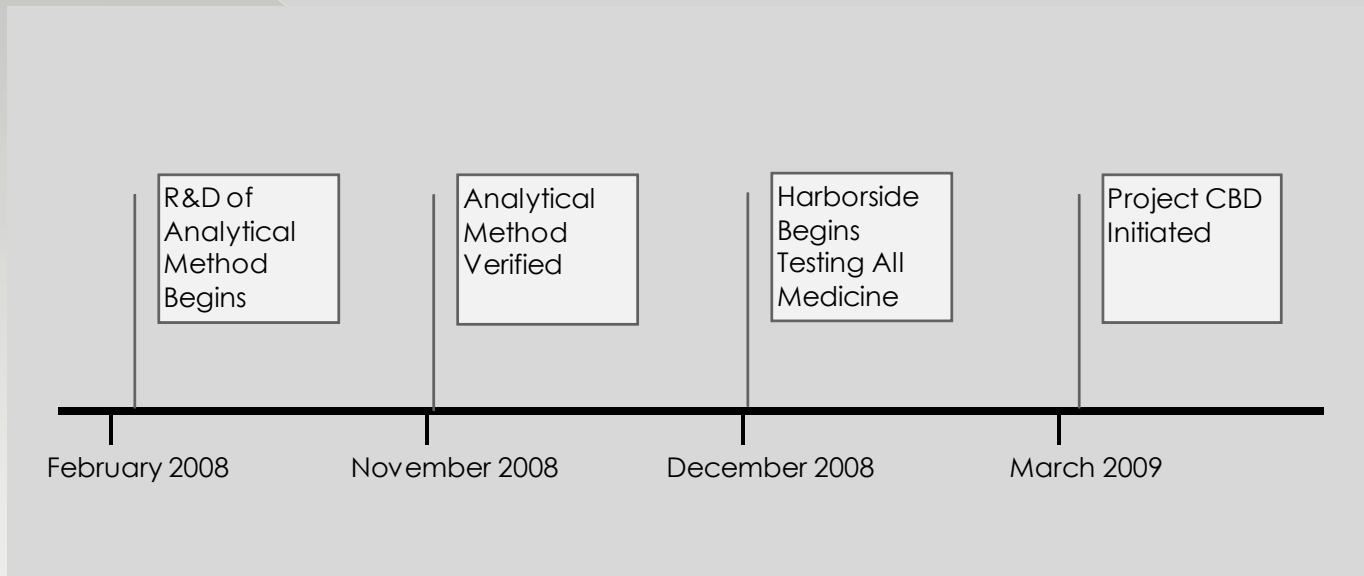


First Look: Analytical Window Into California's Medical Cannabis Supply

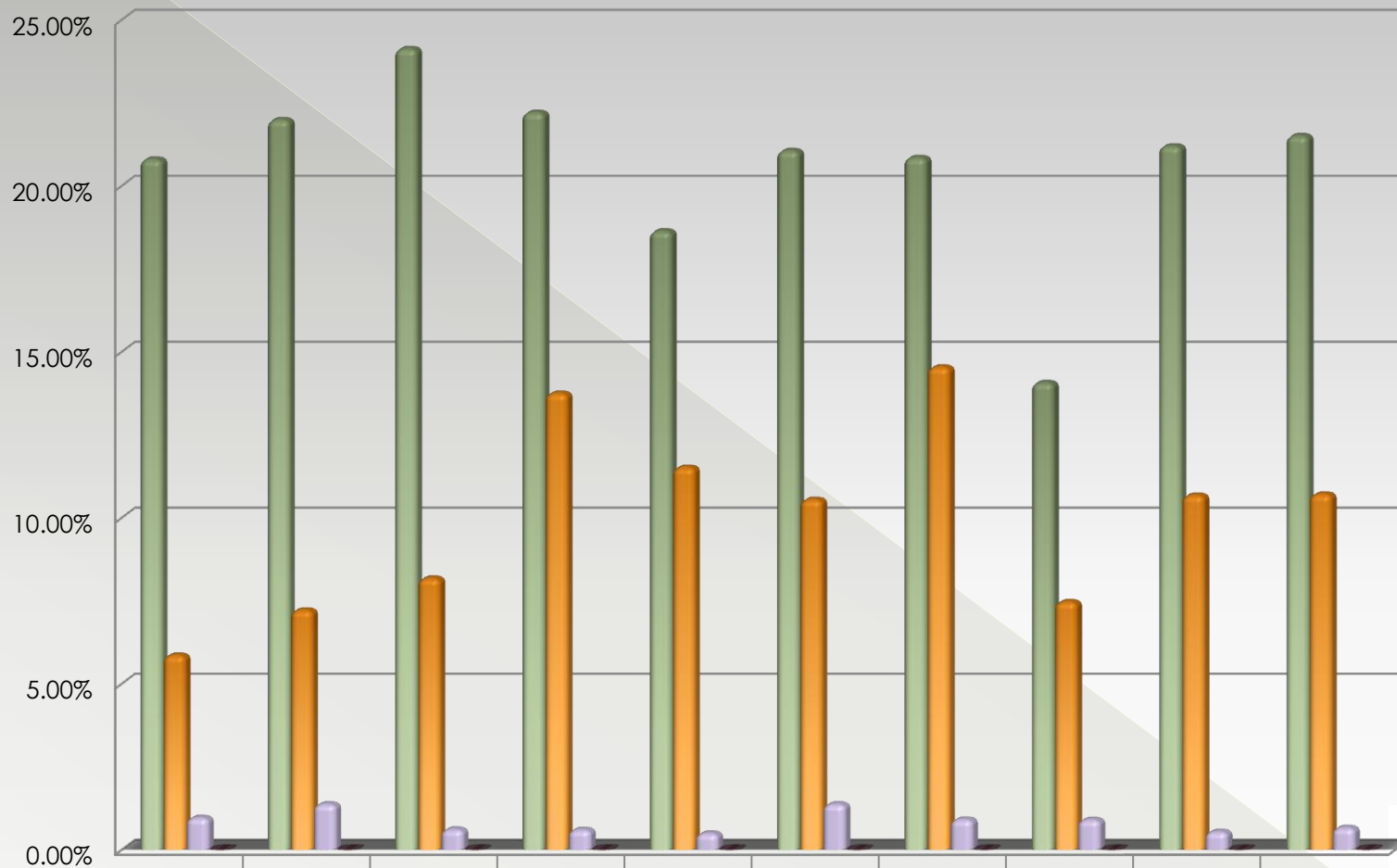
Steve DeAngelo
Executive Director



Project Timeline



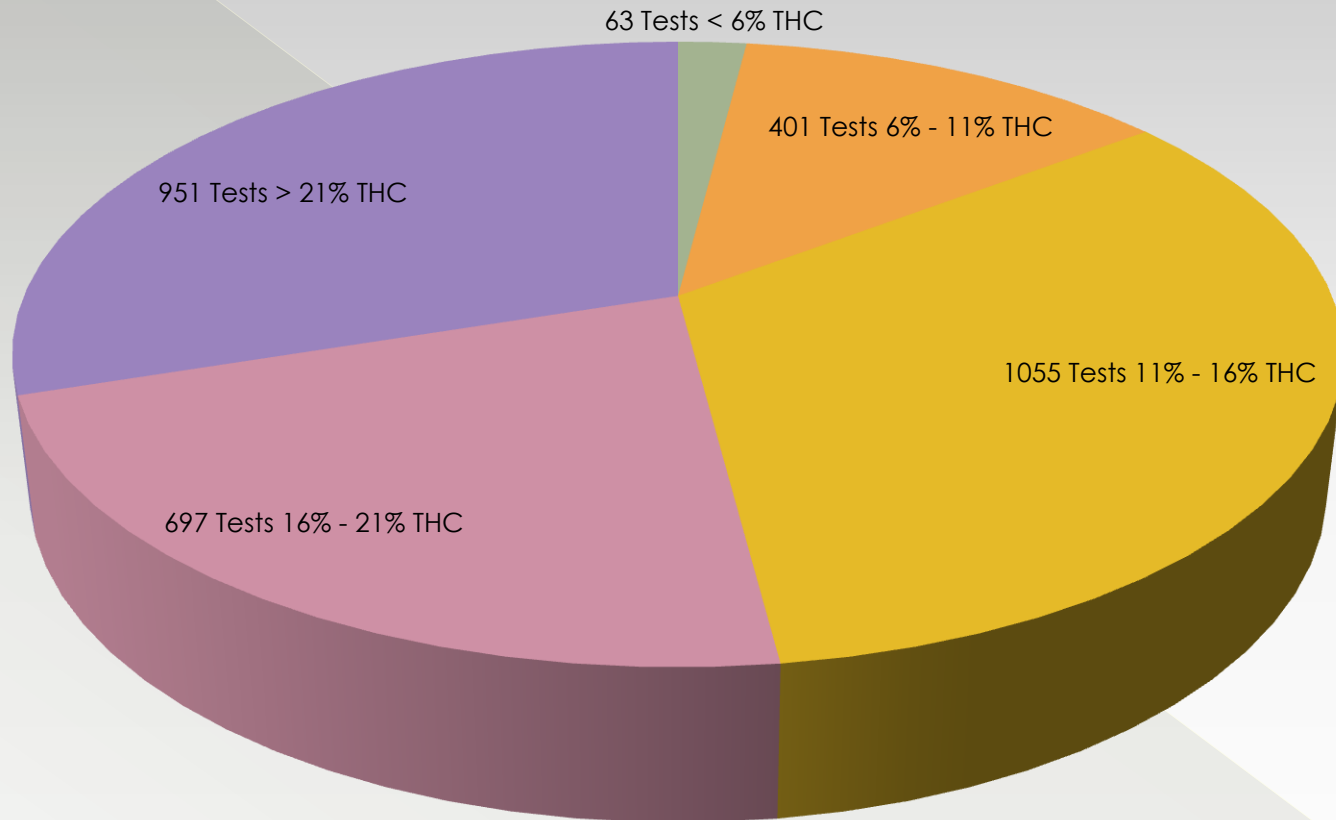
Harborside's Most Popular Strains



	Granddaddy Purple - 120 Tested 20.79%	Blue Dream - 93 Tested 21.98%	OG Kush - 64 Tested 24.12%	Mango OG - 31 Tested 22.20%	Cerebus Sativa - 23 Tested 18.63%	Purple Kush - 37 