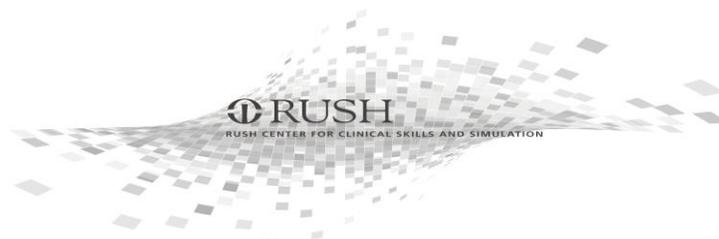




**Rush Center for Clinical Skills and Simulation**

**Re-Entry Guidelines  
June 12, 2020**



| Content  | Page Number |
|--|-------------|
| Introduction   | 3           |
| Employee and Stakeholder Safety  | 4           |
| Covid-19 Symptoms  | 4           |
| Face Masks   | 4           |
| Social Distancing  | 4           |
| Environmental Modifications to Support Safety                          | 5           |
| Simulation Center Occupancy Guidelines                                 | 5           |
| High Fidelity Simulation Area, Maximum Occupants by Room               | 6           |
| Standardized Patient Area, Maximum Occupants by Room                   | 7           |
| Cleaning Procedures  | 7           |
| RUMC Infection Control Information                                     | 8           |
| RUMC Outpatient Room Cleaning Policy                                   | 8           |
| RUMC Policy in PDI Super Sani-Cloth Use                                | 8           |
| Supplemental SimGeeks Cleaning and Disinfection Guidelines             | 9           |
| SimGeeks Guidelines for Cleaning Mannequins                            | 9           |
| SimGeeks Best Practices for Sim Center Cleaning                        | 10          |
| Logistical Guidelines for On-Site Simulation                           | 11          |
| Preparation for Simulation Events/Set-Up                               | 11          |
| Standardized Patient Program Procedures                                | 11          |
| Procedures During Simulation Events                                    | 11          |
| Post-Simulation Event/Clean-Up by Simulation Center Staff              | 12          |
| Collaborating to Implement Flexible Operations                         | 12          |
| The OSHA Occupational Risk Pyramid                                     | 13          |
| The CDC Hierarchy of Controls  | 14          |
| Online Simulation/Telesim  | 14          |
| Hybrid Online and Onsite Simulation                                    | 14          |
| On-Site Simulation   | 14          |
| Collaboration Guidelines   | 15          |
| Criteria for Online Simulation   | 15          |
| Criteria for Hybrid Simulation   | 15          |
| Criteria for On-Site Simulation  | 15          |
| Safety Protocols to Support Flexible Operations                        | 16          |
| Safety Guidelines for Simulation Center Staff Members                  | 16          |
| Safety Guidelines for Faculty and Students Using the Simulation Center | 17          |
| References   | 18          |
| Figure 1. Self-Assessment Screening Tool                               | 19          |

## Introduction

Covid-19 has disrupted most aspects of our lives, especially providing immersive learning experiences. Simulation-based education relies on interaction with medical tools and communication with patients and clinicians. This experience is especially significant when we provide training on skills where tactile sensation and human factors related to grip, positioning, and muscle memory are needed for effective skill transfer. Distance learning and online video courses are not adequate surrogates for many of these activities.<sup>1</sup>

Our goal is to keep on-site projects to a minimum for safety and to reflect [Rush University and Rush University Medical Center](#) policies and procedures related to Covid-19. The unique safety concerns for the simulation center team and our stakeholders are addressed here. These guidelines will be updated as new information becomes available, and emphasize employee and stakeholder safety. Environmental modifications, employee guidelines to support safety, and communication strategies to ensure awareness and compliance are included with these guidelines, which will require a collaborative approach from all stakeholders.

We need to enforce hand hygiene and screening practices (see Figure 1) prior to simulation center entry. Face masks, supplied at all RUMC entry points, will be required for entry to the simulation center. It is important for all of us – students, faculty, and staff – to follow these Rush University Medical Center guidelines: if you are experiencing symptoms of Covid-19 (fever, cough, shortness of breath, sore throat, body aches, loss of smell), call ext. 2-5878 to arrange for testing.<sup>2</sup>

Since face masks are common requirements in clinical areas, incorporating this practice into training will improve acceptance and add realism. This practice also provides a constant visual and physical reminder not to touch the face, mouth, or nose.<sup>1</sup>

The information presented here includes [RUMC outpatient clinic policies](#), including infection control procedures,<sup>3</sup> and professional development material on simulation and Covid-19 provided by the [Society for Simulation in Healthcare](#) (SSH), the [Association for Standardized Patient Educators](#) (ASPE), [SimGhosts](#), the [University of Minnesota Simulation Center](#) and the [International Nursing Association for Clinical Simulation and Learning](#) (INACSL).

