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SAFETY GUIDELINES FOR REOPENING ON-SITE SIMULATION LABS

DESCRIPTION

The guidelines by which the Simulation Core can resume on-site activities and minimize the risk to all simulation participants of exposure to the COVID-19 virus.

RATIONALE

To clarify the guidelines by which the College’s Education Simulation Core (SC) conducts skills training on-site at Baylor College of Medicine Main Campus while COVID-19 restrictions are in place. These guidelines are designed to ensure on-site events and activities are delivered in a way that provides a safe working and learning environment for faculty, learners, standardized patients, and SC staff. These guidelines were created by SC leadership and staff following the College’s workplace COVID-19 guidelines and CDC guidelines.

STAKEHOLDERS AFFECTED BY THESE GUIDELINES

These guidelines apply to all faculty, learners, standardized patients, and SC staff who will be on-site for simulation activities and events. All participants are required to read, understand, and comply with these guidelines.

DEFINITIONS

Personal Protective Equipment (PPE) – equipment that is worn to minimize exposure to hazards that cause serious injuries or infections. SC event participants are always required to wear masks, face shields, and gloves. Supplemental PPE (gowns, shoe covers, etc.) may be required at the discretion of the SC staff. Appropriate disposal containers will be provided in the SC laboratories and classrooms.

On-site Simulation Activities – procedural and clinical skills training for learners that uses manikins, task trainers, or other equipment, and is held in the SC facilities. On-site simulation training is considered essential for safe clinical practice and cannot be gained by any other hybrid or online modality.

Cleaning – the action of making something clean and free of dirt without chemical use.

Disinfection – cleaning with a chemical to destroy bacteria and other contaminants on surfaces.

EPA – The Environmental Protection Agency’s mission is to protect human and environmental health by regulating with different rules and guidelines.

CDC – The Centers for Disease Control and Prevention is one of the major operating components of the Department of Health and Human Services that protect Americans from health, safety, and security threats.

COVID-19 – a pandemic disease caused by a new strain of coronavirus (SARS-CoV-2) that can spread from person to person.

PPE – personal protective equipment that is worn to minimize exposure to hazards that cause serious injuries or infections.

RESPONSIBILITY

It is the responsibility of the SC executive director to ensure all on-site faculty, learners, standardized patients, and SC staff adhere to the guidelines.

EVENT RESERVATION PROCEDURE

1. On-site simulation event requests are submitted using the simulation center request form provided through email by an SC staff representative. This form includes tasks, materials, number of participants, and other detailed information as necessary for event planning. Event requests are reviewed on a case-by-case basis, or as determined by the SC executive director.
2. The decision to schedule on-site simulation is based on the following criteria:
 - skills training is necessary for students to progress in their medical education and safely work in clinical settings, or
 - skills training is essential for mandatory examinations or graduation, or
 - skills training is for interns, residents, and fellows. It cannot be gained in any way other than by using the simulation equipment available in the SC labs and is necessary for patient safety in clinical environments.
3. The SC manager will consult with the central scheduler to determine the best times and dates for the event. There may be more than one event in SC facilities in a day, but not at the same time. The date is also determined by available staff and the total amount of time required for set-up, execution, and cleaning.

4. In response to the event request, faculty sponsors will receive an abbreviated event proposal that summarizes the plan for the on-site event, including date, time, place, logistics, room assignment, room layout, cost, and other detailed information that is necessary for participant safety.
5. If necessary, a meeting will be scheduled to discuss specific elements of the event plan. Once the proposal is finalized, the event sponsor and SC representative agree to implement the event plan as outlined in the final documents.

SAFETY GUIDELINES

Health Screening: All event participants must complete screening before entering the building. Only learners scheduled for an event are permitted into the SC laboratories and classrooms. The College will screen for temperature and symptoms.

