

# A Review of Current Occupational Safety and Health in the Washington Cannabis Industry

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**WA State Department of Labor and Industries**

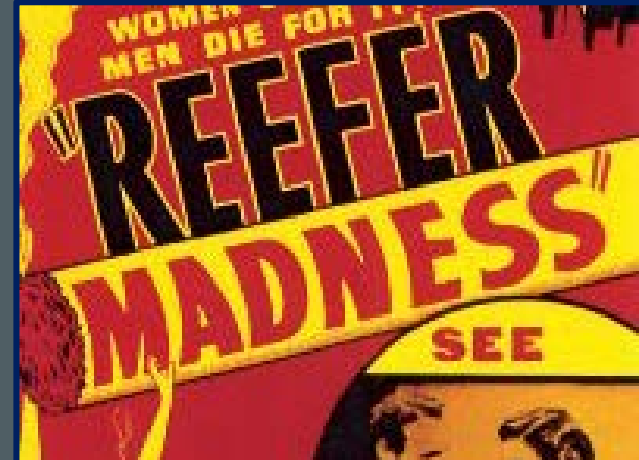
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Washington State Department of  
**Labor & Industries**



- Workplace safety and health is regulated by Labor & Industries' Division of Occupational Safety and Health (DOSH). We are an OSHA "State Plan" state. As such, we apply the Washington Administrative Codes (WACs).
- We inspect any employer site with one or more employee; including municipalities and agriculture.



# Our Cannabis Licensees

- Producers: 1,149
- Processors: 1,517
- Retailers: 1,854

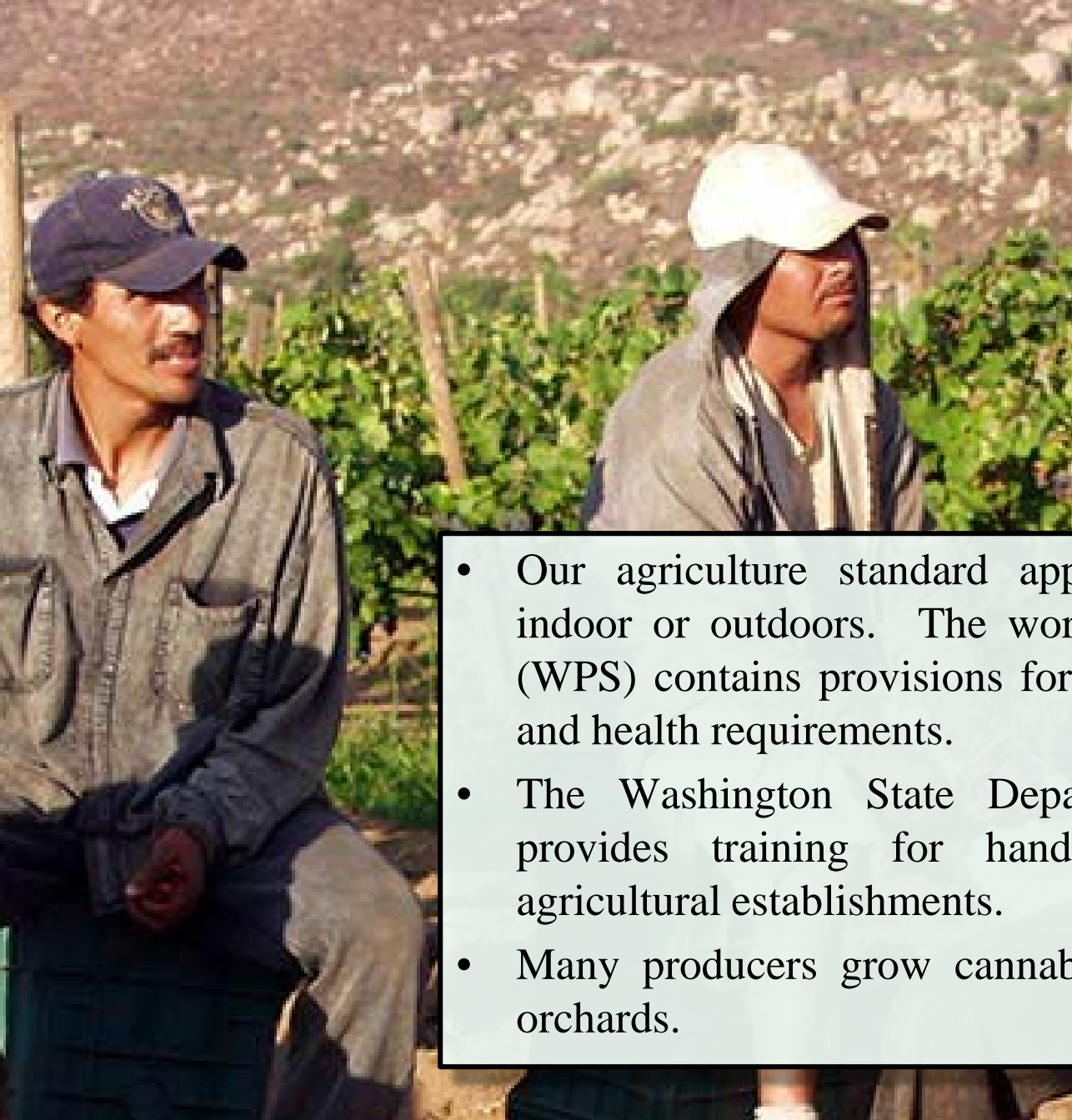


*Source: Washington State Liquor Cannabis Board*



# Growers





- Our agriculture standard applies to any grower—indoor or outdoors. The worker protection standard (WPS) contains provisions for pesticide-related safety and health requirements.
- The Washington State Department of Agriculture provides training for handlers and workers in agricultural establishments.
- Many producers grow cannabis alongside their fruit orchards.















