Hand Sanitizer Guidance

To aid control measures in preventing the spread of COVID-19, the Kansas State University Division of Facilities will provide hand sanitizer dispensers at the main entrances to all buildings on the Manhattan campus. Additional dispensers may be added in common areas on separate floors of buildings, as needed.

Departments may add additional hand sanitizer dispensers, which they manage. The following requirements and guidance are provided to assist departments in making product available, while remaining compliant with fire and building code requirements and recommended hand sanitation measures.

Acronyms

ADA Americans with Disability Act
CDC Centers for Disease Control and Prevention
FDA U.S. Food and Drug Administration
IFC International Fire Code (part of the International Code Council – ICC)
WHO World Health Organization

Formulations

The CDC recommends the use of alcohol-based hand rubs (ABHR), specifically ABHR that contain at least 60% alcohol (ethyl alcohol) or 70% isopropanol (isopropyl alcohol).

Hand washing mechanically removes pathogens and is thus preferred, but laboratory data demonstrate that ABHR formulations, in the recommended alcohol concentrations, can inactivate SARS-CoV-2 (CDC). Use of ABHR is an alternative when hand washing is not possible and to increase hand sanitation efforts.

Both hand rubs containing alcohol or benzalkonium chloride may be marketed. However, evidence indicates benzalkonium chloride is less reliable against certain bacteria and viruses than either of the alcohols (CDC). Other formulations are not recommended for consumer use.

The FDA warns against the use of certain hand sanitizer products containing methanol (wood alcohol) due to toxic effects when absorbed through the skin or inadvertently ingested (FDA).

Proper Use

When using hand sanitizer:

- Get enough product to cover all surfaces of the hand (this varies with hand size and product type).
- Rub *all* surfaces of hands, thumbs, fingers, and finger tips until they feel dry. This should take at least 20 seconds. Instructional video: www.youtube.com/watch?v=ZnSjFr6J9HI (WHO)
- Do not rinse or wipe it off.

Don't use when hands are visibly soiled or greasy. Instead wash hands with soap and warm water. Discontinue use if irritation occurs. Keep product container out of the reach of children.

Where to Obtain ABHR Dispensers

The Kansas State University Facilities Storeroom will stock 12 and 16 ounce bottles of alcohol-based sanitizer that are available to order by any KSU department.

Stand mounted and wall dispensers are available with advance orders. Refills for these dispensers will also be stocked by the Facilities Storeroom.

The university is exploring funding opportunities to cover these costs. Orders will be tracked, but not initially billed to departments unless funding is not found to reimburse the storeroom. Contact storeroom@ksu.edu or 785-532-2049 for current pricing and advance ordering. Visit www.k-state.edu/facilities/covid-19.html.

Limitations in Buildings

Dispenser Types

Installation of wall mounted dispensers is discouraged. Any permanent installation to the wall or floor must be conducted by the Division of Facilities (service request: https://www.k-state.edu/facilities/request/). For central installment of larger dispensers (e.g., in classrooms or corridors) stand-mounted units are recommended. Desktop containers or countertop dispensers for program areas and offices are recommended cost-effective alternatives to permanent installations.

Consideration should be given to the logistics of checking, re-filling and battery replacements for department-managed shared-use dispensers.

Fire Code Limitations

ABHR contain alcohol in sufficient concentration to be considered flammable and are subject to regulation.

Code requirements do not apply to small personal containers (e.g., carried by a person). However, there are limitations on the size of building dispensers and total quantities within a building. Prior to obtaining dispensers for installation within buildings (including stand-mounted units), contact Environmental Health and Safety (EHS). EHS will review floor plans and code requirements to ensure installations and dispenser types meet code requirements **and that aggregate quantity limits within building fire/control areas are not exceeded**.

ABHR are available in gel and liquid or foaming formulations. EHS discourages the use of aerosol dispensers for building installations. Quantity limits provided herein and assessed by EHS will be based on liquid and gel formulations (contact EHS for guidance if other dispenser or formulation types are needed). *For the purpose of this guidance, the terms gels and liquids is used interchangeably.*

ADA Requirements

Americans with Disability Act (ADA) requirements aim to ensure accessibility to product. Dispenser selection and installation requirements include:

- 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. *(ADA section 4.27.4)*

- 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. *(ADA section 4.4.1)*

- Accessibility - Dispensers should be mounted so the operating mechanisms are at a height less than 48 inches from the floor. *(ADA sections 4.271 – 4.27.3)*

For ADA questions related to buildings/construction: CampusPlanning@ksu.edu.
For general ADA & accommodation questions: Charlotte Self charlott@ksu.edu

Placement and Quantity Limits

International fire code (IFC) stipulates requirements for installations and total quantities within buildings. Dispenser related limitations include:

When mounted or installed in rooms separated from the corridor

- The maximum capacity of each dispenser shall be 68 ounces (2 L). *(2018 IFC 5705.5*)

When mounted or installed in corridors

- Aerosol containers shall not be allowed in corridors.
- The maximum capacity of each liquid dispenser shall be 41 ounces (1.21 L). *(2018 IFC 5705.5.1)*

ABHR quantity limits in a control area

The maximum quantity allowed in a corridor within a control area shall be 10 gallons (37.85 L). *(2018 IFC 5705.5.1)*

Product Placement

- Dispensers shall be separated from each other by horizontal spacing of not less than 48 inches (1220 mm). *(2018 IFC 5705.5)*

- 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 countertop shall be free of electrical receptacles, switches, appliances, devices or other ignition sources *(2018 IFC 5705.5)*

- Dispensers must not impede egress (evacuation routes or access to exits). Never place free standing dispensers such that they could fall in corridors or doorways, block evacuation routes or pose a trip hazard.

- Do not install or place within stairwells or in elevators.

- Do not install in corridors less than 6 feet in width. *Installments within smaller corridors will require code variance from State and pre-approval of building fire safety plan* (contact EHS safety@ksu.edu).

ABHR dispenser limitations in carpeted areas:
Dispensers installed in buildings with carpeted floors shall only be allowed in smoke compartments or fire areas equipped throughout with an approved automatic fire sprinkler system. *(2018 IFC 5705.5)*

Maximum allowable level of alcohol content in an ABHR
95% isopropyl or ethyl alcohol. *(2018 IFC Section 202)*