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HAND HYGIENE TIMES

Your resource for the latest news in effective infection control program development and best practices.

Issue 2 Volume 2

Fire Codes and Alcohol-Based Hand Rubs (ABHRs)

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ABHRs contain alcohol in order to help kill germs on hands. The percentage of alcohol typically ranges from 60% to 70% (v/v) and this alcohol level causes ABHRs to be placed into flammable liquid categories by fire safety standards. ABHRs have been safely used in healthcare settings for over 20 years and are recommended for use by leading health organizations such as the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO).

Local Fire Authorities have the final say

When it comes to enforcement of fire codes, the authority at the most local level typically takes precedent, so while it is a good practice to utilize national and state regulations to help guide your decisions, ultimately the local fire authority has the final say. When making decisions regarding use of ABHRs in a facility it's important to involve team members and key decision makers at the healthcare facility with knowledge and responsibility for safety. There are excellent information sources available to utilize on these topics such as The National Fire Protection Association (NFPA), International Fire Code (IFC), the Joint Commission (JAHCO), ASHE (American Society for Healthcare Engineering), and of course state and local fire safety information sources.

Below are some issues frequently addressed by fire safety authorities:

How do fire code authorities define ABHR's?

An alcohol-containing preparation designed for application to the hands for anti micro-bacterial or other medicinal purpose and containing ethanol or isopropanol in an amount not exceeding 70 percent by volume.[2, 7]

How large can the packages of ABHR be?

The maximum individual dispenser fluid capacity shall be:

- 1.2 Liters (1200mL, 0.3 gallons) for dispensers in patient rooms, corridors and areas open to corridors.[1]
- 2.0 Liters (2000mL) (0.5 gallons) for dispensers in suites of rooms.[1]

What is the total amount of ABHR product that can be used in any one area?

No more than 10 gallons (37.8 L) of ABHR shall be in use in a single smoke compartment.[1]

How close can the ABHR dispensers be to each other?

Dispensers shall be separated from each other by horizontal spacing of not less than 48 in.(1220 mm)[3]

Are gels, foams, liquids, and aerosols all acceptable to use?

Aerosols were just recently added to the National Fire Code, so it would be prudent to check with your local fire marshall to confirm they have adopted to the new standards before installing.

How close can the ABHR dispenser be to an electrical outlet?

The dispenser shall not be installed directly adjacent to, directly above, or below an electrical receptacle, switch, appliance, device, or other ignition source.[2]

The above rule has been formally interpreted by the Joint Commission to be 6 inches from the center line of the dispenser to the ignition source.

Is it acceptable to install the ABHR dispenser over a carpeted area?

Dispensers installed directly over carpeted floors shall be permitted only in sprinklered smoke compartments.[3]

How much ABHR product can be stored?

Storage of quantities greater than 5 gallons (18.9 Liters) in a single smoke compartment will need to meet the requirements of NFPA 30 Flammable and Combustible Liquid Code.[1]

The maximum allowable quantity per control area is 120 gallons. The quantity shall be increased by 100% in buildings equipped with an approved automatic sprinkler system. Quantity shall be increased by 100% when stored in an approved storage cabinet.[2]

THAT'S a FACT!

One study found that 65 percent of healthcare workers' gowns or uniforms were contaminated following routine morning care nursing activities. When caring for patients who have MRSA and VRE patients, 69 percent of lab coats were contaminated. Additionally, 27 percent of these healthcare workers contaminated their hands after touching their coats.[8,9]

8 Boyce JM, et.al. Environmental contamination due to methicillin-resistant Staphylococcus aureus: Possible infection control implications. Infect Control Hosp Epidem. September 1997, 18(9):622-627.

9 Thomas G. Understanding risks and transmission of MRSA. San Luis Obispo County Public Health Bulletin, Spring 2004September 1997, 18(9):622-627.

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Issues frequently addressed by safety authorities:

What are the requirements to comply with Americans with Disabilities Act (ADA)?