Tested 21.05%	TS Exotics (Love Potion #2) - 7 Tested 20.84%	Purple Hash Plant - 27 Tested 14.06%	Headband - 33 Tested 21.19%	Grape Ape - 34 Tested 21.50%
Highest THC	20.79%	21.98%	24.12%	22.20%	18.63%	21.05%	20.84%	14.06%	21.19%	21.50%
Lowest THC	5.85%	7.21%	8.17%	13.74%	11.51%	10.54%	14.53%	7.46%	10.67%	10.70%
Highest CBD	0.96%	1.37%	0.61%	0.60%	0.49%	1.37%	0.91%	0.90%	0.54%	0.66%
Lowest CBD	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



THC Testing Results



Total THC Tests = 3,167

Guidance on Microbiology & Mycotoxins

American Herbal Products Association (AHPA) Maximum Mold Acceptance Guidelines:

Dried herbs:

- Total yeast and molds (Penicillium, Cladosporium, and Aspergillus) = 10^5 CFUs/g
- Other = 10^7 CFUs/g

Powdered extracts:

- Total yeast and molds (Penicillium, Cladosporium, and Aspergillus) = 10^3 CFUs/g
- Other = 10^4 CFUs/g

Harborside's Maximum Mold Acceptance Guidelines:

Dried herbs:

