beverages</u>	Salmonella spp.
2/26/24	Multiple brands	Eye ointment products	<u>Drug</u>	Potential Lack of Sterility Assurance
4/1/24	AVpak	Atovaquone Oral Suspension , USP 750 mg/5mL	<u>Drug</u>	Potential <i>Bacillus cereus</i> contamination

Source :<https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts>

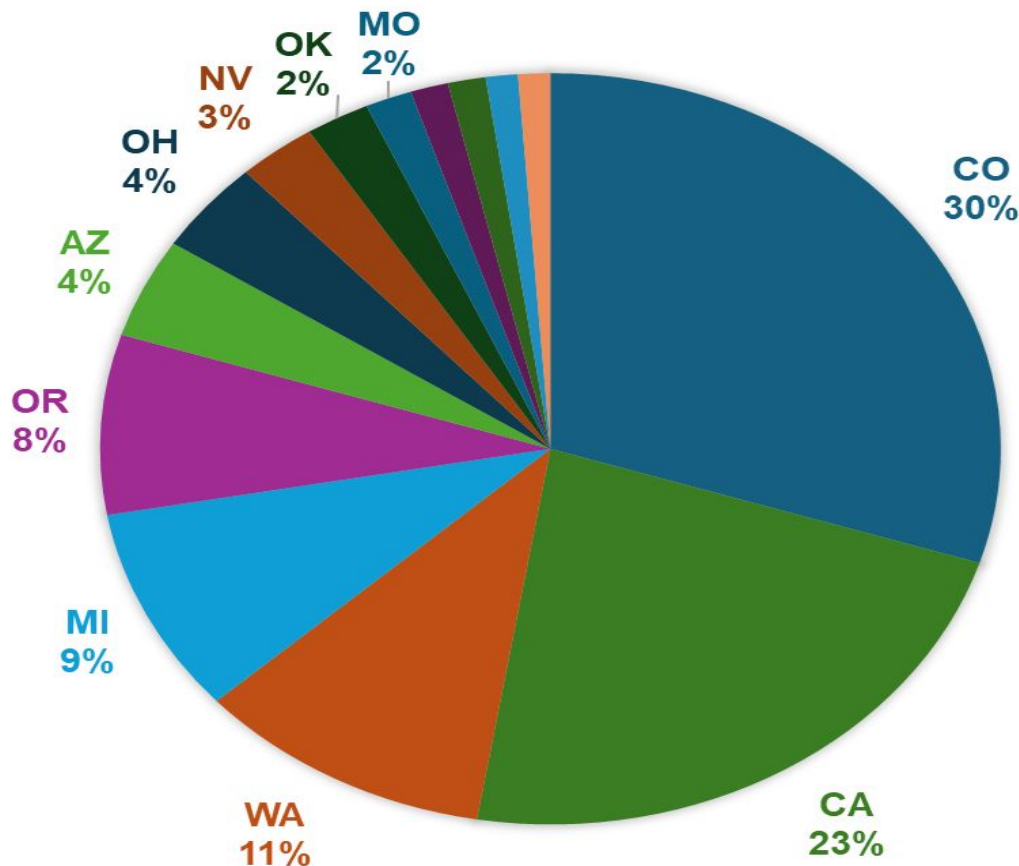
Methods

- **Reviewed** each public recall document
- **Inputted** relevant information
 - Product type
 - Reason for the recall
 - Specific contaminant(s)
- **Performed** analyses

