# Americans for Safe Access

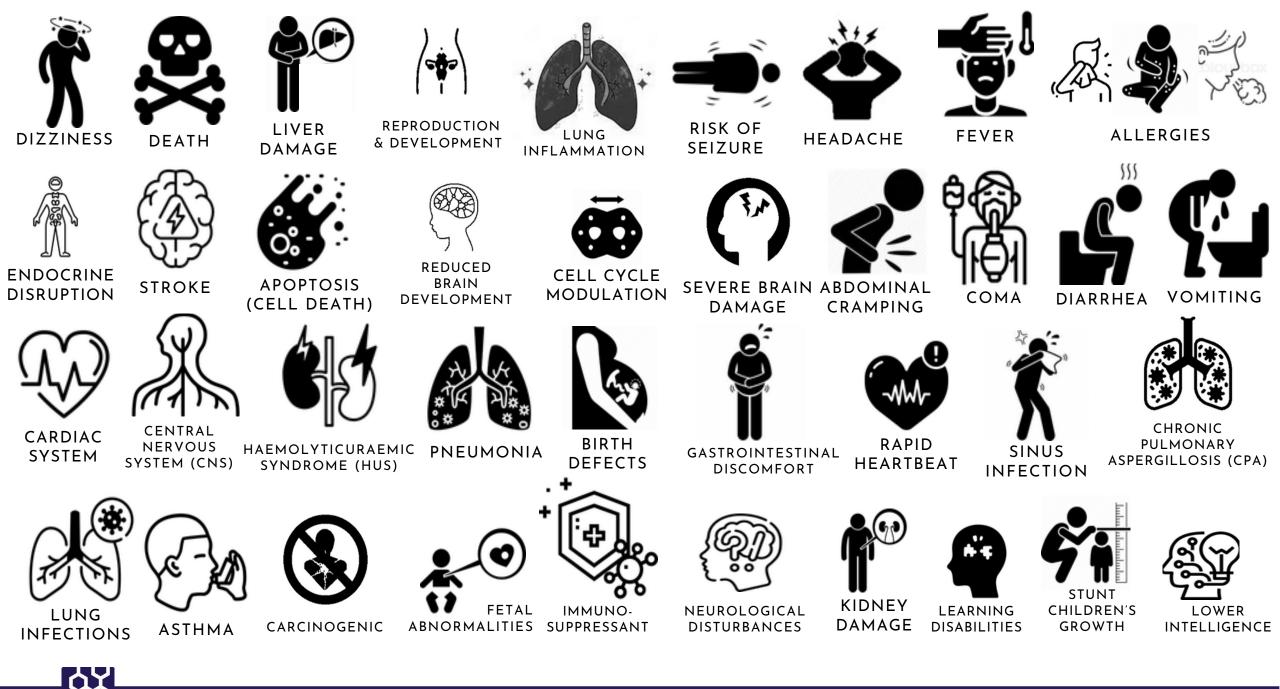
# Advocating for safe & legal access to cannabis for therapeutic use & research since 2002

# WHAT'S IN YOUR CANNABIS?



Cannabis, in its natural form, is inherently safe for most patients but it is especially susceptible to contaminants during cultivation, manufacturing, handling & even storing.

Whether you are purchasing cannabis from regulated, grey, or illicit markets or cultivating your own cannabis, you should be aware of the contaminates commonly found in cannabis & the symptoms that accompany their presence.