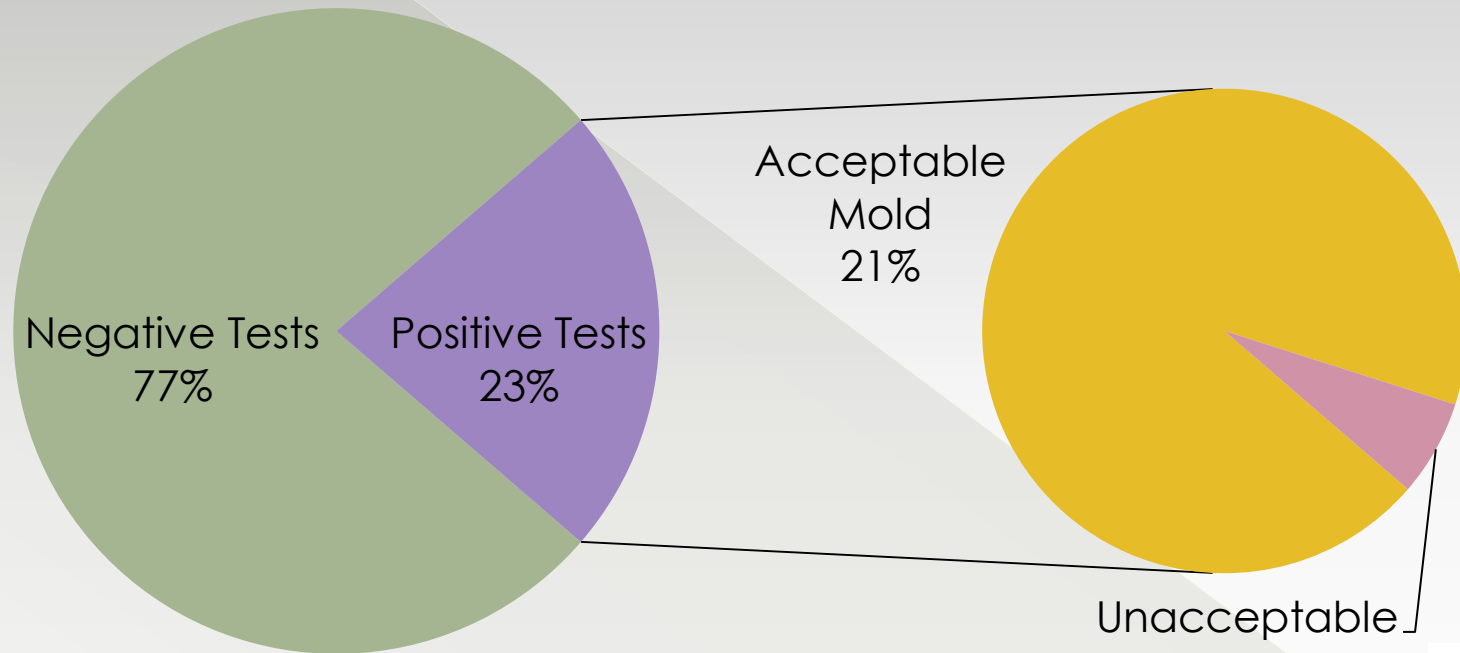
- Total yeast, Penicillium, and Cladosporium = 10^5 CFUs/g
- Total Aspergillus = 5,000 CFUs/g
- Other = 10^4 CFUs/g

Powdered extracts:

- Total yeast, Penicillium, and Cladosporium = 10^3 CFUs/g
- Total Aspergillus = 5,000 CFUs/g
- Other = 10^3 CFUs/g