## Employee and Stakeholder Safety

Our work requires simulating physical procedures in clinical environments. Simulation center stakeholders include faculty, students, residents, and staff who work in clinical setting. These guidelines outline resources and procedures to ensure the safest possible working conditions for all our team members, including our standardized patients (SPs) who do not routinely work in clinical settings. This is imperative since most of our simulation team members and many of our undergraduate learners do not work in clinical settings and risk exposure to Covid-19 from any stakeholders who are in clinical practice.<sup>5</sup>

### Covid-19 Symptoms

People with Covid-19 show a range of symptoms, from mild to severe. Symptoms may appear 2-14 days after exposure to the virus and may include:

- Cough
- Shortness of breath or difficulty breathing
- Fever<sup>4</sup>

Rush provides a [Covid-19 self-assessment](#), and links to clinical resources. Faculty, staff and students using the simulation center should regularly perform self-assessment for Covid-19. Signs with content on self-assessment will be placed at all simulation center entrances (see Figure 1). Faculty, staff and students who answer “yes” to any of the questions on this sign are asked to not enter the simulation center, contact their health care provider, or call 2-5878.<sup>4</sup>

### Face Masks

All Rush employees are required to wear face masks (surgical or procedural) while at work. Universal masking is important now because there is widespread community transmission of Covid-19 in the Chicago area. We need everyone’s support to help protect each other. Please observe these guidelines:

- Use only Rush-provided face masks. These can be obtained at the entry ways as you arrive on campus. If the mask becomes damaged or soiled, we have a supply of replacement masks in the simulation center.
- Watch [this video](#) on the right and wrong ways to wear your mask.
- Do not use cloth masks or homemade masks while at work.
- The hospital-issued face mask may be removed when an employee is working in a non-patient care area and can consistently maintain a six-foot distance from others. Since simulation center staff are in frequent contact with students, faculty and other staffs, masks must be worn when the center is open and simulation programs are in progress.
- Wear the mask as directed to cover the mouth and nose.
- Continue hand hygiene.
- Avoid touching your face or your mask.

### Social Distancing

In addition to universal masking, please follow the Rush [social distancing rules](#), especially in break rooms and work rooms. Please limit large groups in these areas to reduce the chance of transmission. People who are even mildly symptomatic can infect others

## Environmental Modifications to Support Safety

The simulation center is multi-purpose, rather than single-use space located in a shared facility and includes components of clinical, classroom and traditional office settings. This document synthesizes safety considerations pertinent to all of these environments.

These guidelines identify iterative assessment and communication of risk as resumption of some on-ground programs occurs during the summer of 2020. University learning activities are remote for the summer, 2020 term. Faculty and staff are encouraged to work remotely as much as possible. Our team will need to remain flexible on simulation center operations as the pandemic progresses, especially if there is a Covid-19 resurgence.

Other suggested environmental changes:<sup>5,6</sup>

- Allows 60-140 square feet per participant.
- Consider having one participant closer to the simulator and others more distant in the simulation room, not elbow to elbow, with the person closest to the simulator designated as the primary provider.
- Limit the time of exposure to other participants.
- Social distancing calculator: <https://www.banquettablespro.com/social-distancing-room-space-calculator>

The simulation center has implemented unidirectional travel flow throughout the facility. Arrow markers have been placed on the floors. Social distancing will need to be maintained in and around the bathrooms, i.e., a six foot distance will need to be maintained between people in line to use the bathrooms. Rush social distancing signage is located throughout the simulation center.

- We cannot authorize use of the simulation center microwave in the staff break room for students. There are three microwaves in the canteen space by the 1750 W. Harrison St. entrance. We will direct faculty and students to this area for meal breaks.
- We prefer that students do not use the water dispensers, unless absolutely necessary.
- We cannot allow any food or drink in the simulation center during this time.

## Simulation Center Occupancy Guidelines

The entrances to simulation center instructional and meeting areas will have signs that indicated the need to maintain social distancing and the maximum occupancy for each of these rooms. The seats in waiting areas for both the High Fidelity and Standardized Patient suites are marked to indicate required social distancing.