# WSDA Maintains a List of Approved Pesticides For Use on Cannabis

The screenshot shows the Washington State Department of Agriculture (WSDA) website. The header features the WSDA logo and the text 'State Department of Agriculture'. A search bar is located in the top right corner. The main content area is titled 'Pesticide and Fertilizer Use on Marijuana in Washington' and includes a link to a PDF file. A sidebar on the right lists 'Topics of Interest' with links to various bulletins. A sidebar on the left lists navigation links such as 'WSDA Home', 'Pesticide Management', and 'Pesticides'. At the bottom of the page, there are social media icons for Facebook, Twitter, YouTube, and RSS.

WSDA State Department of Agriculture

Home / pestfert / pesticides / pesticideuseonmarijuana.aspx « YOU ARE HERE

Page updated/verified: Jun 01, 2017

## Pesticide and Fertilizer Use on Marijuana in Washington

To view PDF files [download Acrobat Reader](#).

The agency responsible for licensing and regulating marijuana is the [Washington State Liquor and Cannabis Board](#) [external link].

If you have questions pertaining to medical marijuana that are not licensing related you need to contact the [Washington State Department of Health](#) [external link].

### Pesticides\*

To assist growers authorized by I-502 or I-692 who use pesticides for the production of marijuana in Washington, WSDA has developed a [list of pesticides](#) [PDF 220kB] that meet

#### Topics of Interest

- [LCB-WSDA Bulletin No 17-01 Updated List of Pesticides Allowed for Use on Marijuana](#) [PDF 95 kB]
- [LCB-WSDA Bulletin No 16-01 Pesticide "Guardian" No Longer Allowed on Marijuana](#) [PDF 92kB]
- [LCB-WSDA Bulletin No 16-02 Updated List of Pesticides Allowed for Use on Marijuana](#) [PDF 95kB]
- [LCB-WSDA Bulletin LCB No 16-0:](#)

Follow Us!

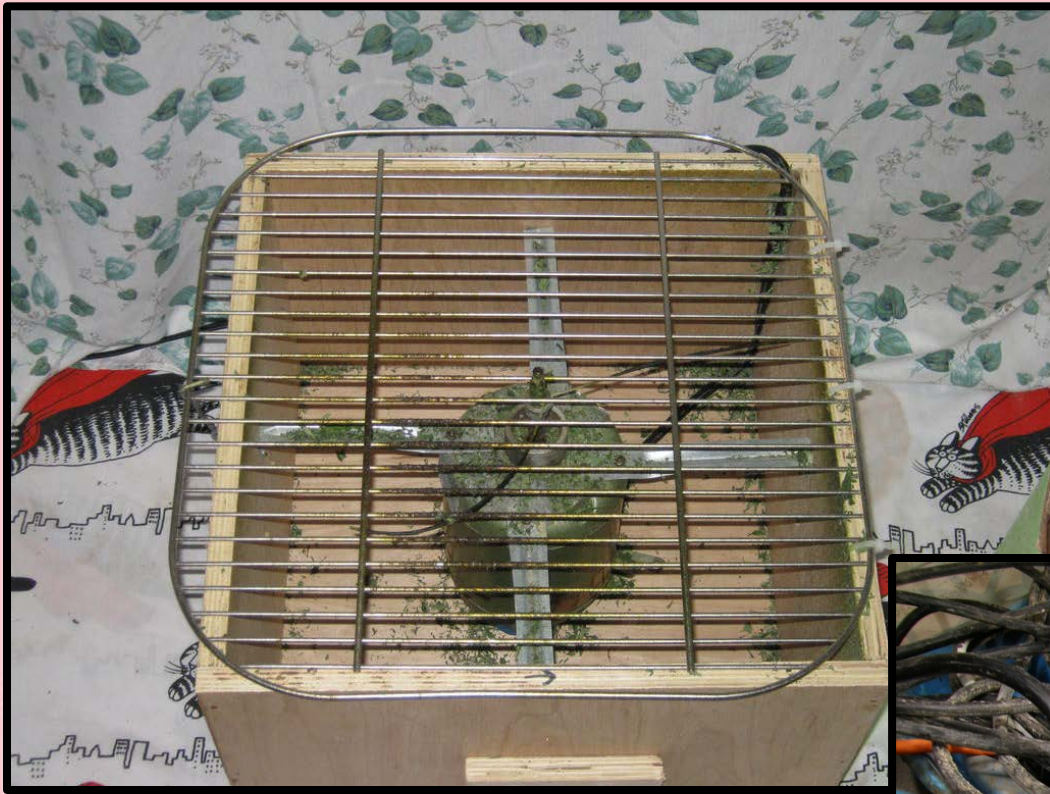
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Washington State Department of Agriculture  
Pesticide Management Division