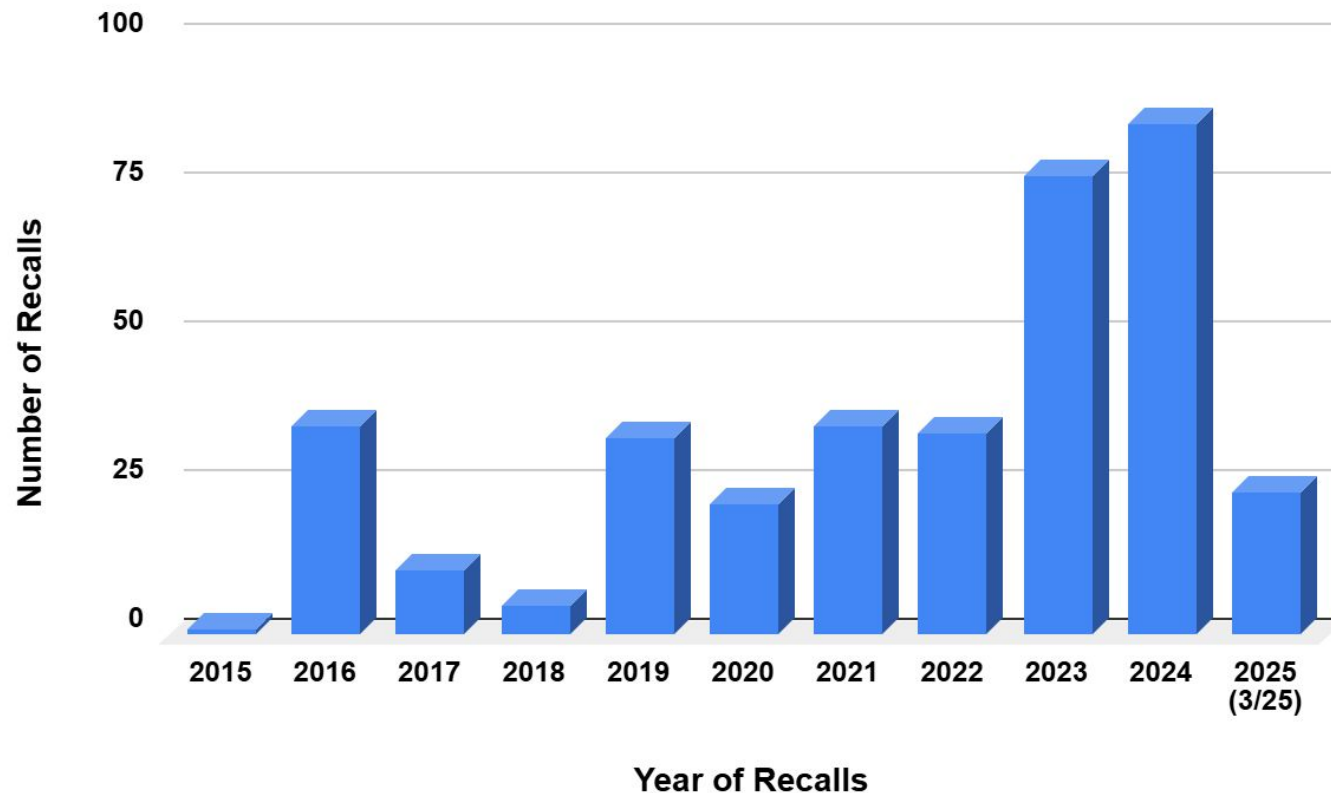
363 Product Recalls (to 3/2025)

- **CO** had the highest number of recalls, followed by **CA, WA, & MI.**

>80% of the 2024 recalls were in 5 states - **CO, CA, WA, MI, OR**



Recall Number by Year (03/14/25)