**High Fidelity Simulation Area, Maximum Occupants by Room**

| <b>Room</b>                 | <b>Maximum Occupants</b> |
|-----------------------------|--------------------------|
| KP 178, DB 1                | 4                        |
| KP 177, DB 2                | 4                        |
| KP 176, DB 3                | 4                        |
| KP 156A, OB/peds control    | 2                        |
| KP 156B, OB/peds sim        | 4                        |
| KP 153A, OR control         | 2                        |
| KP 153B, OR sim             | 4                        |
| KP 149, 4 bed control       | 3                        |
| KP 154A, ED/gen med control | 2                        |
| KP 154B, ED/gen med sim     | 4                        |
| KP 141, 4 bed room          | 4                        |
| KP 173, Clinical skills lab | 10                       |
| VROOM 1                     | 5                        |
| VROOM 2                     | 5                        |
| <b>Total</b>                | <b>57</b>                |

**Standardized Patient Area, Maximum Occupants by Room**

| <b>Room</b>           | <b>Maximum Occupants</b> |
|-----------------------|--------------------------|
| Men's washroom        | 3                        |
| Women's washroom      | 3                        |
| KP 197, training room | 2                        |
| KP 139, training room | 4                        |
| KP 138, viewing room  | 7                        |
| AV tech office        | 2                        |
| Exam room 1           | 2                        |
| Exam room 2           | 2                        |
| Exam room 3           | 2                        |
| Exam room 4           | 2                        |
| Exam room 5           | 2                        |
| Exam room 5           | 2                        |
| Exam room 6           | 2                        |
| Exam room 7           | 2                        |
| Exam room 8           | 2                        |
| Exam room 9           | 2                        |
| Exam room 10          | 2                        |
| Exam room 11          | 2                        |
| Exam room 12          | 2                        |
| KP 132, SP lounge     | 4                        |
| KP 195 conf rm        | 4                        |
| KP 196 conf rm        | 4                        |
| KP 185 consult rm     | 4                        |
| KP 131 Myoffice       | 2                        |
| KP 133 MH office      | 2                        |
| KP 134 SM office      | 2                        |
| KP 135 JV office      | 2                        |
| KP 193 MS office      | 2                        |
| KP 192 MK office      | 2                        |
| <b>Total</b>          | <b>75</b>                |

**Cleaning Procedures**

All simulation center staff members will continue to follow these RUMC infection prevention policies:

- Standard Precautions: [OP-0460](#)
- Transmission-Based Precautions: [OP-0461](#)
- Hand Hygiene: [OP-0258](#)

Additional RUMC infection control information is the table below.

| Topic  | Resources   |
|--|---|
| Handwashing  | <a href="#">Clean In/Clean Out Fact Sheet</a><br><a href="#">Rush Smart Minute Handwashing Video</a><br><a href="#">5 Moments for Hand Hygiene</a><br><a href="#">How to Handrub</a><br><a href="#">How to Handwash</a> |
| Cleaning Exam Rooms                                | <a href="#">Proper Use of Disinfectant</a><br><a href="#">Ambulatory Cleaning and Disinfection</a><br><a href="#">OP-0277 Disinfection of Medical Equipment Surfaces (Non-Critical Items)</a>                           |
| Correct Use of Personal Protective Equipment (PPE) | <a href="#">PPE Donning and Doffing</a>   |

The simulation center staff will ensure that a secure inventory of disposable gloves and surgical masks is maintained. Additional wall-mounted hand disinfection units have been ordered. A number of alcohol-based hand disinfection solution bottles are located throughout the simulation center.

The RUMC policy on N95 mask use for Covid-19 Persons Under Investigation/Confirmed patients is that those individuals who would like to use an N95 mask in place of a surgical mask may do so. It is the employee's responsibility to contact Employee Health to set up an initial fit test and maintain annual fit testing requirements. For normal simulation center operations, N95 masks are not necessary, but employees who desire to use an N95 mask will need to follow the procedure above.

### RUMC Outpatient Room Cleaning Policy

This policy includes guidance from the [Chicago Department of Public Health](#) related to Covid-19. The simulation center staff will follow these established minimums for ambulatory clinics related to cleaning and disinfection. The RUMC Outpatient Room Cleaning Policy will be followed in the Standardized Patient area.

- Exam tables must be wiped down after each patient and have paper changed.
- Exam tables and patient care surfaces must be disinfected with PDI Super Sani Cloth when visibly soiled.
- Waiting rooms must be disinfected with a PDI Super Sani Cloth when visibly soiled and daily.
- Conference room tables and chairs must be wiped down with a PDI Super Sani Cloth after each user group leaves. Allow up to 30 minutes for room cleaning between user groups.
- Evidence-based simulator cleaning guidelines from [SimGeeks](#) will be used for cleaning simulation equipment.
- Use of the cubby storage areas for personal property in Debriefing Rooms 1-4 will be discouraged.

