

# 2015 APHL™ ANNUAL MEETING

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## Public Health Laboratorians and Cannabis: Challenges Encountered in Uncharted Waters

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# Role of CDPHE

- Medical Marijuana Registry
- Medical Marijuana Research
- Retail Marijuana Education
- Marijuana Surveillance
- Laboratory Certification (retail and **medical**)
  - **Testing requirements for medical MJ**
  - **MJ laboratory testing reference library**
    - Proficiency testing, methods, potency variances...



**Recreational Marijuana Steering Committee (internal)\***  
*\*Co-chaired by CDPHE's Deputy CMO and Chief of Toxicology, Environmental/Occupational Epidemiology; With representatives from all divisions on this chart*

Population Health and Recreational Marijuana Advisory Committee (set up in Senate Bill 283)

*Internal committee coordinates all of CDPHE's diverse responsibilities related to recreational marijuana*

Collecting and analyzing data on prevalence of marijuana use

Clean Indoor Air Act issues; if designated, may do prevention education or campaigns

Surveillance for health effects & outbreaks; compile medical lit & safety info

Consultative role on developing lab regs; lab certification

Consultative role on issues related to the safety of edibles

Consultative role on issues related to marijuana disposal

Center for Health and Environmental Information and Statistics (CHEIS)

Preventive Services Division (PSD)

Disease Control and Environmental Epidemiology Division (DCEED)

Laboratory Services Division (LSD)

Division of Environmental Health & Sustainability (DEHS)

Hazardous Waste and Waste Management Division (HWWMD)



# Retail Marijuana Testing Facility Inspection Program



retail

**Legislative Intent:** Promoting public health and safety and ensuring compliance with constitutional and statutory guidelines.  
**HB 13-1317**



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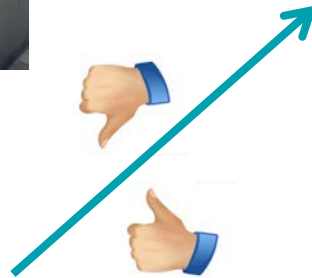
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# Certification of Retail Marijuana Testing Facilities (RMTF):



RMTF

Department of Revenue



Colorado Department of Public Health and Environment



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# Retail marijuana testing facility inspection program:

- Coordinates inspection of retail marijuana testing facilities;
- Ensures that testing facilities meet the rules promulgated by the Department of Revenue (DOR) and are competent to carry out specific scientific tests;
- Provides recommendations to DOR about suitability of the testing facilities for certification; and
- Provides scientific consultation and recommendations to the DOR in regards to laboratory testing as it pertains to public health and safety.



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# Contaminant Testing Recommendations:

## Microbials (Bacteria, Molds, Mildew, Fungus, Filth)

Contaminant	Acceptable Limit
Escherichia coli	Negative-None detected
Salmonella species	Negative-None detected
Bile tolerant gram negative bacteria	Max Limit: 10,000 CFU
Aspergillus sp.	Negative-None detected
Mucor sp.	Negative-None detected
Penicillium sp.	Negative-None detected
Thermophilic actinomycetes sp.	Negative-None detected
Aflatoxin	Max limit: 20 ppb
Filth Analysis	



# Contaminant Testing Recommendations:

- Is the contaminant a public health concern for the general population? *E. coli* and molds ubiquitous
- Are the testing requirements reasonable? *Edibles carry different risks.*
- Can labs provide isolates of pathogens to CDPHE for outbreak investigation purposes?



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# Contaminant Testing Recommendations:

## Microbials (Bacteria, Fungus)

Contaminant	Acceptable Limit	Product to be tested
Shiga toxin producing Escherichia coli (STEC)	<1 CFU/g	Flower; retail marijuana products; water and food-based concentrates
Salmonella species	<1 CFU/g	
Aspergillus fumigatus, Aspergillus flavus, Aspergillus niger	<1 CFU/g	



# Challenges:

- Legislatively driven timelines
- Lack of national recommendations/guidance
- Absence of federal agencies (e.g., DEA license)
- Lack of proficiency testing program
- Lack of a reference laboratory
- Lack of regulated laboratory experience in new businesses
- Alignment of retail and medical MJ testing requirements
- Learning as we go



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# Successes:

Testing Category	Potency	Microbials (Bacteria, Fungus)	Residual Solvents
Number of Labs Currently Certified	10	3	5

- Investigated arsenic poisoning potentially linked to MJ
- Developed revised laboratory inspection checklists and guidance
- Developed collaborative relationships with DOR, certified MJ labs



# Up Next:

- Revise laboratory certification rules
- Revisit testing requirements (align medical MJ)
- Develop reference library (methods and sampling)
- Develop PT program



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