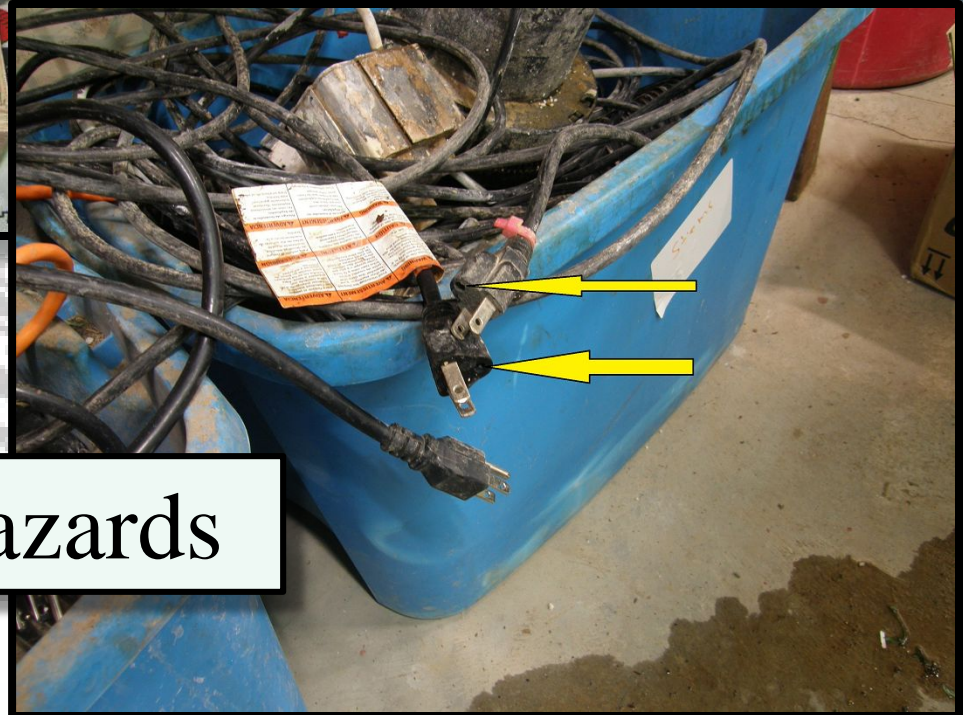
### Criteria for Pesticides Used for the Production of Marijuana in Washington

#### May 2016

The following represents the opinion of the Washington State Department of Agriculture (WSDA) regarding the criteria for pesticides that may be used for the production of marijuana (Cannabis) in Washington. This opinion may be rescinded or superseded at any time by the WSDA.



- Amputations
- Electrical Hazards
- Cylinder handling
- “Do It Yourself”