### RUMC Policy on PDI Super Sani-Cloth Use

- Use for routine cleaning and disinfection of medical equipment and surfaces.
- Identify if safe for use on the equipment/surface that needs to be cleaned and disinfected.
- Don gloves.
- Clean all visible soil from the surface.

- Disinfect equipment/surface by vigorously rubbing the surface with the PDI Super Sani-Cloth.
- All surfaces must remain wet for 2 minutes and then allowed to dry.



**PDI Super Sani-Cloth**

In the event that PDI Super San-Cloths are not available, [CaviWipes](#), or other disinfectants recommended by [SimGeeks](#) will be used

### **Supplemental SimGeeks Cleaning and Disinfection Guidelines**

This information reflects evolving evidence-based cleaning and disinfection guidelines compiled by [SimGeeks](#). The default policies of the simulation center are those of Rush University Medical Center and Rush University.

#### **Handwashing**

- Remove jewelry and rinse hands with warm running water.
- Use friction to lather soap entirely over both hands.
- Wash thoroughly under running water.
- Turn off faucet with wrist/elbow.
- Dry hands with a disposable towel or electric air dryer.
- If handwashing is not available, rub an adequate amount of antiseptic hand sanitizer on all surfaces.
- Let the antiseptic dry on its own.

#### **Cleaning vs Disinfecting**

- Cleaning is the physical washing away of contaminants using soap and water.
- Disinfecting is the use of chemicals to kill germs remaining on a surface.<sup>7</sup>
- Surfaces should always be cleaned before disinfecting.<sup>7,8</sup>
- EPA List-N is a list of chemicals known by the EPA to kill contagion. This list can be focused based on what you are looking to disinfect, such as COVID.<sup>9</sup>

#### **Guidelines for Cleaning Mannequins**

- Clean all mannequins with soap and water prior to disinfecting.

- Laerdal and CAE recommend disinfecting with 70% isopropyl alcohol.
- CPR mannequin faces can be disinfected with a sodium hypochlorite solution.<sup>10</sup>
  - Sodium hypochlorite: ½ cup of bleach (1000 ppm minimum) per gallon of water. Contact time 1 minute on surface.
- Do not scrub mannequin skins.

### Best Practices for Sim Center Cleaning

- Hard surfaces: Clean with soap and water prior to disinfecting. Be sure to disinfect all commonly touched surfaces such as doorknobs, light switches and water fountains. Follow guidelines and safety recommendations for each chemical according to EPA's List N.<sup>7,9,11</sup>
  - Contact (dwell) time: The amount of time a disinfectant needs to remain visibly wet on a surface to properly kill contagions. Varies per manufacturer's guidelines. Refer to EPA List N for dwell time of specific chemicals.<sup>9</sup>
- Soft surfaces: Launder if possible or use an approved cleaner from List N or the manufacturer.<sup>7,9</sup>
- Clothing and fabrics: Do not shake. Wash with hottest water setting the fabric will allow. Use disposable or washable hamper liners.<sup>7</sup>

### Electronics

- Consider wipeable/disposable covers for touch screens and keyboards.
- Use manufacturer guidelines for cleaning. If non, use an alcohol based cleaner of at least 70% isopropyl alcohol and allow to dry.
- Avoid bleach, alcohol, or abrasives on touch screens.<sup>7</sup>

### VR Equipment

- Use disposable covers and disinfect between users.
- Wet with 70% alcohol solution or other disinfectant and allow to completely dry.
- Do not use any cleaners on the lenses. Avoid UV light due to potential for burning the screens.

### Common Disinfectants

- Quaternary ammonium, the most common ingredient on List N.<sup>9</sup>
- Sodium hypochlorite, the main ingredient in bleach
- Hydrogen peroxide
- Do not mix cleaning chemicals. Always follow the manufacturer's guidelines.
- Isopropyl alcohol with a percentage higher than 70% will evaporate too quickly to allow it to kill contagions.

### Disinfection with UV

- UV changes the structure of genetic material and prevents replication of germs.<sup>12</sup>
- Shading and shadowing can prevent UV light from effectively disinfecting surfaces.<sup>8</sup>
- Caution: UV can burn your eyes and skin causing lasting damage.