ASA

## **OVER 6 MILLION REGISTERED PATIENTS**

Agitation of Alzheimer's\*Admittance into hospice care\*Alzheimer's disease (including agitation of)\*Amyotrophic lateral sclerosis (ALS or Lou Gehrig's disease) \*Anorexia \*Anxiety disorders \*Any other condition that is severe and resistant to conventional medicine\*Arnold-Chiari malformation\*Arthritis\*Asthma \*Attention deficit disorder / attention-deficit/hyperactivity disorder (ADD/ADHD) \*Autism\*Bipolar disorder\*Bulimia\*Cachexia or wasting syndrome\*Chronic Pain\*Cancer\*Causalgia (complex regional pain syndrome (CRPS) Type 2)\*Cerebral palsy\*Chemotherapy treatment\*Chronic autoimmune inflammatory disorders (including rheumatoid arthritis)\*Chronic inflammatory demyelinating polyneuropathy (CIDP)\*Chronic vocal or motor tic disorder\*Chronic pancreatitis\*Chronic renal failure requiring hemodialysis\*Chronic traumatic encephalopathy (CTE)\*Crohn's disease\*Complex regional pain syndrome (CRPS) / reflex sympathetic dystrophy (RSD)\*Corticobasal degeneration\*Cystic fibrosis\*Damage to the nervous tissue of the spinal cord with objective neurological indication of intractable spasticity\*Decompensated cirrhosis\*Degenerative or pervasive neurological condition \*Dementia \*Depression\*Diabetes\*Dyskinetic and spastic movement disorders\*Dystonia\*Ehlers-Danlos syndrome\*Elevated intraocular pressure\*Endometriosis \*Epidermolysis bullosa \*Fibromyalgia \*Fibrous dysplasia \*Glaucoma \*Hepatitis C \*HIV/AIDS \*Huntington's disease\*Hydrocephalus\*Hydromyelia\*Immune-mediated inflammatory diseases\*Inclusion body myositis\*Inflammatory bowel disease (IBD)\*Insomnia\*Interstitial cystitis / bladder pain syndrome\*Intractable appetite loss\*Intractable cramping\*Intractable headache syndromes, including intractable migraines\*Intractable nausea or vomiting\* Intractable skeletal muscular spasticity\*Intractable Neuropathic Pain\* Irritable bowel syndrome (IBS)\*Irreversible spinal cord injury with objective neurological indication of intractable spasticity\*Lewy body disease\*Lupus\*Medical conditions of the same kind or class, or comparable to, enumerated conditions under state law\*Migraine\*Mitochondrial disease\* Multiple sclerosis (MS) or persistent muscle spasms, including spasms associated with MS\*Muscular dystrophy\*MALS Syndrome\*Myasthenia gravis\*Myoclonus\*Nail-patella syndrome (NPS)\*Neurofibromatosis\*Neuro-Bechet's autoimmune disease\*Neuropathies\* Obstructive sleep apnea\*One or more injuries that significantly interferes with daily activities as documented by the patient's provider\*Opioid use disorder\*Osteoarthritis\* Osteogenesis\* imperfecta\*Conditions as determined in writing by a qualifying patient's physician\*Pain: chronic and severe pain\* Pain: chronic neuropathic pain associated with degenerative spinal disorders\* Polycystic kidney disease (PKD)\* Pain: chronic pain\* Pain: chronic pain related to musculoskeletal disorders\* Pain: intractable pain\* Pain: neuropathic pain\* Pain: severe pain\* Pain: severe and intractable pain\* Parkinson's disease\* Pediatric Sensory Processing Disorder\* Peripheral neuropathy\* Polyneuropathy\* Postherpetic neuralgia\* Post-Iaminectomy syndrome with chronic radiculopathy\* Post-traumatic stress disorder (PTSD)\* Residual limb pain (RLP)\* Seizure disorders/epilepsy\* Severe and Persistent Muscle Spasms\* Severe nausea\* Superior canal dehiscence syndrome\* Severe psoriasis and psoriatic arthritis\* Severe muscle spasticity \* Sickle cell disease\* Sjogren's syndrome\* Spasmodic torticollis (cervical dystonia)\* Spastic quadriplegia\* Spasticity disorders\* Spinal cord injury (SCI) or spinal cord disease, including Arachnoiditis\* Spinal muscular atrophy\* Spinal cord disease or severe injury\* Spinal stenosis\* Spinocerebellar ataxia (SCA)\* Stroke\* Syringomyelia\* Tarlov cysts/perineural cysts\* Terminal cancer\* Terminal illness\* Terminal illness Requiring End-of-Life Care\* Terminal illness with less than 12 months of life\* Terminal illness with less than 6 months of life\* Tourette syndrome (TS)\* Traumatic brain injury (TBI) or post-concussion syndrome\* Ulcerative colitis\* Vulvodvnia and Vulvar Burnina\* Wilson's disease