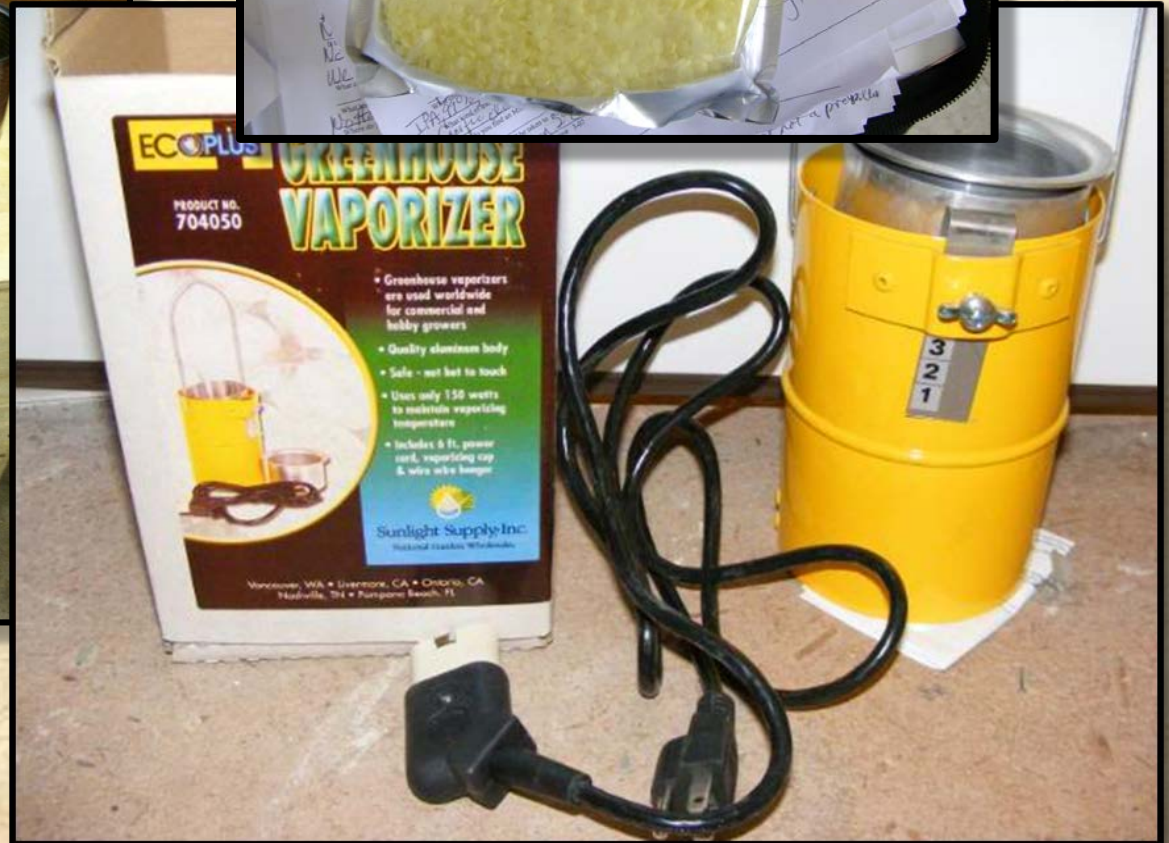
## Equipment Hazards















- Awkward Positions
- Bending
- Stooping
- Lifting
- Twisting



## Ergonomic Hazards



# Chemical Hazards

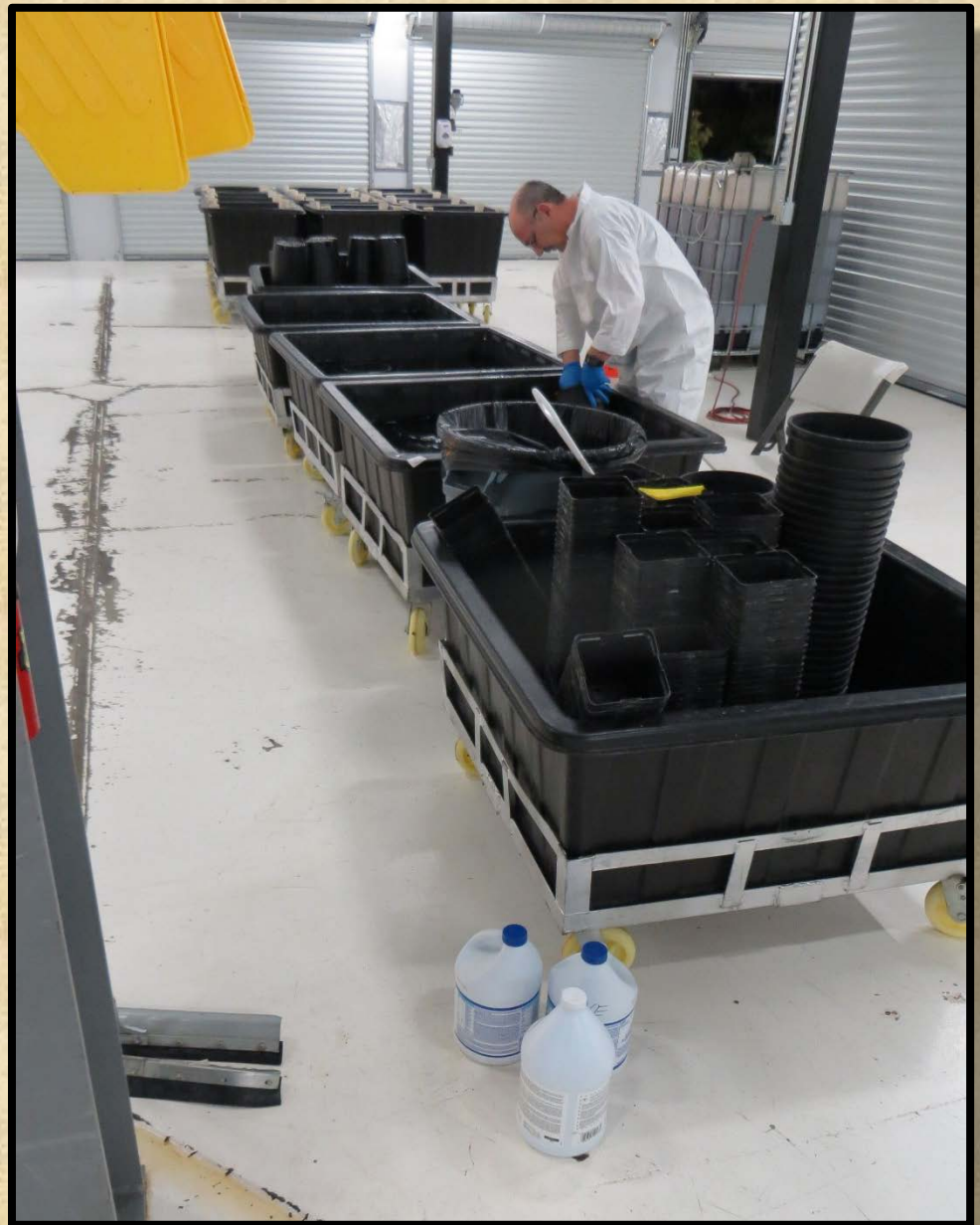


#34330336



- Pesticides
- Cleaning Agents
- Flammable Gas/Liquid
- Carbon Dioxide
- Any chemical product used in an occupational setting









# Confined Spaces

A close-up photograph of vibrant green mint leaves with serrated edges and prominent veins, filling the left and center portions of the slide. A white rectangular box with a black border is superimposed over the right side of the image, containing the title text.

