# COVID-19 and the Impacts to Fire Code Enforcement Gerry R. Maiatico Fire Marshal Warren County, VA

#### Objectives

- Discuss how COVID-19 has effected Fire Code Enforcement Programs.
- Review the policy implementations that can be implemented to address shortfalls of fire code enforcement.
- Review common code violations
   associated with COVID precautions.

## Objectives

- Discuss common ways a FMO can protect against COVID-19.
- Review reference documents available to the FMO for COVID-19 impacts.
- Look at education messaging that can be used for COVID precautions



#### Disclaimer

This program is not designed to:

- Tell you what I'm doing is right...
- Tell you what is right or wrong for your locality...

This program is designed to open the discussion as how you have approached or how you are going to approach the fire code enforcement of during COVID-19!

## COVID-19 Today....

We all know the history, but where are we today?



In Virginia – 156 k cases 3,328 deaths



In US - 7.64 million cases 213 k deaths

## What is your opinion?

This topic has seen unprecedented responses:

- · Closing of the community
- · Change in schedules
- Precautions and Protections
- Changes in attitudes and behaviors

## What is the impact?

- How has it affected your ability to enforce the SFPC?
- List out....
- Pick the Top one....







# What are our common violations found for COVID Precautions?

- Ingress Egress Issues
- · Social Distancing Precautions
- Blocked/Obstructed Fire Lanes-Access Roads
- Tents
- ABHS Storage
- Many More....

# Ingress and Egress Concerns

 New or temporary social distancing approaches to controlling building occupant flow have resulted in the potential for public safety to be compromised, like blocked or locked emergency exits to limit or prohibit access to portions of a building.

#### 1031.2 Reliability

Required exit accesses, exits and exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency where the building area served by the means of egress is occupied. An exit or exit passageway shall not be used for any purpose that interferes with a means of egress.

#### Does the SFPC Address Ingress?



















#### 106.5 Modifications

The fire official may grant modifications to any provision of the SFPC upon application by the owner or the owner's agent provided the spirit and intent of the SFPC are observed and public health, welfare, and safety are assured.

Note: The current editions of many nationally recognized model codes and standards are referenced by the SFPC. Future amendments to such codes and standards do not automatically become part of the SFPC; however, the fire official should consider such amendments in deciding whether a modification request should be granted.

# 106.5.1 Supporting Data

The fire official shall require that sufficient technical data be submitted to substantiate the proposed use of any alternative. If it is determined that the evidence presented is satisfactory proof of performance for the use intended, the fire official shall approve the use of such alternative subject to the requirements of this code. The fire official may require and consider a statement from a professional engineer, architect or other competent person as to the equivalency of the proposed modification.

#### 106.5.2 Decision

The application for modification and the final decision of the fire official shall be in writing and shall be recorded in the permanent records of the local enforcing agency.





















# **Restaurant Closures and Dining Options**

What are you seeing in your area being implemented that may effect your fire code enforcement program?





# SFPC 503.1.1 Building and Facilities

Approved fire apparatus access roads shall be provided for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45,720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.



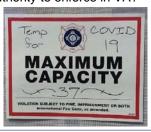






# Temporary COVID occupant load calculations

Who has the authority to enforce in VA?



#### 1001.3 Overcrowding

Overcrowding, admittance of any person beyond the approved occupant load established by the USBC or other building code under which the building was constructed, or obstructing aisles, passageways, or any part of the means of egress shall not be allowed. The fire code official, upon finding any condition that constitutes a life safety hazard, shall be authorized to cause the event to be stopped until such condition or obstruction is corrected.

#### Example: What went wrong?



The City has received NUMEROUS emails and social media posts with concerns from our neighbors about blatant neglect of public health protocols in the Downtown and Midtown areas. While the City's enforcement of COVID-specific regulations have been severely hindered by the Governor's executive order, posted occupancy limits and other code violations are being strictly enforced. Any business that repeatedly violates occupancy limits WILL BE closed.



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#### Alcohol-based Hand Sanitizers

Most common alcohol-based hand sanitizer eliminates 99.9% of common disease-causing organisms. It contains 62% (70% v/v) ethyl alcohol, aloe, and vitamin E leaving hands refreshed without sticky residue left behind - even

with repeated use.

#### Flammable Liquid

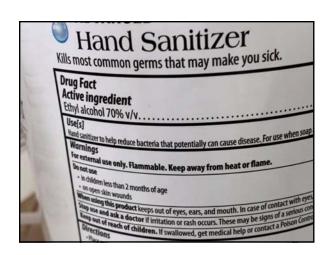
Any liquid that has a closed-cup flash point below 100° F (37.8° C). Flammable liquids shall be classified as Class I liquids and shall be further subclassified in accordance with the following:



- Class IA Liquid Any liquid that has a flash point below 73° F (22.8° C) and a boiling point of 100° F (37.8° C).
- Class IB Liquid Any liquid that has a flash point below 73° F (22.8° C) and a boiling point at or above 100° F (37.8° C).
- Class IC Liquid Any liquid that has a flash point at or above 73° F (22.8° C), but below 100° F (37.8° C).