Recall Quality

The **Good** - Colorado - Sample type(s) & specific contaminants

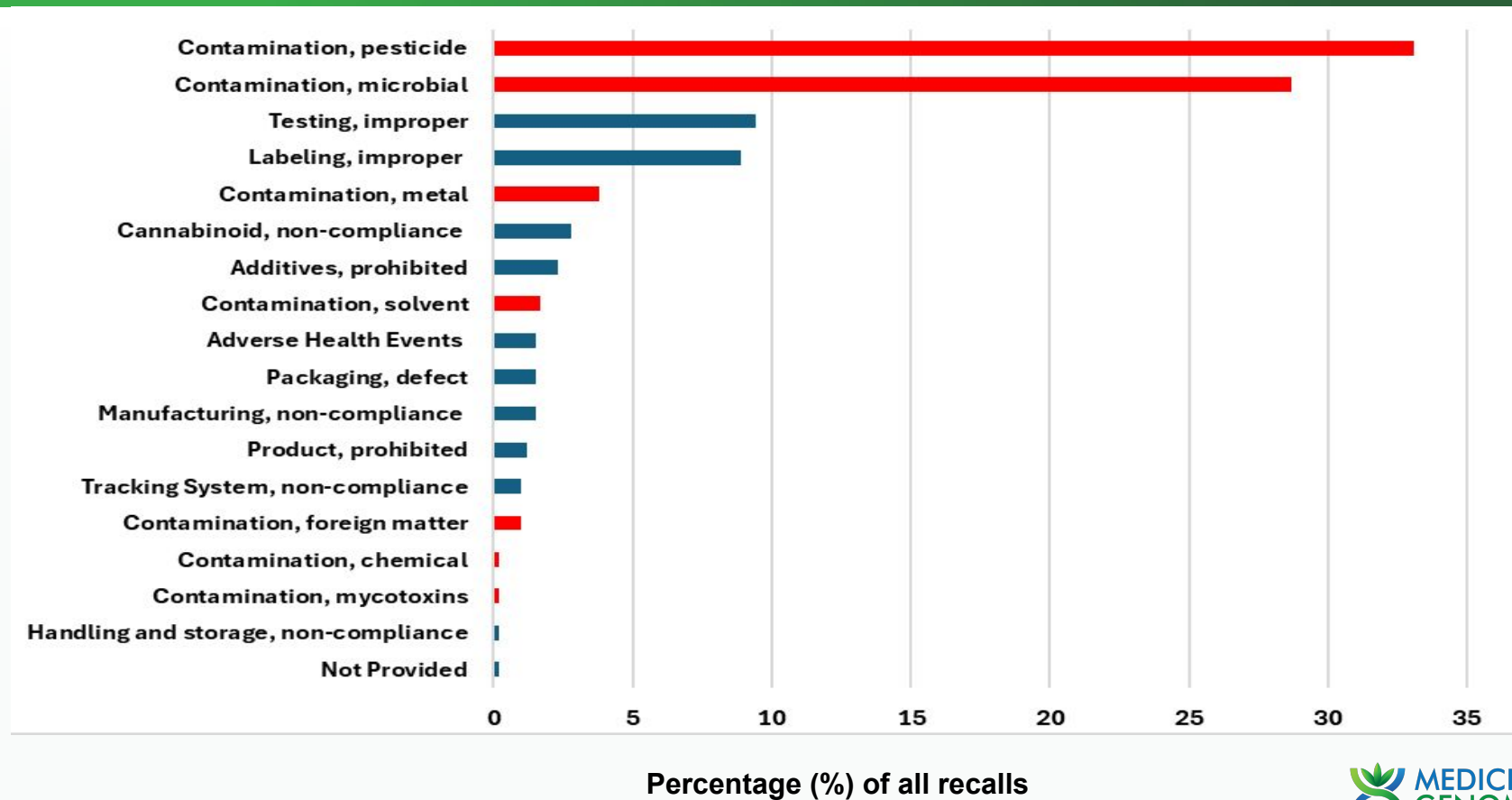
- Flower, trim, concentrate, infused-products
Pesticide contamination - **Myclobutanil** (fungicide) -
(steroid demethylation inhibitor; ignition produces cyanide)
- Flower, shake, & trim
Microbial contamination - pathogenic ***Aspergillus*** specie
(aspergillosis)
- Flower, shake, & trim
Metal contamination - **Mercury**
(central nervous system symptoms)