## Plant Extraction Processes—Not New to Washington State







“The nine most **terrifying** words in the English language are: **I’m from the government and I’m here to help.**”

—Ronald Reagan

DOSH doesn’t have vertical WACs directed at cannabis extractions, but applies existing rules to those employers. If we see conditions that warrant an inspection by the local building inspector, we refer the information to that authority.





- Respirators
- Facemasks
- Gloves
- Safety glasses/goggles

## Personal Protective Equipment





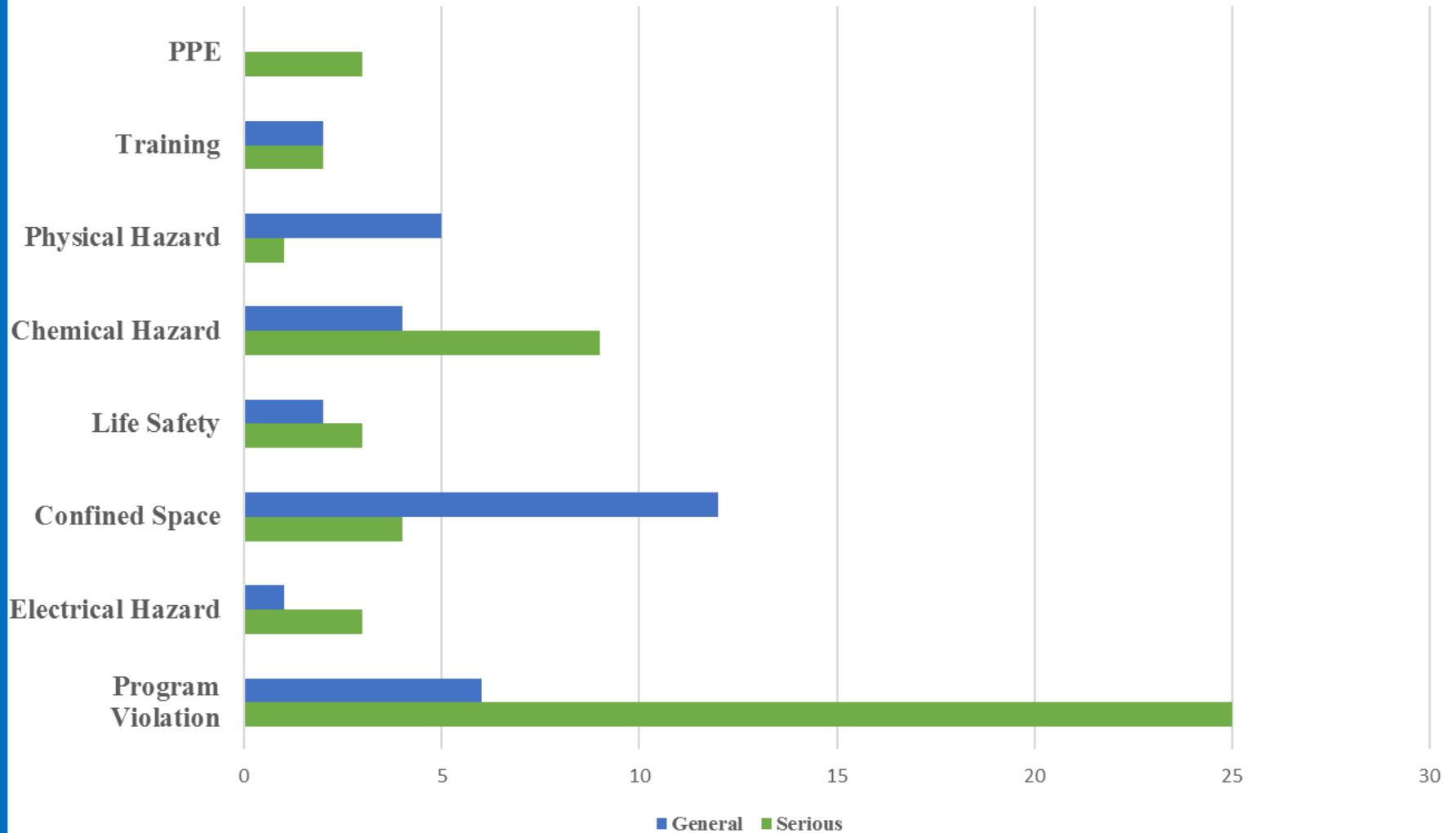


# UV Eye Protection

*Wavelength-Specific*



## Most Common Citations







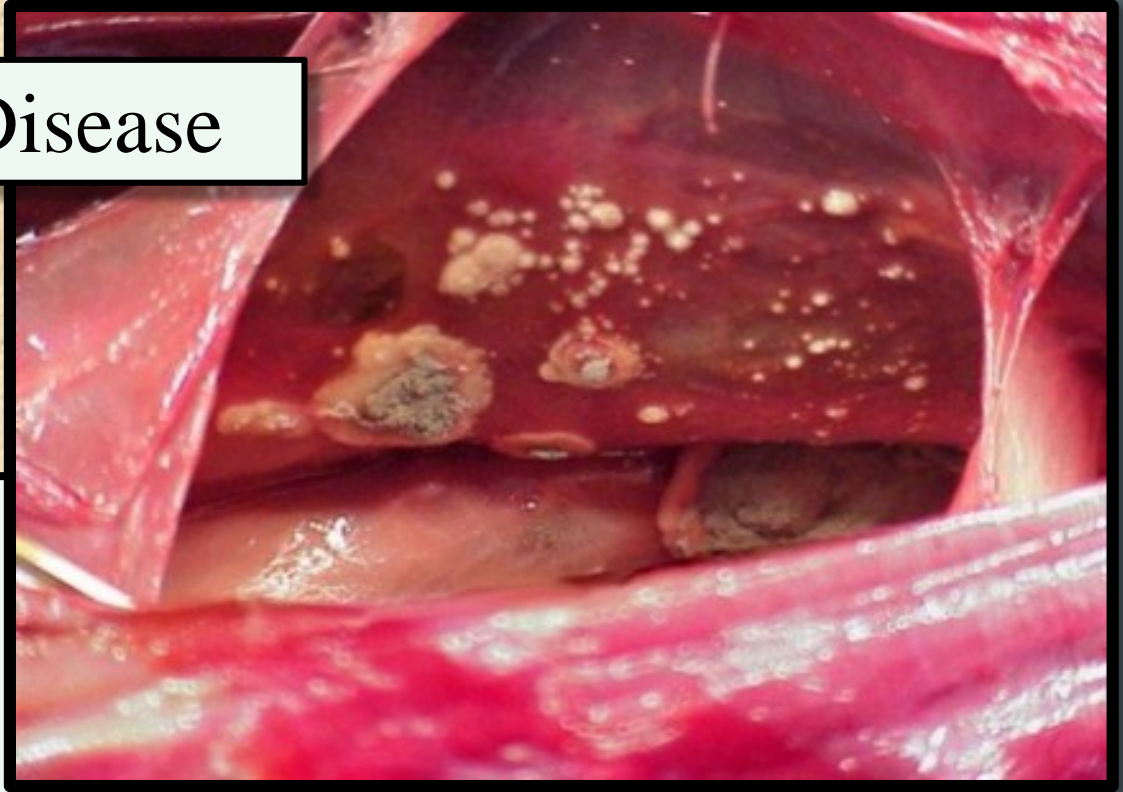
- Bacteria
- Endotoxins
- Vegetative Dust
- Fungi
- Molds



## Biological Hazards

# Respiratory Disease

- ✓ Chest Tightness
- ✓ Shortness of breath
- ✓ Cough
- ✓ “Farmer’s Lung”  
(Hypersensitivity Pneumonitis)
- ✓ *Exists in conditions where organic antigens reside in optimal growth conditions. Farming, birdkeeping, etc.*





## **Case Summary: Ventilation Issues at a Cannabis Grow and Extraction Business**

- Labor dispute blamed for the complaint
- The pressure relief valves on the CO<sub>2</sub> equipment relieve to the room instead of outdoors
- CO<sub>2</sub> used for growth as well as extraction
- Ductwork intended to “move CO<sub>2</sub> around” had no fresh/outdoor return air, and leaked throughout the building. Not dissimilar to an anesthetic gas scavenger used in an operating room.
- Garage and front door opened once a day for ventilation