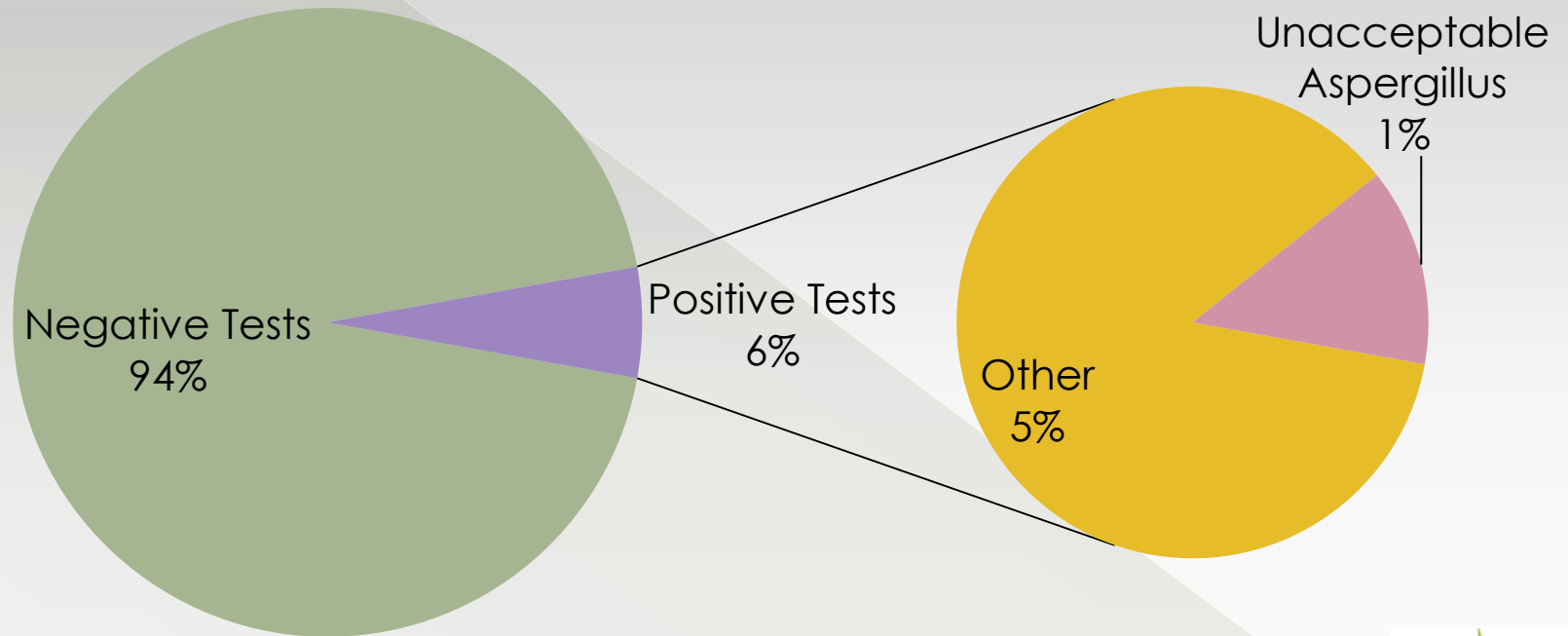
Pathogenic Mold Testing Results



Total Mold Tests = 2,077
Negative Tests = 1,594
Positive Tests = 467
Unacceptable Mold (Returned To Vendors) = 30