## Logistical Guidelines for On-Site Simulation

### Preparation for Simulation Events/Set-Up

- Each simulation team member should establish a lockable work space that allows for social distancing of at least 6 feet from other employees and stakeholders as a home base for the day.
- Wash hands prior to donning PPE and obtain supplies for the simulation program.
- Wipe down/disinfect all equipment/task trainers/mannequins to be used.
- Throw away dirty gloves when leaving the storage room after cleaning equipment and don new, clean gloves as you leave the room.
- Transport supplies to the simulation event room(s).
- Wipe down surfaces in the simulation event room(s).
- Place equipment in the room in order to establish safe social distancing.
- Consider draping supplies/equipment placed a day in advance of simulation.
- Confirm that appropriate disinfection/hand hygiene supplies are in the room.
- Post a sign indicating that the room is clean and prepared for the simulation and that no one may enter without permission of a simulation team member.<sup>5</sup>

### Standardized Patient Program Procedures

- No dangling jewelry for both learners and SPs.
- Long hair needs to be pulled back for both learners and SPs.
- No white coats, ties, or other clothes that can be draped.
- Learners will bring their own note pads and writing utensils.
- Learners are discouraged from bringing in back packs, cool weather outerwear, etc.
- No paper charts will be provided. All patient information will be accessed through Learning Space on the computer.
- SPs need to change gowns between learners.
- The RUMC Outpatient Room Cleaning Policy (p. 8) will be used by SPs to clean the exam rooms between each student encounter.
- High frequency touch areas, including conference room tables and chairs, door handles, and telephones, will be wiped down several times each day using the PDI Super Sani-Cloth or an equivalent germicidal cleaning agent.

### Procedures During Simulation Events

- Students and faculty report to an identified area as directed by the responsible simulation center staff member.
- Hand sanitizer and PPE are available for faculty and students on arrival. All participants should have been provided with a surgical mask when they entered campus.
- Verbally review safety protocol, i.e., unidirectional traffic flow, PPE, restroom locations, facility use, avoidance of physical contact with others, unnecessary contact with equipment, social distancing.
- Handwashing is required each time before you enter or leave a new simulation space.
- Orientation/pre-brief for stakeholders will take place in the same space with all involved standing (as able). Students and faculty will then be directed to move to an active simulation area by a simulation team member.
- Simulation center staff will remain outside of simulation spaces in use by learner groups. Staff will use PA equipment for overhead announcement to assure safe social distancing.

- Simulation center staff members will provide additional supplies as necessary by bringing a cart or tray outside the room and leaving it at the doorway. Simulation participants will pick up any needed items from the cart or tray.
- Simulation users should disinfect surfaces or equipment between individual participants/learners who remain in the sim room during an active simulation. Simulation center staff members will not enter the room during an active simulation to disinfect equipment during the simulation session.
- Debriefing will occur outside of the active simulation room, with all participants standing (as they are able). A simulation center staff member will direct and move stakeholders to a designated debriefing area.
- Simulation participants should only move between stations as directed by a simulation center staff member to minimize contamination/contact.
- Scheduled down time is necessary to decrease airborne exposure prior to simulation rooms that were just in active use being disinfected by simulation team members, i.e., each simulation room should sit empty for 15 minutes prior to a simulation center staff member entering and disinfecting the room.
- Simulation participants will dispose of items in the appropriate receptacles and wash their hands following trash disposal and prior to leaving the simulation center.
- Simulation participants will be directed to use specific pathways by a simulation center staff member to exit the simulation center.
- Simulation participants should continue to wear masks while in the simulation center.
- Once simulation center participants exit from an active simulation room, a simulation center staff member will post a sign indicating that the room is dirty.

#### **Post-Simulation Event/Clean-Up by Simulation Center Staff**

- PPE should be worn.
- Wipe down/disinfect all surface and equipment/task trainer/mannequins used prior to removing these items from the dirty room.
- Depending on the chemicals used, change out gloves or PPE in accordance with OSHA guidelines.
- Place equipment/supplies (after cleaning) on a cart for return to storage. The cart should also be disinfected.
- Throw away dirty gloves upon leaving the simulation room after cleaning equipment and don new, clean gloves as you are leaving the room.
- Place a sign on the room that indicates the simulation room is clean.
- Transport the clean equipment to the appropriate storage room.
- Maintain the storage room as a clean space. If contaminated items are brought into the space, the individual responsible for that dirty item is to clean the item promptly as well as any part of the space that is impacted by the dirty item.
- Staff should sanitize hands prior to leaving the storage room.