### Allegations:

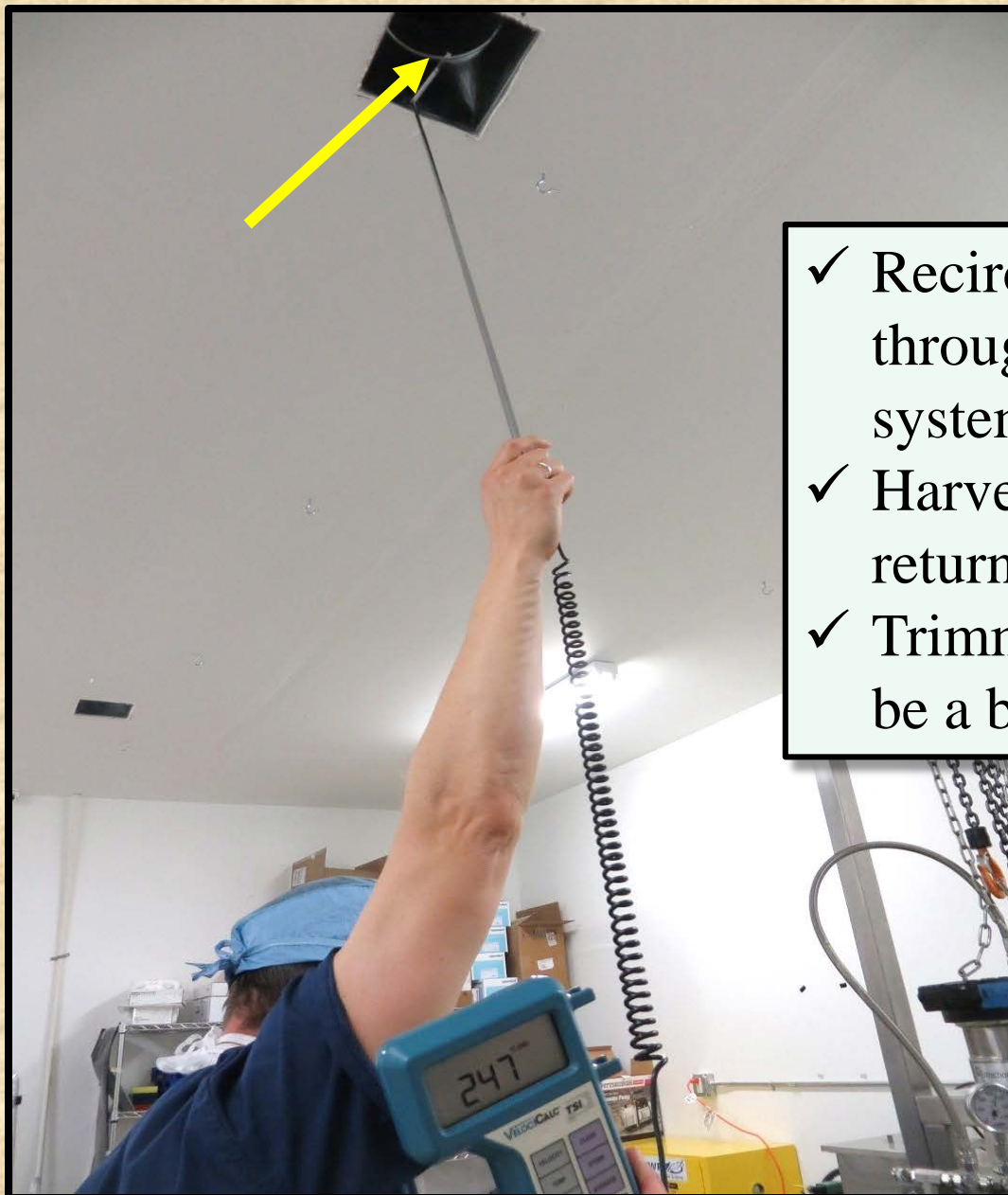
- CO<sub>2</sub> levels too high in all areas of the facility
- Harvest rooms not properly ventilated
- PPE requirements not followed