#### Alcohol-based Hand Sanitizers

Alcohol-based hand sanitizers are classified as Class I Flammable Liquid substances, which means they have a flash point of less than 100 degrees Fahrenheit. Hand sanitizer vapors can be flammable. In the event that hand sanitizer combusts, carbon monoxide and carbon dioxide can form.



# Chapter 50 MAQ Per Control Area

TABLE 5003.1. N(1) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARDAL PA. A. P.

| MATERIAL                         | CLASS    | GROUP<br>WHEN<br>THE<br>MAXIMUM<br>ALLOWABLE<br>QUANTITY<br>IS<br>EXCEEDED | STORAGE <sup>b</sup>               |                               |                                     | USE-CLOSED SYSTEMS <sup>b</sup>    |                               |                                     | USE-OPEN<br>SYSTEMS <sup>b</sup>   |                               |
|----------------------------------|----------|--|------------------------------------|-------------------------------|-------------------------------------|------------------------------------|-------------------------------|-------------------------------------|------------------------------------|-------------------------------|
|                                  |          |  | Solid<br>pounds<br>(cubic<br>feet) | Liquid<br>gallons<br>(pounds) | Gas<br>(cubic<br>feet<br>at<br>NTP) | Solid<br>pounds<br>(cubic<br>feet) | Liquid<br>gallons<br>(pounds) | Gas<br>(cubic<br>feet<br>at<br>NTP) | Solid<br>pounds<br>(cubic<br>feet) | Liquid<br>gallons<br>(pounds) |
| Flammable<br>liquid <sup>©</sup> | IA.      | H-2  | NA.                                | 30 <sup>4, e</sup>            | NA                                  | NA.                                | 30 <sup>d</sup>               | NA.                                 | NA.                                | 10 <sup>d</sup>               |
|                                  | (Band IC | or<br>H-3  |                                    | 120 <sup>d, e</sup>           |                                     |                                    | 120 <sup>d</sup>              |                                     |                                    | 30 <sup>d</sup>               |

The quantities of alcoholic beverages in retail and wholesale sales occupancies shall not be limited providing the liquids are ackaged in individual containers not exceeding 1.3 gallons. In retail and wholesale sales occupancies, the quantities of medicines obstitutif or consumer products and commission containing not more than 50 percent by volume of water mobible liquids with the manifed of the solutions not being flammable shall not be limited, provided that such materials are packaged in individual retails one of exceeding 1.3 acknow.

d. Maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an approved automat sprinkler system in accordance with Section 903.3, 1.1. Where Note e also applies, the increase for both notes shall be applied accumulatively.

e. Maximum allowable quantities shall be increased 100 percent where stored in approved storage cabinets, day boxes, gas cabinets, gas rooms, enhanced enclosures or in listed safety cans in accordance with Section 5003.3.10. Where Note dialso applies the increase for both notes shall be applied accommandatively.

 Quantities shall not be limited in a building equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

g. Allowed only in buildings equipped throughout with an approved automatic sprinkler system

h. Containing not more than the maximum allowable quantity per control area of Class IA. Class IB or Class IC flammable liquids

The maximum allowable quantity shall not apply to fuel oil storage complying with Section 60











# 5704.3.6 Wholesale and Retail Sales Uses

Flammable and combustible liquids in Group M occupancy wholesale and retail sales uses shall be in accordance with Sections 5704.3.6.1 through 5704.3.6.5, or Sections 10.10.2, 12.3.8, 16.4.1 through 16.4.3, 16.5.1 through 16.5.2.12, Tables 16.5.2.1 through 16.5.2.12, and Figures 16.4.1(a) through 16.14.1(c) of NFPA 30.

# 5704.3.6.1 Container Type

Containers for Class I liquids shall be metal.

Exception: In sprinklered buildings, an aggregate quantity of 120 gallons (454 L) of water-miscible Class IB and Class IC liquids is allowed in nonmetallic containers, each having a capacity of 16 ounces (0.473 L) or less.

# What are the storage requirements for ABHS?

- SFPA Chapter 50 General Requirements
- Maximum Allowable Quantity Per Control Area
- NFPA 30





# Hand Sanitizer Dispensers



### 5705.5 Alcohol-Based Hand Rubs Classified as Class I or II

The use of wall-mounted dispensers containing alcohol-based hand rubs classified as Class I or II liquids shall be in accordance with all of the following:

- 1. The maximum capacity of each dispenser shall be 68 ounces (2 L).
- 2. The minimum separation between dispensers shall be 48 inches (1219 mm)
- 3. The dispensers shall not be installed above, below, or closer than 1 inch (25 mm) to an electrical receptacle, switch, appliance, device or other ignition source. The wall space between the dispenser and the floor or intervening counter top shall be free of electrical receptacles, switches, appliances, devices or other ignition sources.
- Dispensers shall be mounted so that the bottom of the dispenser is not less than 42 inches (1067 mm) and not more than 48 inches (1219 mm) above the finished floor.