Personal Protective Equipment (PPE): All individuals who enter the main campus building must wear a cloth face mask that covers the nose and mouth. All event participants in the SC laboratories and classrooms must wear a cloth face mask, face shield, and gloves. Supplemental PPE (gowns, shoe covers, etc.) may be required at the discretion of the SC staff. Appropriate disposal containers will be provided in the SC laboratories and classrooms.

Hand Washing: Participants are required to wash their hands (per CDC guidelines) before and after the event.

Supplies: Essential cleaning supplies required for on-site simulation activities include hand sanitizer, and EPA approved disinfectant wipes or disinfectant spray (70% alcohol solution) used with clean disposable cloths.

Physical Distancing: Events are scheduled with the minimum required and maximum allowed participants. SC laboratories and classrooms are laid out (furniture and equipment) to maximize all participants' ability to maintain a physical distance of at least six feet. Signs indicating room occupancy are installed outside the door to the laboratory or classroom. For scenarios that limit the opportunity for physical distancing (i.e., a physical exam of standardized patients, teamwork around manikin), the event will be choreographed in a way that ensures the best use of space between participants. Face shields (in addition to cloth face masks and gloves) will be required for this type of activity.

The maximum occupancy for each space in the SC laboratories and classrooms is based on social distancing standards and optimal room layout. A summary of the attendance density allowed in SC spaces is shown in Addendum A.

Scheduling: Event sessions are scheduled with breaks that allow SC staff to clean and sanitize surfaces, materials, and equipment. Scheduled breaks also decrease airborne exposure between groups. Learners will be scheduled to arrive, staged in a designated area, and called into the laboratory or classroom at the appropriate time. Learners are not allowed to congregate in the SC labs or classrooms, and they must leave promptly at the end of their session.

Cleaning: Cleaning and decontamination of all equipment and surfaces are completed following College, CDC, and equipment manufacturer guidelines. SC cleaning guidelines are outlined in Addendum B.

ADDENDUM A

SIMULATION CORE OCCUPANCY GUIDELINES

Simulation Core Spaces - Maximum Occupancy

Procedural Skills Labs (PSL)

Room	Description	Maximum Occupancy
414SA/415SA	Classroom	7
416SA	FLS/FES Stations	5
416C/422C	OR	8
425C	OR	7
461E	SimMan	3 + Simulation Operator
Corridor C	Staging	7-8
Corridor A	Staging	7-8

Clinical Skills Labs (CSL)

Room	Description	Maximum Occupancy
M419.1-14	Exam Rooms	2 in each exam room
M421	Classroom	12
M423	Classroom	15 (BCM reservations required)
M403/405	Study Room	8 (BCM reservations required)
M413/414	Study Room	8 (BCM reservations required)
Corridor	Staging/Proctors	12

Teaching and Practice Labs (TPL)

Room	Description	Maximum Occupancy
O22D	Classroom	12
C1-C20	Exam Rooms	2 in each exam room

ADDENDUM B

SIMULATION CORE CLEANING AND SANITATION GUIDELINES

General Cleaning Guidelines

1. All participants are required to wash their hands before and after simulation events. Hand sanitizer is also available in the simulation labs.
2. The simulation labs are cleaned before the start of each event, between learner groups, and at the end of the event.
3. Approximately 20 minutes is allowed between labs and some learner groups to clean and disinfect surfaces, supplies, and equipment. The time required to clean depends on the number of rooms used, the number of participants, and the proper and consistent use of PPE. When available, two sets of equipment are procured for the event so one can be cleaned while the other is in use.

Disinfecting Guidelines

Examples of frequently touched surfaces in the Simulation Core labs include classroom tables, chairs, exam tables, counters, floors, light switches, doors and doorknobs, instruments, equipment, and electronic equipment.

Surface Survival of SARS-CoV-2, the virus that causes COVID-19

MATERIAL	SURVIVAL
GLASS	5 days
WOOD	4 days
PLASTIC AND STAINLESS STEEL	3 days
CARDBOARD	24 hours
COPPER	4 hours

Surface disinfectants for use against SARS-CoV-2 can be found on the EPA’s List-N:

<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19>

There are several essential components of the EPA’s List-N items that must be allowed to stay on the surface for efficacy.