Recall Quality

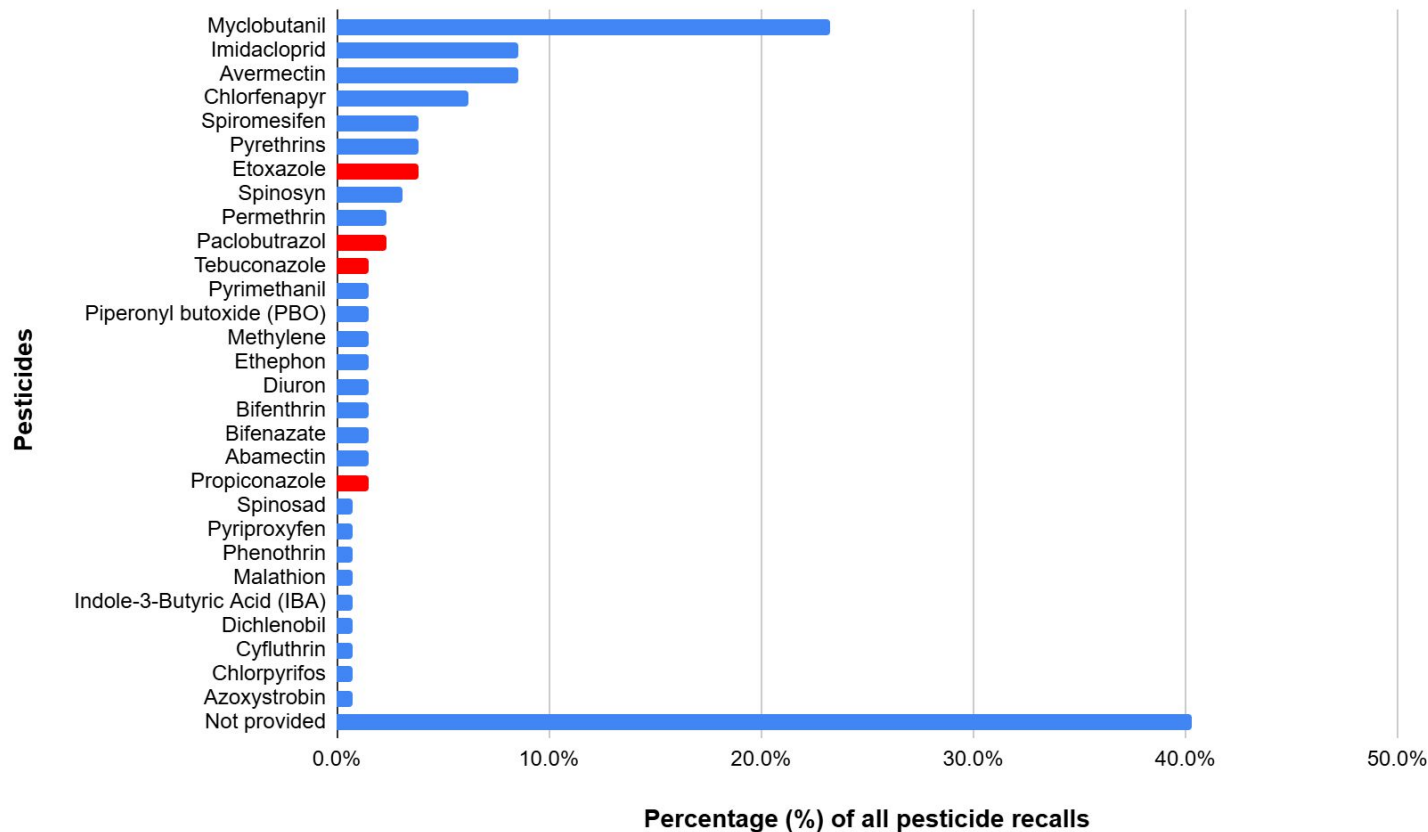
The **Bad & Ugly** - Specific contaminant name was not provided

- WA - **Pesticide** names were not provided
- MI - **Contaminants** that exceeded action levels were not identified