# WHERE DO CANNABIS CONTAMINANTS COME FROM?



#### WHERE DO CANNABIS CONTAMINANTS COME FROM?

CULTIVATION & PROCESSING	MANUFACTURING	STORAGE
PESTICIDES MOLD, MILDEW, FUNGUS & YEASTS	ADDITIVES & ADULTERANTS FOREIGN MATTER RESIDUAL SOLVENTS	MOLD, MILDEW, FUNGUS & YEASTS HEAVY METALS
HEAVY METALS BACTERIA, VIRUSES & PARASITES		BACTERIA, VIRUSES & PARASITES
FOREIGN MATTER		



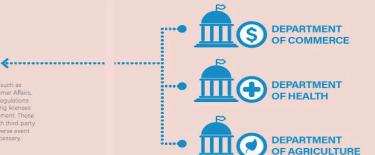
#### **STATE MEDICAL CANNABIS PROGRAM REGULATIONS** AND OVERSIGHT

#### REGULATIONS

MORE THAN 310 MILLION AMERICANS LIVE IN STATES WITH MEDICAL CANNABIS LAWS. THESE PROGRAMS ARE INFLUENCED BY LOCAL, STATE, AND FEDERAL REGULATIONS. AFTER A LAW IS ENACTED, STATE AGENCIES CREATE A SERIES OF REGULATIONS THAT GOVERN EVERYONE PARTICIPATING IN THE PROGRAM AND ALL PRODUCTS PRODUCED.

#### **MEDICAL CANNABIS REGULATORY AGENCY** State agencies or groups of several agencies (such as the Departments of Health, Agriculture, Consumer Affairs,

etc.) are tasked with creating and monitoring regulations agencies also conduct inspections or work with third-party reporting, and implement product recalls if necessary.

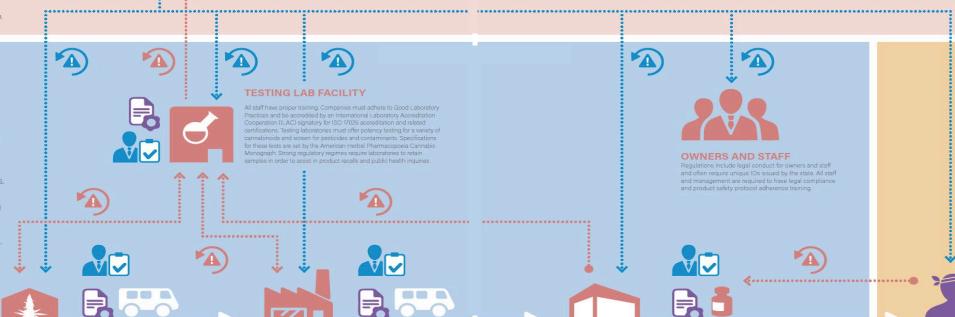




Medical cannabis businesses must pass inspections to accredited third-party agencies, law enforcement, OSHA,

#### SUPPLY CHAIN

REGULATIONS BEGIN AT THE APPLICATION STAGE, WHERE CRITERIA ARE SET FOR WHO CAN OWN, OPERATE, AND WORK IN MEDICAL CANNABIS BUSINESSES, AND END WITH PURCHASING CRITERIA AT THE RETAIL POINT, FROM SEED TO PROTOCOLS, STAFF TRAINING, AND ADVERSE EVENT REPORTING AND RECALL PROCEDURES, MEDICAL CANNABIS BUSINESSES ARE SUBJECT TO INSPECTIONS. REGULATORS NOW HAVE RESOURCES, SUCH AS THE AMERICAN HERBAL PHARMACOPOEIA CANNABIS MONOGRAPH AND THE AMERICAN HERBAL PRODUCTS ASSOCIATION RECOMMENDATIONS FOR REGULATORS, TO INFORM THE CREATION ALL COMPANIES MUST DEMONSTRATE ABILITY TO TRACK ADVERSE EVENTS AND



#### MANUFACTURING FACILITY



A



#### **DISPENSING/RETAIL FACILITY**

Staff are trained to provide guidance to patients in making to maintain certain hours and limit the scope of advertising to fit within community standards. Security cameras and



#### MEDICAL CANNABIS PRODUCTS



#### MEDICAL PROFESSIONALS



#### PATIENTS AND THEIR CAREGIVERS

Rules for patients also govern how much medicine a

#### QUALIFICATION

ONCE THE AUTHORIZING STATUTE HAS BEEN ADOPTED, REGULATORS SET THE REQUIREMENTS FOR PATIENT AND MEDICAL CANNABIS PROGRAMS, CREATE RELEVANT GUIDELINES AND FORMS, AND SET RULES

A COLA



#### **PRODUCT SAFETY**

Each batch of raw plant material and cannabisderived product must be quality assurance tested in order to ensure the integrity, purity, and proper labeling of medical cannabis products.