Aspergillus Mold Testing Results



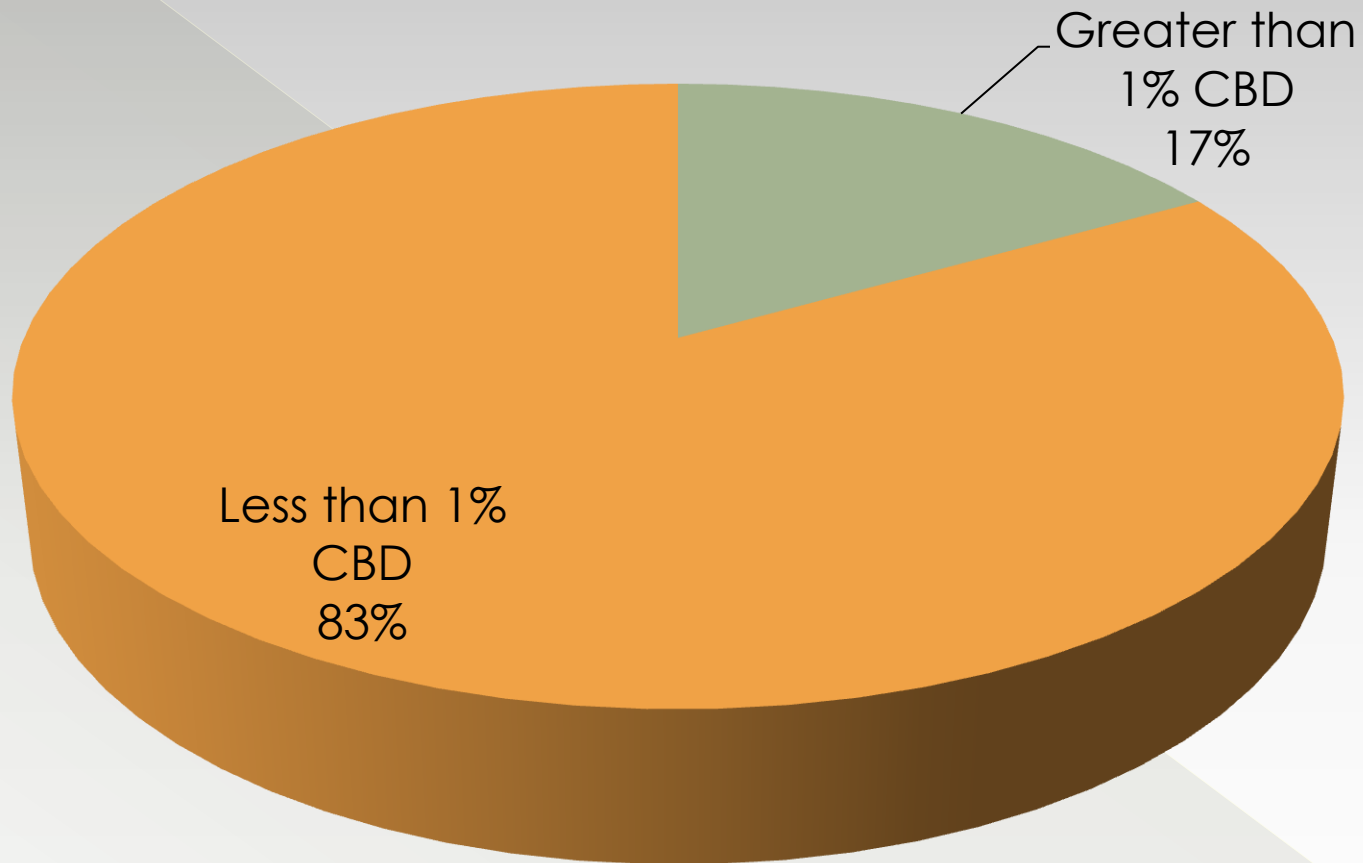
Total Mold Tests = 2,077
Negative For Aspergillus = 1,959
Positive For Aspergillus = 118
Unacceptable Mold (Returned To Vendors) = 16

CBD / Cancer Studies

- Abrams, Donald I. and Guzman, Manuel. "Cannabinoids and Cancer: Evidence from cell culture systems and animal models indicates that THC and other cannabinoids may inhibit the growth of some tumors by the modulation of signaling pathways." O'Shaugnessy's. Summer, 2009, p. 7-13
- Blazquez C, Gonzalez-Feria L, Alvarez L, Haro A, Llanos Casanova M, Guzman M. "Cannabinoids inhibit the vascular endothelial growth factor pathway in gliomas." Cancer Research. 2004, p. 64:5617-5623
- Guzman M. "Cannabinoids: Potential anticancer agents." Nature Reviews/Cancer. 2003, p. 3:745-755
- Ligresti A, Moriello AS, Starowicz K, Matias I, Pisanti S, De Petrocellis L et al. "Anti-tumor activity of plant cannabinoids with emphasis on the effect of cannabidiol on human breast carcinoma." J Pharmacol Exp Ther. 2006, p. 318:1375-1387
- McAllister SD, Christian RT, Horowitz MP, Garcia A, Desprez P-Y. "Cannabidiol as a novel inhibitor of Id-1 gene expression in aggressive breast cancer cells." Mol Cancer Ther. 2007, p. 6:2921-2927
- Patsos HA, Hicks DJ, Greenhough A, Williams AC, Paraskeva C. "Cannabinoids and cancer: Potential for colorectal cancer therapy." Biochemical Society Transactions. 2005, p. 33:712-714
- Sarfraz S, Afaq F, Adhami VM, Mukhtar H. "Cannabinoid receptor as a novel target for the treatment of prostate cancer." Cancer Res. 2005, p. 65:1635-1641