Operation – The dispenser needs to be operable with one hand without grasping, pinching or twisting of the wrist and the force required to activate must not be greater than 5 lbf.[4]

Protrusion - Objects with their leading edges between 27 inches and 80 inches above the finished floor shall protrude no more than 4 inches into walks, halls, corridors, passageways or aisles.[5]

Accessibility - Dispensers should be mounted so the operating mechanisms are at a height less than 48 inches from the floor.[6]

What is the maximum allowable level of alcohol content in an ABHR?

70% isopropyl or ethyl alcohol per NFPA. [2]

1 NFPA 101 Life Safety Code, 2009 Edition
2 International Fire code, 2006 Edition
3 NFPA 101 Life Safety Code, 2009 Edition; International Fire code, 2006 Edition
4 ADA section 4.27.4
5 ADA section 4.4.1
6 ADA sections 4.271 – 4.27.3
7 2008 New York City Fire Code (as added by LL 26 of 2008 and amended by LL 37 & 41 of 2009)

Product Feature

COMPLIANCE BUILDING DELIVERY SYSTEMS – TFX™ AND FMX™ DISPENSING SYSTEMS

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GOJO TFX™ Touch-Free Dispensing Systems offer a compliance building level of convenience because there is nothing to touch.

Key features of the TFX Touch Free Dispensing System include:

Regulatory Compliance

- Fully ADA Compliant
- Fire Code Compliant - Capacity
- UL Listed

High Capacity Refill

- Reduces the number of changes
- SANITARY SEALED™ container with a fresh dispensing valve
- 1200 ml high capacity, easy-to-reload
- 30,000 uses from three standard C-size alkaline batteries (included)

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Key features of the FMX Dispensing System include:

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- Fire Code Compliant - Capacity

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- Reduces the number of changes
- SANITARY SEALED™ container with a fresh dispensing valve

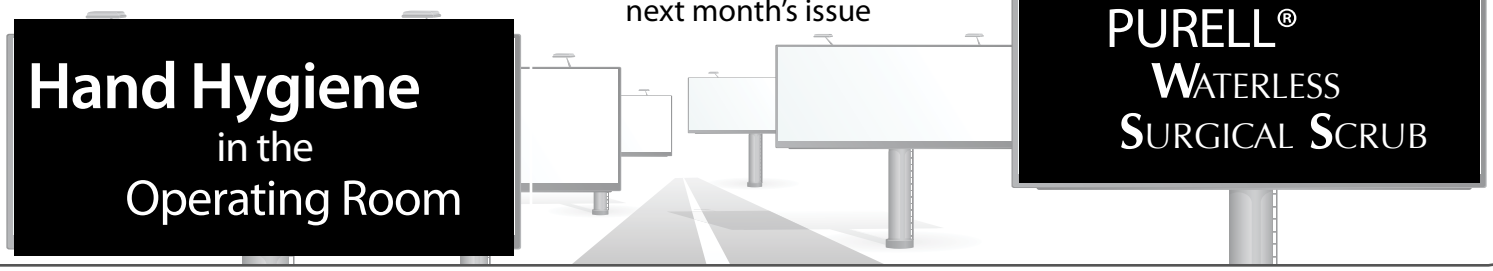
GOJO innovative wall mount delivery solutions make PURELL and PROVON accessible and convenient for all. In order to help control the spread of germs and build compliance GOJO - TFX and FMX delivery systems are recommended for high traffic areas where there are constant influx of employees, patients and visitors.

Description	Order Number	Case Pack	For use with
TFX™ System			
PURELL® TFX™ Touch Free	2720-12	12	PURELL TFX refills
PROVON® TFX™ Touch Free	2745-12	12	PROVON TFX refills

Description	Order Number	Case Pack	For use with
FMX™ System			
PURELL® FMX-12™	5120-06	6	PURELL FMX foam refills
PROVON® FMX-12™	5160-06	6	PROVON FMX foam soap refills
PROVON® FMX-20™	5260-06	6	PROVON FMX foam soap refills

A Look Ahead

next month's issue



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