AmericansForSafeAccess.org



#### TRANSPORTATION

**CULTIVATION FACILITY** 

All staff have required legal compliance and product safety

Regulations extend to transportation of cannabis products throughout the supply chain. Regulations require drivers to be registered with the state and require paperwork at pickup and drop-off locations, including weighing the product. Regulations also include special instructions for dealing with waste.



When a product containing contaminants, molds, or mildew - or an improperly labeled product - enters the supply chain, regulatory agencies trigger a product recall to prevent patient consumption. This includes alerting the manufacturers, retail outlets, and the public. Recalled products are destroyed.

### WHERE DO CANNABIS CONTAMINANTS COME FROM?

Like all agricultural & manufactured commodities, cannabis is susceptible to contamination.

Due to a combination of properties in the plant such as its high-water content, presence of resin & its bioaccumulation abilities, producing cannabis & cannabis products for human consumption requires special care.

Because of cannabis' high value, it is not uncommon for unscrupulous producers to improperly use pesticides or to use additives or adulterants to add weight, fragrance or even dilute their products.





# CULTIVATION & PROCESSING



Cannabis and hemp are known as hyper-accumulators because of their ability to absorb chemicals and heavy metals from the soil and accumulate them in the flowers, stems and leaves of the plant.

The cannabis plant grows best in warm, humid environments, the same conditions that many microbiological species and pests such as spider mites, aphids, and thrips thrive in. Agricultural products are also exposed to additional pests such as insects, rodents, and birds.

Attempting to treat pests may introduce another problem for consumers if farmers attempting to prevent degradation of a highly valuable crop improperly use pesticides.



# MANUFACTURING

All contaminates become even more concentrated during the extraction process, when using various solvents to extract cannabinoids and terpenes.

While these processes can be done safely, if not done correctly, residuals of these solvents can remain in cannabis products.

Additives and adulterants may be added by unscrupulous producers to add weight, dilute, or add fragrance to their products. The vaping crisis in 2019 and 2020 exposed additives and adulterants including vitamin E acetate, squalene, coconut oil and food flavorings. Limonene, a naturally occurring terpene in Cannabis can be removed during the extraction process and manufactures may add food grade Limonene, which has not been evaluated for inhalation toxicity and have been linked to lung injuries, to make concentrates have the characteristic Cannabis smell.





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## **STORAGE**



Due to the high moisture content in cannabis, improper storage can also promote mold, mildew and fungal growth. (Light, heat, and oxygen can also affect and degrade cannabinoids and terpenes).

Metals from old oil vaporizers (vapes) devices may leach into the oil as they age.





# WHAT DOES **CONTAMINATED CANNABIS** MEAN FOR YOUR HEALTH?



#### CONTAMINANTS FROM CULTIVATION

#### PESTICIDES

Chemicals applied to crops to eradicate pests, including bugs, weeds, fungi, & rodents



#### HEALTH IMPACTS





ENDOCRINE DISRUPTION

REPRODUCTION & DEVELOPMENT



NEUROLOGICAL DISTURBANCES

Symptoms more severe in children, elderly, & individuals with compromised immune systems.



### **HEAVY METALS**

Metals like lead, cadmium, arsenic, & mercury are highly toxic & may be present in soil or water.



### HEALTH IMPACTS



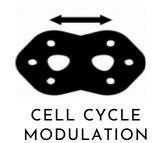


LOWER INTELLIGENCE



APOPTOSIS (CELL DEATH)





Symptoms more severe in children, elderly, & individuals with compromised immune systems.



#### CONTAMINANTS FROM MANUFACTURING

### **RESIDUAL SOLVENTS**

Solvents like ethanol, propane & butane may be leftover from the cannabis extraction process.