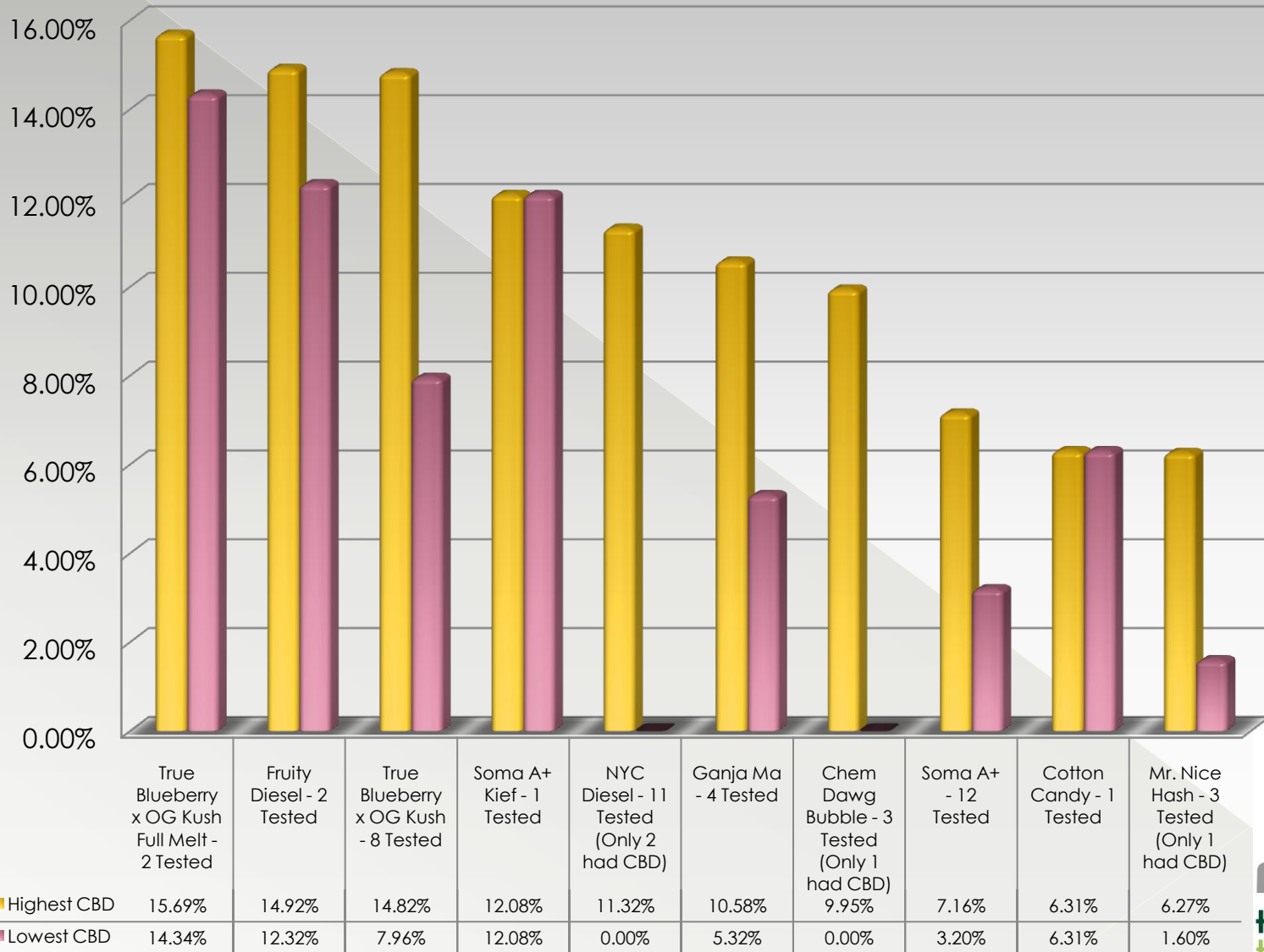


CBD Testing Results 1

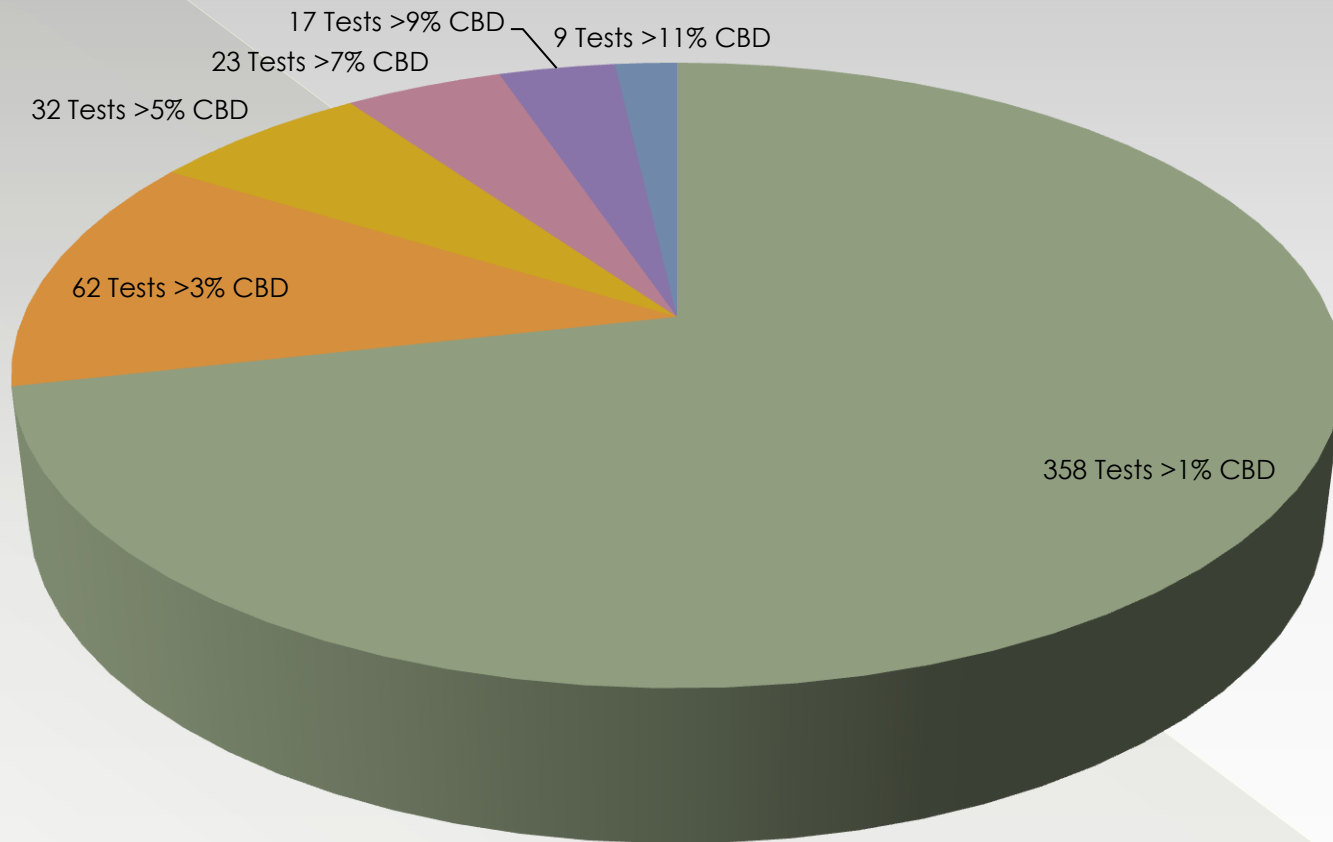


Tests Over 1% CBD = 501
Total CBD Tests = 2,986

Harborside's Top 10 CBD Medicines



CBD Testing Results 2



Tests Over 1% CBD = 501
Total CBD Tests = 2,986

Project CBD

1. **Identify** CBD rich strains via lab testing
2. **Obtain** seeds and clones of rich CBD strains
3. **Encourage** trusted growers to propagate CBD rich strains
4. **Increase** patient access to CBD rich strains
5. **Study** medical efficacy of CBD rich strains



Who can benefit?

1. Patients with serious illnesses which respond to CBD
2. Cannabis naïve patients who seek low psychoactivity
3. Long time patients who have begun to experience dysphoria with THC rich strains



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