#### **Collaborating to Implement Flexible Operations**

Implementing flexible operations to meet safety protocols for students returning to clinical settings, accreditation requirements for health sciences programs and trainee learning objectives requires taking innovative approaches with a collaborative style. This requires a shift in thinking on the part of the simulation team and our stakeholders. Instead of approaching simulation events seeking the simulation

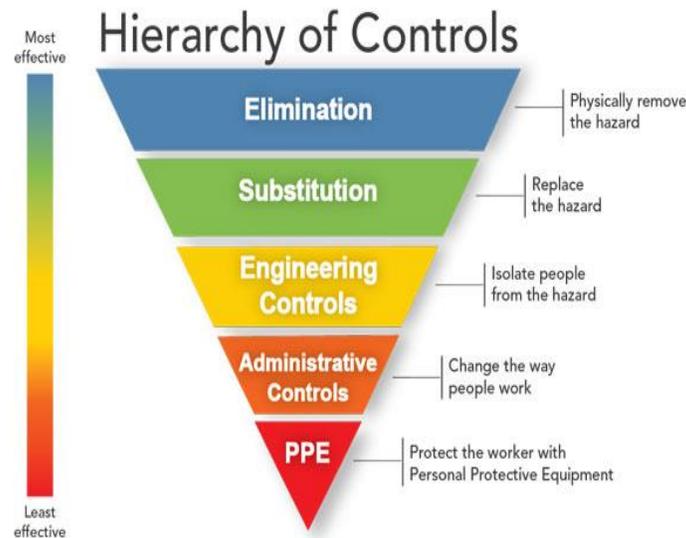
center to accommodate and implement predetermined plans, we will ask our stakeholders to work collaboratively with us to reimagine simulation events with the lowest possible risk for everyone involved. This process will empower the simulation center team by relieving the pressure of operating from a reactive place of selling services. We plan to operate from a proactive, strength-based approach collaboratively designing curriculum highlighting best practices of simulation methodology, emphasizing physical and psychological safety. This necessitates implementing new practices to achieve trainee learning objectives. A collaborative approach will improve the quality of what we do for learners, as well as enhancing patient safety and the quality of clinical care provided.<sup>5</sup>

The figures below represent occupational risk exposure and the steps employers and workers may take to decrease hazard, i.e., Covid-19. These guidelines recommend online simulation as the choice for stakeholders associated with the lowest exposure risk with the highest level of control for our team members and stakeholders in simulation-based medical education. However, we have also identified social distancing and infection control policies for limited on-site programs.

### [The OSHA Occupational Risk Pyramid](#)



## [The CDC Hierarchy of Controls](#)



### Online Simulation

Telesim SP programs exemplify the Low Exposure Risk category of the Occupational Risk pyramid and the Engineering Controls section of the CDC Hierarchy of Controls pyramid. Given the current Covid-19 hazards, this type of simulation is associated with the lowest possible risk and the highest amount of control for the simulation center team and stakeholders in simulation-based medical education.<sup>5</sup>

### Hybrid Simulation – Online and On-Site Simulation

When simulation center team members are implementing hybrid simulation activities, those working online are in the Low Exposure risk category of the Occupational Risk pyramid, and the Engineering Controls section of the CDC Hierarchy of Controls pyramid. Those working on-site are in the Medium Exposure Risk category of the Occupational Risk Pyramid, and the Administrative Controls and PPE sections of the CDC Hierarchy of Controls. Staff working on site who may be exposed to stakeholders in the High or Very High Risk exposure categories of the Occupational Risk pyramid. Employees and stakeholders working on-site have the least control over the hazard having to rely on administrative policy modifications and PPE.<sup>5</sup>

### On-Site Simulation

Simulation center staff members working on-site are in the Medium Exposure Risk category of the Occupational Risk Pyramid, and the Administrative Controls and PPE sections of the Hierarchy of Controls pyramid. Simulation center staff members working on-site are increased to a Medium Exposure Risk category while being potentially exposed to stakeholders in the High or Very High Risk exposure categories of the Occupational Risk pyramid. Additionally, stimulation center staff and stakeholders working on-site have the least control over the hazard, having to rely on administrative/policy modifications and PPE.<sup>5</sup>

## Collaboration Guidelines

Internal and external stakeholders will meet with members of the simulation center leadership team to discuss project needs, including the optimal format for content delivery: virtual, hybrid, or on-site. These guidelines reflect policies and procedures promulgated by M-Simulation at the University of Minnesota<sup>5</sup> and current simulation center policies and procedures.