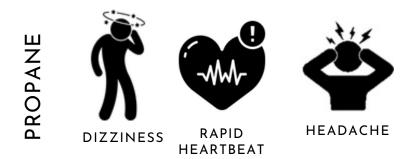
SEVERE

BRAIN DAMAGE

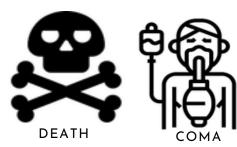
FETAL

**ABNORMALITIES** 

## HEALTH IMPACTS











CARDIAC SYSTEM

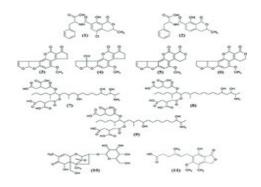


Symptoms more severe in children, elderly, & individuals with compromised immune systems.



## **AFLATOXINS**

Toxic substances produced by fungi.



#### HEALTH IMPACTS













STUNT CHILDREN'S GROWTH

Symptoms more severe in children, elderly, & individuals with compromised immune systems.



### MICROBIOLOBIALS:

### ESCHERICHIA COLI (E. COLI)



### HEALTH IMPACTS







A DIARRHEA

HAEMOLYTICURAEM

IC SYNDROME (HUS)

FEVER

ABDOMINAL

CRAMPING





RISK OF SEIZURE

STROKE

Symptoms more severe in children, elderly, & individuals with compromised immune systems.



#### MICROBIOLOBIALS:

#### SALMONELLA SPECIES



### **HEALTH IMPACTS**





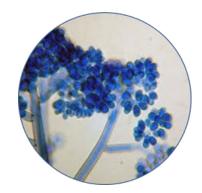


Symptoms more severe in children, elderly, & individuals with compromised immune systems.

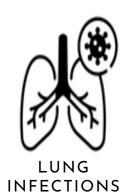


#### MICROBIOLOBIALS:

### BOTRYTIS CINEREA (GRAY MOLD)



### HEALTH IMPACTS









ALLERGIES

Symptoms more severe in children, elderly, & individuals with compromised immune systems.



### MICROBIOLOBIALS:

# OTHER YEASTS & MOLDS



### **HEALTH IMPACTS**



PNEUMONIA





ASTHMA



ALLERGIES

Symptoms more severe in children, elderly, & individuals with compromised immune systems.



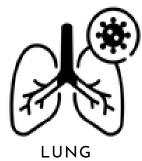
### MICROBIOLOBIALS:

### ASPERGILLUS SPECIES

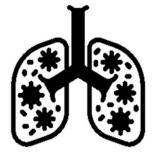


#### HEALTH IMPACTS





INFECTIONS



CHRONIC PULMONARY ASPERGILLOSIS (CPA)

Symptoms more severe in children, elderly, & individuals with compromised immune systems.



# HOW CAN YOU PROTECT YOURSELF?

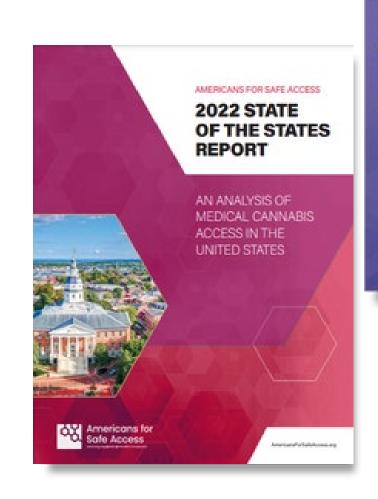


# **EDUCATE YOURSELF & OTHERS**

ASA has many publications designed to help patients & their caregivers navigate the current laws & regulations, guides to safely consuming, cultivating & purchasing medical cannabis.