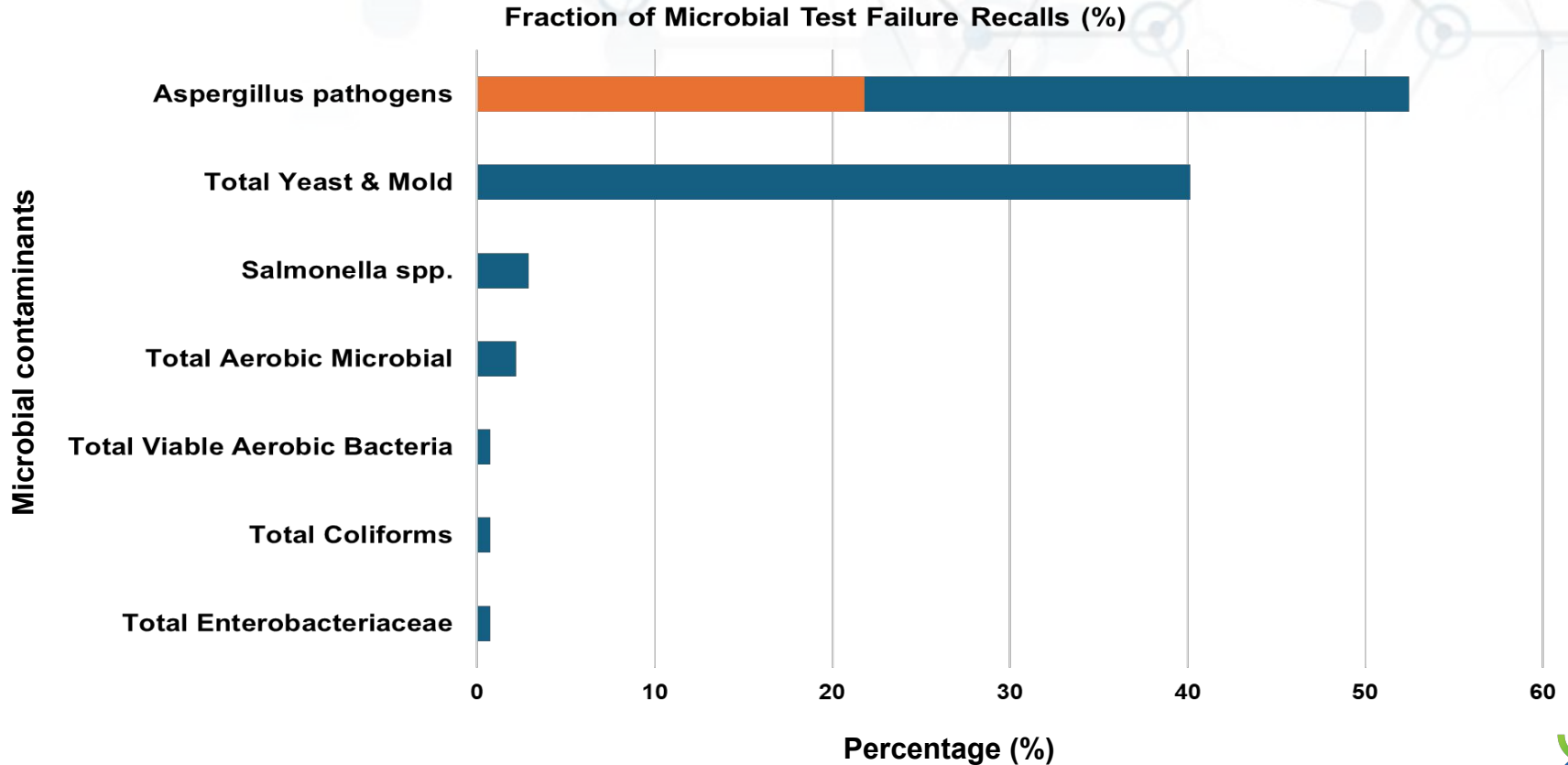
17 Reasons for Product Recalls - Top 2: ~62%