Quaternary ammonium

3-5 minute contact time

Caution should be taken to avoid direct skin contact

Sodium hypochlorite

1 minute contact time

A common ingredient in bleach

Recommend sodium hypochlorite solution = 1/3 cup bleach per gallon of water

Hydrogen peroxide

2-10 minute contact time

Use only at full strength (3%)

Isopropyl alcohol

1-2 minute contact time

Avoid concentrations above 70% because it evaporates too quickly to kill the virus

Cleaning and Disinfecting Manikins

Clean with soap and water.

Disinfect by dampening a clean towel with a 70% isopropyl alcohol (recommended by Laerdal and CAE) and gently wipe the surface. Allow air drying.

Do not scrub manikin skin.

Cleaning and Disinfecting Electronics

Follow the manufacturer's guidelines if available. Otherwise, disinfect by dampening a clean towel with a 70% isopropyl alcohol solution and wiping surfaces. Allow air drying.

Avoid using bleach and abrasives on touch screens.

Linens

Do not use linens on operating tables and clean vinyl surfaces after each use. Or, if linens are necessary, change linens after each learner group.

Self-directed Practice Labs Use and Cleaning Procedures

Clinical Skills – Exam rooms M419.1, M419.2, and M419.3 (maximum two people per room) are open and available to use on a first-come, first-served basis unless another on-site event is scheduled in the labs.

1. Each participant is required to
 - wear a cloth mask and gloves
 - wash hands according to CDC recommendations
 - use hand sanitizer provided on each side table

2. Disinfect surfaces before and after use by dampening a clean cloth with 70% alcohol solution, wiping, and allowing to air dry. Exam room surfaces include doorknobs, desks, computers, keyboards, side table, exam table, dimmer switch, gooseneck lamps, tuning fork, hammer, sundry jar tops, and light switches.
3. Dispose of used exam table paper and replace it by pulling down and covering the table.
4. Wipe down otoscope and ophthalmoscope with 70% alcohol spray and a clean cloth.
5. Discard all used cotton applicators, speculums, tongue depressors, Kleenex, drapes, and cotton balls in the trash after use.

Procedural Skills – Room 416SA (maximum five people) is open, and FLS/FES/VR machines are available to use on a first-come, first-served basis unless another on-site event is scheduled in the labs.

1. Each participant is required to:
 - Wear a cloth mask and gloves
 - Wash hands according to CDC recommendations
 - Use provided hand sanitizer
2. Disinfect surfaces before and after use by dampening a clean cloth with 70% alcohol solution, wiping, and allowing to air dry. Practice room surfaces include doorknobs, desks, computers, monitors, keyboards, and light switches.
3. Follow specific cleaning instructions posted for each equipment station.

TPL – Room 022D (maximum 12 people) **and Exam Rooms C1-C20** (maximum two people per room) are open and available to use on a first-come, first-served basis unless another on-site event is scheduled in the labs.

1. Each participant is required to
 - Wear a cloth face mask
 - Wash hand according to CDC recommendations
2. Disinfect surfaces before and after use by dampening a clean cloth with 70% alcohol solution, wiping, and allowing to air dry. Classroom and exam room surfaces include doorknobs, desks, computers, keyboards, side tables, exam tables, and light switches.
3. Dispose of used exam table paper and replace it by pulling down and covering the table.

REFERENCES

The United States Environmental Protection Agency, List-N Disinfectants for Use Against SARS-CoV-2, <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

Centers for Disease Control and Prevention, Coronavirus (COVID – 19), <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19>

Centers for Disease Control and Prevention (2020, April 28). *Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools and Homes*, https://www.cdc.gov/coronavirus/2019-ncov/community/pdf/Reopening_America_Guidance.pdf

Society for Simulation in Healthcare (2020, April 30). *SimSeries: COVID-19: Cleaning and Disinfecting in Simulation*.