DOWNLOAD THE FULL REPORT AT www.safeaccessnow.org/SOS





## REGULATING PATIENT HEALTH

AN ANALYSIS OF DISPARITIES IN STATE CANNABIS TESTING PROGRAMS

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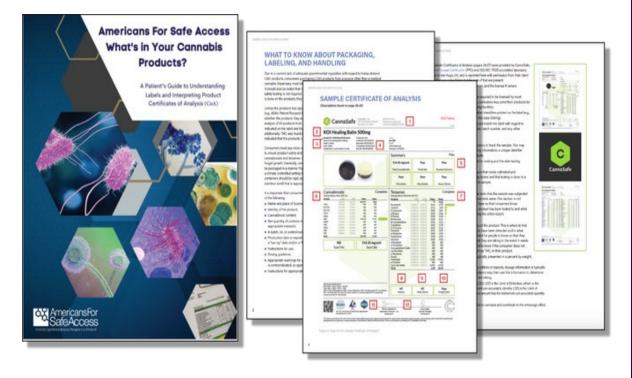
JULY 2023



DOWNLOAD THE FULL REPORT AT www.safeaccessnow.org/whatsinyourcannabis



Check the test results or certificate of analysis (COA) of your product to ensure it has passed testing. The COA should include the batch number on your product. To learn more about how to read a COA, check out ASA's Patient's Guide to Understanding Labels & Interpreting Product Certificates of Analysis.



www.safeaccessnow.org/guide-lables



Many of the symptoms caused by contaminated cannabis are similar to other illnesses. If you suspect that you are experiencing symptoms from contaminated cannabis, stop use at once. If the symptoms do not subside see a doctor right away.





Some states allow you to bring products directly to labs to test for contaminants & potency.







If you grow your own cannabis, be sure you know what is in your soil and water. Monitor the humidity of the environment and always check for mold, bugs, and other foreign objects.

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Avoid using old oil vaporizers (vapes). As they age, metals from the device may leach into the oil. Avoid vaporizers with added terpenes, especially if they are food-grade.







Keep products stored in a dark, cool place away from children & pets.



# DEMAND MORE, GET INVOLVED!

# YOU HAVE POWER!



# USE THE POWER OF THE DOLLAR

- Look for PFC certified products
- Purchase, praise & support products that are third-party certified & offer Certificates of Analysis (COA)
- Always ask retailers (physical & online) for the Certificates of Analysis (COA) of products
- Ask cannabis delivery services & retail locator apps to highlight third party certification & display COAs
- Utilize company social media channels & customer comment to let companies know you want more!



## TAKE ACTION!

# WHAT'S IN YOUR CANNABIS?

CANNABIS PATIENT & CONSUMER PRODUCT SAFETY AWARENESS CAMPAIGN

#### GOALS:

- Educate consumers about the importance of product safety
- Improve and standardize testing and labeling regulations throughout the country
- Protect patients and consumers

#### www.safeaccessnow.org/whatsinyourcannabis





# AUGUST RESET ONLINE EDUCATION S WHAT'S IN **YOUR CANNABIS?** WATCH FREE A CONSUMER'S GUIDE youtube.com/SafeAccess **TO CANNABIS PRODUCT SAFETY**

# @americansforsafeaccess

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**GET UPDATES & ALERTS!** 

MAKE A DONATION!







**@SafeAccess** 



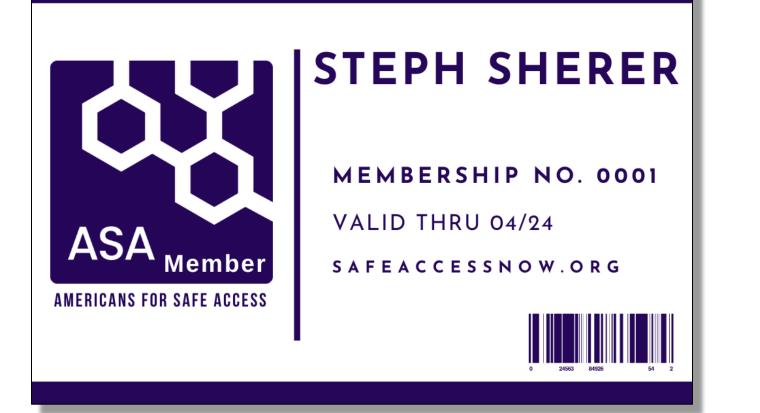
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# **BECOME AN ASA MEMBER TODAY!**





## SafeAccessNow.org/membership



# Americans for Safe Access

Advancing Legal Medical Cannabis Therapeutics



# UNTIL THERE IS SAFE ACCESS... WE ARE AMERICANS FOR SAFE ACCESS!