#### 5705.5 Cont.

- Dispensers shall not release their contents except when the dispenser is manually activated. Facilities shall be permitted to install and use automatically activated "touch free" alcoholbased hand-rub dispensing devices with the following requirements:
  - 5.1 The facility or persons responsible for the dispensers shall test the dispensers each time a new refill is installed in accordance with the manufacturer's care and use instructions.
  - 5.2 Dispensers shall be designed and must operate in a manner that ensures accidental or malicious activations of the dispensing device are minimized. At a minimum, all devices subject to or used in accordance with this section shall have the following safety features:

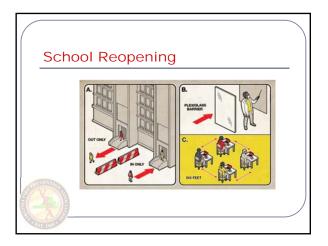
#### 5705.5 Cont.

- 5.2.1 Any activations of the dispenser shall only occur when an object is placed within 4 inches (98 mm) of the sensing device.
- 5.2.2 The dispenser shall not dispense more than the amount required for hand hygiene consistent with label instructions as regulated by the U.S. Food and Drug Administration (USFDA).
- 5.2.3 An object placed within the activation zone and left in place will cause only one activation.
- Storage and use of alcohol-based hand rubs shall be in accordance with the applicable provisions of Sections 5704 and 5705.
- Dispensers installed in occupancies with carpeted floors shall only be allowed in smoke compartments or fire areas equipped throughout with an approved automatic sprinkler system in accordance with the applicable building code.

# CDC Hand Hygiene in Healthcare Settings

https://www.cdc.gov/handhygiene/firesafety/index.html





# Has any of the SFPC requirements changed?

Fire Drills?

Lockdown Drills?

Fire Resistance Ratings?

Combustible Materials % on Walls?

**Emergency Operations Plans?** 

Fire Apparatus Access?

Means of Egress?

# Virginia Legislative 2020 SPECIAL SESSION I

SENATE BILL NO. 5068

A BILL to permit school boards to waive mandatory student safety drills and student health screenings; emergency.

Patron-- Peake

Referred to Committee on Education and Health

Be it enacted by the General Assembly of Virginia:

1. § 1. Notwithstanding the provisions of §§ 22.1-137, 22.1-137.2, 22.1-137.2, 22.1-184, 22.1-273, or 22.1-273.1 of the Code of Virginia or any other provision of law to the contrary, any school board may waive any mandatory student safety drill and any mandatory student health screening until such time as the General Assembly reconsiders such waivers during the 2021 regular session of the General Assembly.

2. That an emergency exists and this act is in force from its passage

#### Virginia Administrative Code Constitution of Virginia $08/17/20 \ \ Senate: Prefiled and ordered printed with emergency clause; offered 08/18/20 \ 20200635D$ 08/17/20 Senate: Referred to Committee on Education and Health 08/19/20 Senate: Reported from Education and Health (15-Y 0-N) 08/20/20 Senate: Constitutional reading dispensed (40-Y 0-N) Uncodified Acts 08/26/20 Senate: Read second time and engrossed RIS Users (account required) 08/27/20 Senate: Read third time and passed Senate (34-Y 0-N) 09/17/20 House: Placed on Calendar SEARCHABLE DATABASES 09/17/20 House: Read first time Bills & Resolutions 09/17/20 House: Referred to Committee on Education Bill Summaries Reports to the General Assembly Legislative Liaisons

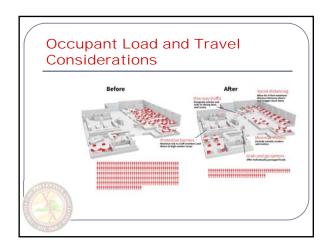
#### VDFP / SFMO

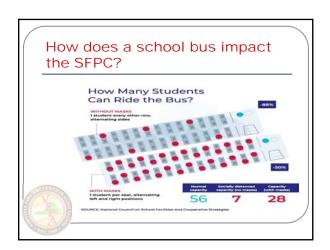
 VDFP's State Fire Marshal's Office Issues Emergency Evacuation Planning and Drills Guidance for Pre K-12 and Colleges and Universities





















## 106.3 Inspections

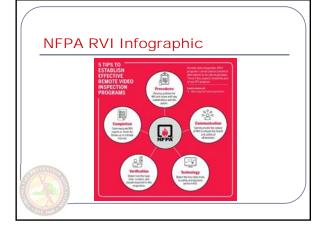
The fire official is authorized to conduct such inspections as are deemed necessary to determine the extent of compliance with the provisions of this code and to approve reports of inspection by approved agencies or individuals in accordance with the fire official's written policy.

# Remote Inspection Program

- Just like traditional in-person inspections, an RVI typically occurs as part of a jurisdiction's inspection process.
- · AHJ for that area.
- Video inspections help accomplish critical and emergency permit work; they are not intended to be less complete than an on-site inspection.

# Remote Inspection Program

- RVI is currently in use in select jurisdictions across the United States.
- No formal standard currently governs its use.
- NFPA 915, Standard on Remote
   Inspections is in the early development stages.



COVID-19 RESOURCES FOR FIRE CODE ENFORCEMENT