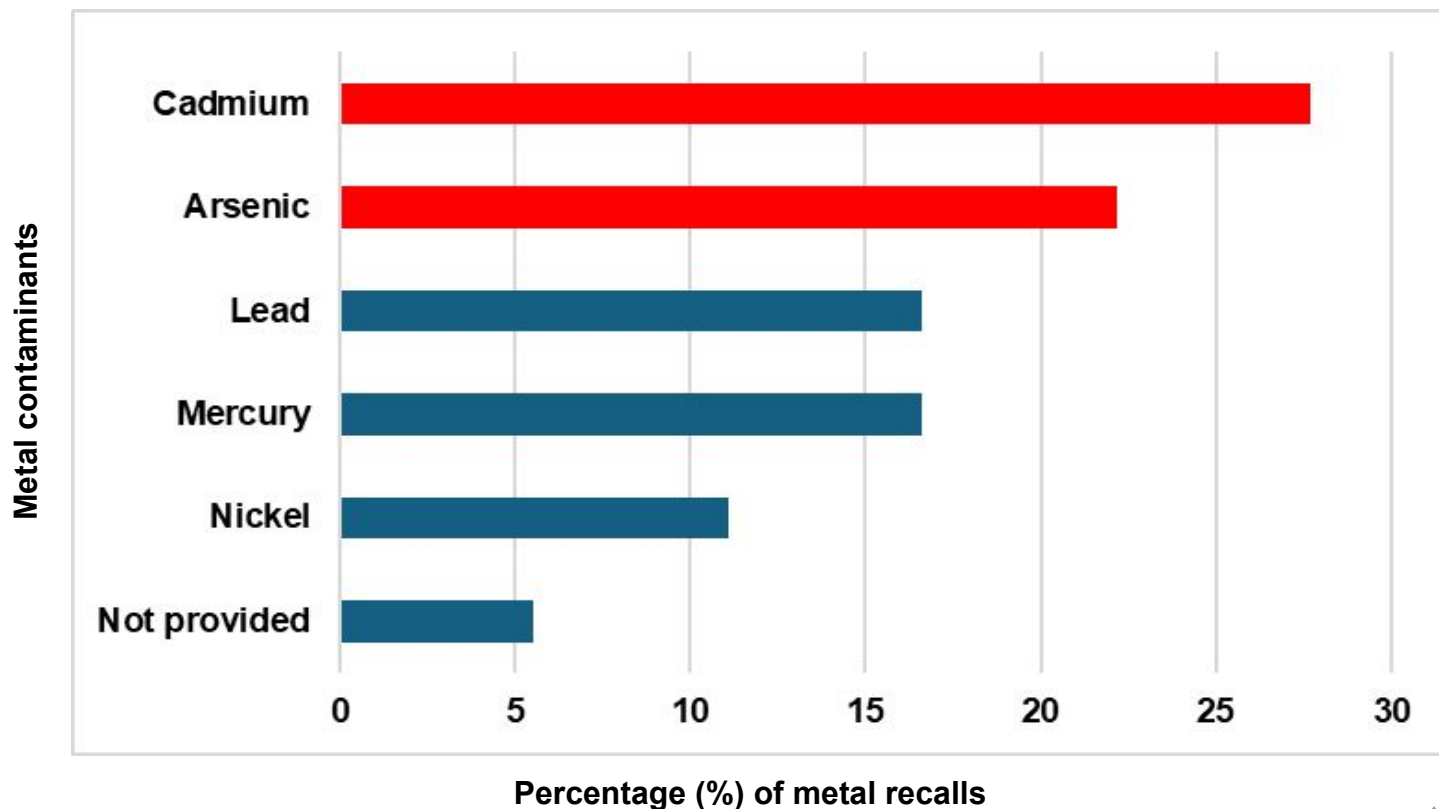
Pesticide Contamination Recalls



Microbial Contamination Recalls - 112



Metal Contamination Recalls - 15 (4.1% of total recalls)



Solvent and Mycotoxin Contamination Recalls - 8 (2.2% of total recalls)

Residual solvents	Methylene Chloride (3) Medium Chain triglyceride oil (2) Ethanol (1) Not provided (1)
Mycotoxins	Not provided (1)

Future Directions

- **FOIA requests to get recall information from remaining states**
- **Update dataset and repeat comparative analyses**
- **Advocate for standard information for all recalls**
- **AND for recall transparency in all states**

Summary

Contaminants may pose a health risk to consumers

- **Pesticide** residues on cannabis products - **39%** of total recalls
- **Microbial** test failures - **29%** of total recalls

Acknowledgements

¹Dataset Source

²Dataset expansion

³Analyses

⁴Results visualization

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Questions?

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