### Criteria for Online Simulation

- Virtual telesim programs will be the default option for standardized patient programs.
- SP activities, communication skills training, interviewing techniques, clinical reasoning, demonstration role plays, narrated physical exam skills, and SP verbal feedback to learners and faculty feedback to learners can be provided through telesim.
- Telesim programs can be used for formative or summative learner assessment.

### Criteria for Hybrid Simulation

- SP activities, communication skills training, medical interviewing, clinical reasoning, didactic sessions, demonstration role plays, narrated physical exam skills assessment and SP feedback and faculty feedback to learners.
- Formative and summative learner assessment.
- Specific technical and procedural skills that may be combined with any of the above done remotely.
- “One off” individual or small group customized training for which learners, faculty, SPs, and simulation center team members are online with one or two team members on site to utilize mannequins or task trainers integrated with online components.

### Criteria for On-Site Simulation

- Standardized training for specific technical and procedural skills necessary for safe clinical practice by an advanced group of learners, i.e., residents, licensed health care practitioners, graduate students, using mannequins, task trainers or other simulation equipment safely within the simulation center setting. Skills that may not be gained by any other modality will be taught on-site.
- Training conducted on-site needs to meet graduation requirements that cannot be met in any other manner.
- Standardized training for a specific technical or procedural skill that is necessary for health sciences students to safely work in clinical areas, including training specific to PPE and other skills related to the safe care of patients with Covid-19.

Any simulation project that may be successfully implemented virtually/online will be implemented virtually to keep employees and stakeholders in the low exposure risk category as defined by OSHA Covid-19 Workplace Guidelines. Simulation activities conducted on-site moves the risk for employees and stakeholders to the OSHA Covid-19 medium risk category. Stakeholders who work clinically fall into the high or very OSHA Covid-19 risk exposure category may be interacting with simulation team members and other stakeholders who would otherwise remain in the low exposure risk category when working online or virtually. The simulation center leadership team will prioritize essential training for students and trainees returning to the clinical environment to be done on-site as necessary. All other projects will be discussed on a case by case basis.

Scheduling for on-ground simulation events will be limited to one event during a given time period, unless it is absolutely necessary to have concurrent events. The goal is to avoid overlapping events. There may be more than one event per day, but not in the same timeframe. This is to maintain sustainable staffing and allow time for cleaning and disinfecting equipment and areas in the simulation center for events that must be held on site.

Once a simulation event is scheduled, a member of the simulation center leadership team will meet with the involved course faculty member(s). The goal of this meeting is to collaboratively design or adapt a pre-existing project to a virtual or hybrid virtual/live program.

### **Safety Protocols to Support Flexible Operations**

To decrease risk of illness as much as possible during on-site simulation, it is essential that all simulation center team members adhere to the following guidelines which align with RUMC and University policies, Chicago Department of Public Health Recommendations, CDC and OSHA guidelines for workplace safety during Covid-19. These protocols also reflect operational procedures shared with simulation educators by M-Simulation at the University of Minnesota.<sup>5</sup>

#### **Safety Guidelines for Simulation Center Staff Members**

- Rotate on-line/remote work assignments with on-site responsibilities.
- Have a back-up person available for each simulation program if an employee becomes sick and is unable to work.
- Simulation center staff members working on-site may not bring visitors to the simulation center.
- Temperatures for all Medical Center staff will be screened at campus entry points and surgical masks will be provided.
- The [CDC Self Checker Tool](#) can be used to screen for any potential Covid-19 symptoms. Staff members are not expected to come to work if they are experiencing any symptoms compatible with Covid-19.
- Simulation center staff members will engage in frequent handwashing for 20 seconds or more at a time including after each occasion when they disinfect simulation areas and before and after eating.
- Simulation center staff members working on-site will practice social distancing of 6 feet or more.
- Simulation center staff members working on-site will wear surgical face masks at all times except in their personal office area when alone.
- Simulation center staff members working on-site will not serve as models for simulation events even if they have done so previously, i.e., ultrasound, and will not have physical contact with each other or other stakeholders in the simulation center.
- Simulation center staff members working on-site will bring limited personal items and store them in an area only they access that is reserved for their personal use.
- Simulation center staff members working on-site will not congregate in common areas such as conference rooms or the break room.
- Simulation center staff members working on-site are encouraged to bring food that does not need to be microwaved or refrigerated and that can be stored in their designated personal space. Staff members may use the break room facilities to refrigerate or microwave their food one at a time, but should not congregate in this area.
- Simulation center staff members working on-site are not permitted to share any office equipment, i.e., desks, chairs, pens, or other equipment, i.e., headphones.