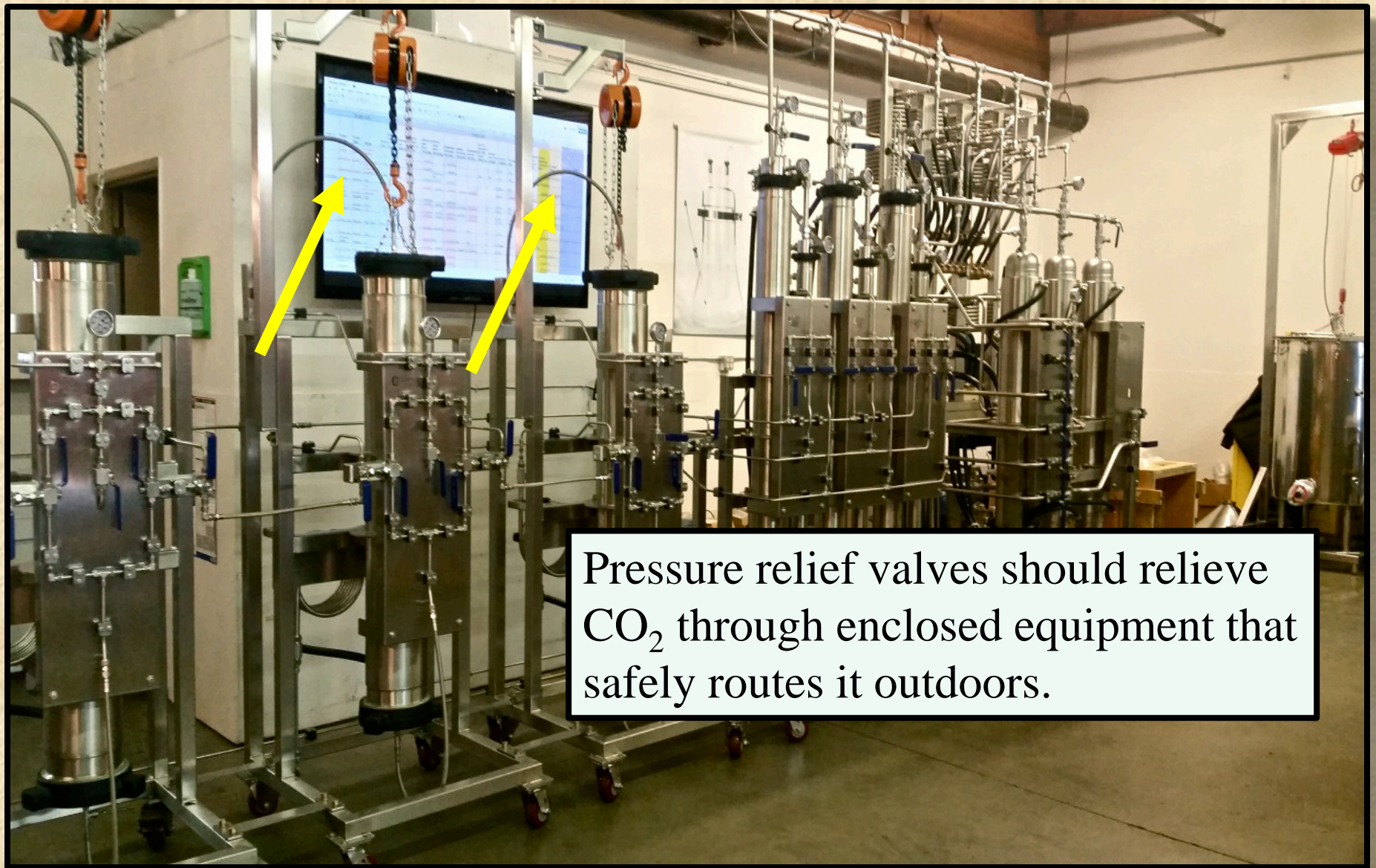
### **Observations:**

- ✓ Significant elevation of CO<sub>2</sub> but below the PEL
- ✓ No oxygen monitoring
- ✓ No/ineffective personal protective equipment
- ✓ No written hazard communication program
- ✓ No hazard communication training
- ✓ No emergency washing





- ✓ Recirculating stale air with CO<sub>2</sub> throughout the building's "HVAC" system
- ✓ Harvest Room: 4 exhaust vents, 4 return air vents, and 14 fans
- ✓ Trimming/packaging area used to be a break room



Pressure relief valves should relieve CO<sub>2</sub> through enclosed equipment that safely routes it outdoors.







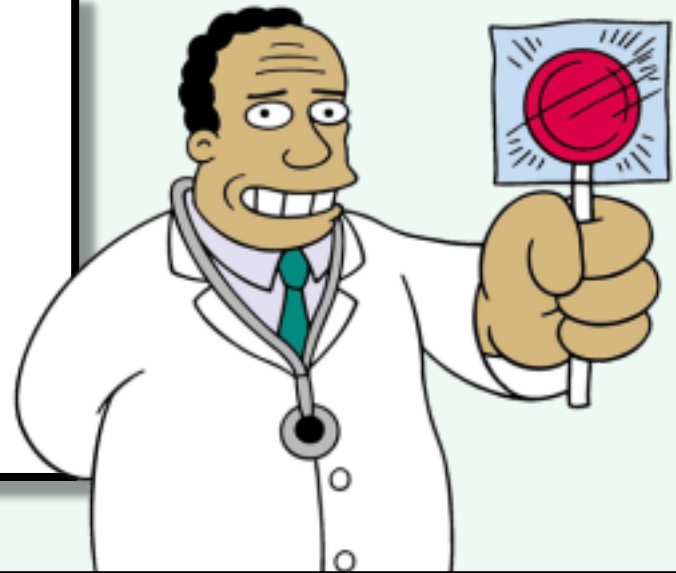
✓ One hospitalization for asthma-like symptoms

- ✓ Employer stated that they had 10 employees, thinking that DOSH couldn't enforce our rules with fewer than that (per OSHA).
- ✓ In Washington State, we enforce if there is one or more employee

- ✓ Water leaks/damage inside, mold and mildew present
- ✓ Observation of 1440 fpm at each exhaust intake in the extraction rooms
- ✓ CO<sub>2</sub>-laden air goes into the lobby area at around 800 ppm
- ✓ The employer was aware of these hazards



When informed of the CO<sub>2</sub> atmospheric hazard during the inspection, the employer acknowledged his understanding of the hazard, and stated, “Carbon dioxide is a reasonable way to kill pests.”



During the closing conference, the DOSH inspectors were informed that the employer was dissolving the business and moving to New York

The owners were a board-certified anesthesiologist and a registered nurse. In New York.

# Looking Ahead...







✓ Developing a partnership with the State Building Code Council and State Fire Marshal's office

✓ Identify building code personnel in every county to contact for referrals

✓ Develop ongoing dialogue with stakeholders

✓ Participate in industry conventions and events

✓ Create specific worker health and safety outreach documents for growers and processors

✓ Offer consultation services prior to programmed enforcement action

# Questions?