**Safety Guidelines for Faculty and Students Using the Simulation Center**

- Simulation center stakeholders (faculty and students) should not enter the simulation center if they have Covid-19 symptoms.
- Any stakeholders who say they have Covid-19 symptoms will not be allowed to participate in the simulation program.
- No visitors are allowed in the simulation center.
- All stakeholders participating in on-site simulation will practice social distancing of 6 feet or more unless otherwise directed by a simulation center staff member.
- All stakeholders should refrain from physical contact with simulation center team members and one another.
- All stakeholders are asked to keep talking to a minimum.
- Stakeholders may not eat in the simulation center at any time.
- Stakeholders must observe social distancing when using the washrooms in the simulation center.
- Stakeholders should bring limited or no personal items to the simulation center. Phones, pens, and wallets should stay on that person. The cubbies in Debriefing Rooms 1-4 will no longer be used to store personal belongings including water bottles and back packs.

These guidelines will continue to evolve as more information about the pathogenesis, epidemiology and treatment of Covid-19 emerges. The simulation center staff will continue to participate in professional development activities that provide evidence-based content on best practices for immersive learning as the Covid-19 pandemic continues. We will continue to offer high quality simulation based medical education that meets or exceeds learner expectations, fostering patient safety and enhancing the quality of clinical care.

**References:**

1. Crawford S. Campus reopening, mask requirements and sharps at home. <https://www.simghosts.org/News/28394/A-Pointed-Issue-Campus-reopening-mask-requirements-and-sharps-at-home>.
2. Rush System for Health Covid-19 Updates. <https://insiderush.rush.edu/rushsystem/covid19/Pages/default.aspx>.
3. Rush University Medical Center. Ambulatory Clinic Reopening Guidebook. [https://insiderush.rush.edu/rushsystem/covid19/PublishingImages/Pages/PageCards/RUMG/Clinic%20Reopening%20Guidebook\\_Final5.pdf](https://insiderush.rush.edu/rushsystem/covid19/PublishingImages/Pages/PageCards/RUMG/Clinic%20Reopening%20Guidebook_Final5.pdf). Accessed 5/31/2020.
4. Rush University Medical Center. Covid-19 resources. <https://www.rush.edu/patients-visitors/coronavirus-covid-19-information-and-resources>
5. University of Minnesota, M-Simulation Flexible Operations Plan. [https://www.healthysimulation.com/wp-content/uploads/2020/06/M-Simulation\\_Flexible-Operations-Plan\\_5\\_27\\_20.pdf](https://www.healthysimulation.com/wp-content/uploads/2020/06/M-Simulation_Flexible-Operations-Plan_5_27_20.pdf)
6. SSH Reentry Webinar. Zoom presentation, 5/27/2020.
7. CDC. Coronavirus disease. Environmental cleaning and disinfection recommendations. <http://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>.
8. Guridi et al. Disinfectant activity of a portable ultraviolet C equipment. *International Journal of Environmental Research and Public Health*. 2019;16(23):4747.
9. US EPA. List N: Disinfectants for use against SARS-CoV-2. US EPA. <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>
10. Laerdal Medical Laerdal Help Center. Laerdal Medical. <https://laerdal.force.com/HelpCenter/s/article/Hygiene-and-cleaning-procedures-for-CPR-manikins>
11. Viswanath A, Monga P. Working through the COVID-19 outbreak: Rapid review and recommendations for MSK and allied health personnel. *Journal of Clinical Orthopaedics and Trauma*. <https://doi.org/10.1016/jcot.2020.03.014>
12. Messina G et al. time effectiveness of ultraviolet C light (UVC) emitted by light emitting diodes (LEDs) in reducing stethoscope contamination. *International Journal of Environmental Research and Public Health*. 2016;13(1):940. <https://doi.org.10.3390/ijerph13100940>

Figure 1. Self-Assessment Screening Tool



Are you experiencing COVID-19 symptoms?

Symptoms may appear 12-14 days after exposure to the virus.



FEVER

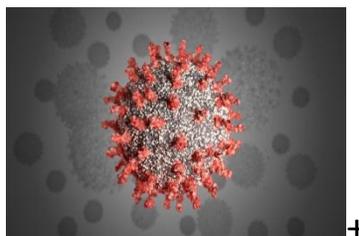
SHORTNESS OF BREATH

COUGH

Have you returned from international travel or been on a cruise in the last 14 days?



Have you been around someone diagnosed with COVID-19?



If the answer is **YES** to any of these questions, please **do not** enter the facility and contact your health care provider, or call 2-5878.